Commentor Number	Name	Email Address	Address	Affiliation
1	Debra Raggio	[redacted]	[redacted]	KDI Wyalusing Power, LLC
2	Delaware Riverkeeper	[redacted]	[redacted]	Delaware Riverkeeper
3	Jean MacFarlane	[redacted]	[redacted]	Private Citizen
4	Arthur Anderson	[redacted]	[redacted]	Private Citizen
5	Shannon Jacobs	[redacted]	[redacted]	Private Citizen
6	Barbara Sonies	[redacted]	[redacted]	Private Citizen
7	Catherine Folio	[redacted]	[redacted]	Private Citizen
8	William Haegele	[redacted]	[redacted]	Private Citizen
9	Yolanda Broad	[redacted]	[redacted]	Private Citizen
10	Thomas J. & Ann Marie Finn Cusick	[redacted]	[redacted]	Private Citizen
11	Jeanne Walton	[redacted]	[redacted]	Private Citizen
12	William Huber	[redacted]	[redacted]	Private Citizen
13	Robbie Cross	[redacted]	[redacted]	Private Citizen
14	Naomi Miller	[redacted]	[redacted]	Private Citizen
15	Richard Metz	[redacted]	[redacted]	Private Citizen
16	Ji Montgomery	[redacted]	[redacted]	Private Citizen
17	Daryl Ezzo	[redacted]	[redacted]	Private Citizen
18	Pamela Nelson	[redacted]	[redacted]	Private Citizen
19	Elizabeth Dale Harris	[redacted]	[redacted]	Private Citizen
20	David Bressler	[redacted]	[redacted]	Private Citizen
21	Kathleen Peterson	[redacted]	[redacted]	Private Citizen

22	Thanice Petrak	[redacted]	Private Citizen
23	Lois Oleksa		Private Citizen
24	Luana Goodwin		Private Citizen
25	Chris King		Private Citizen
26	Karen Bedics		Private Citizen
27	Karen Elias		Private Citizen
28	Anita Nolan		Private Citizen
29	Andrew Thierry		Private Citizen
30	Norma Van Dyke		Private Citizen
31	Bernard Greenberg		Private Citizen
32	Ned Connelly		Private Citizen
33	Isaiah Guenther		Private Citizen
34	Nancy Bartley		Private Citizen
35	Kelly Davis		Private Citizen
36	Norman Starr		Private Citizen
37	Chris DiGiulio		Private Citizen
38	Walter Goodman		Private Citizen
39	Mary Ann Leitch		Private Citizen
40	Lisa Tull		Private Citizen
41	Roberta Camp		Private Citizen
42	Janet Amber		Private Citizen
43	Bruce and Lorraine McMahon		Private Citizen
44	Leanne Morical		Private Citizen
45	Patricia Libbey		Private Citizen

46	Judy Turetsky	[redacted]	Private Citizen
47	Vincent Prudente		Private Citizen
48	Joan Farb		Private Citizen
49	Linda Granato		Private Citizen
50	Boris Dirnbach		Private Citizen
51	Janet Cavallo		Private Citizen
52	Diane Dilendik		Private Citizen
53	Jim Loveland		Private Citizen
54	Aggie Perilli		Private Citizen
55	Ryan Dodson		Private Citizen
56	Wanda Cole		Private Citizen
57	Rex Destiny Roskos		Private Citizen
58	Ann Albence		Private Citizen
59	Marie Carota		Private Citizen
60	Lauri Moon		Private Citizen
61	Gracey Moralis		Private Citizen
62	Diana G. Dakey		Private Citizen
63	Sara Matthews		Private Citizen
64	Josephine Gingerich		Private Citizen
65	Mary Mammarella		Private Citizen
66	Marcus Ferreira		Private Citizen

67	Erin Johnson RN, MSN, MPH	[redacted]	Private Citizen
68	Patricia Rossi		Private Citizen
69	René Sharpless Micheli		Private Citizen
70	Claudia Waits		Private Citizen
71	Mary More		Private Citizen
72	Joseph Marlin		Private Citizen
73	Mary Tiebout		Private Citizen
74	Miranda Johnston		Private Citizen
75	Lisa Geyer		Private Citizen
76	Martha Carbone		Private Citizen
77	Carol Carmon		Private Citizen
78	Marnie Wilson		Private Citizen
79	Karen Norvig Berry		Private Citizen
80	Laura Michaels		Private Citizen
81	Joe Wolfgang		Private Citizen
82	Beatrice Zovich		Private Citizen
83	Daniel J Shields		Private Citizen
84	Lisa Payne		Private Citizen
85	Sarah Thompson		Private Citizen
86	Amy Page		Private Citizen
87	Andy Switzer		Private Citizen

88	John Dulik	[redacted]	Private Citizen
89	Richard Slater		Private Citizen
90	Kalle Weeks		Private Citizen
91	Jessica Wilson		Private Citizen
92	Michael Zuckerman		Private Citizen
93	Margaret Morgan		Private Citizen
94	Dean Marshall		Private Citizen
95	Robert Morgan		Private Citizen
96	Robin Spurlino		Private Citizen
97	Paul & Bonnie Stoeckl		Private Citizen
98	Christopher Dunham		Private Citizen
99	Heather Nelson		Private Citizen
100	Mary Prosser		Private Citizen
101	Thomas Posey		Private Citizen
102	Peter Tran		Private Citizen
103	Matt Neumaier		Private Citizen
104	Lois Drumheller		Private Citizen
105	Julie Kaye		Private Citizen
106	Sandy Freid		Private Citizen
107	Chris Stanton		Private Citizen
108	Jill Hardina		Private Citizen

109	Rose Meixell Neith	[redacted]	Private Citizen
110	Sandra Folzer		Private Citizen
111	Adam Mahonske		Private Citizen
112	Dennis Yaz Yaz		Private Citizen
113	Ellen Blais		Private Citizen
114	Karen Feridun		Private Citizen
115	Amber Notaro		Private Citizen
116	Daniel Lidon		Private Citizen
117	Tina Shelton		Private Citizen
118	Gillian Graber		Private Citizen
119	Barbara Brandom		Private Citizen
120	Paul Carluccio		Private Citizen
121	Tamela Trussell		Private Citizen
122	Jonathan Naugle		Private Citizen

From:	John Slade
To:	Zaman, Muhammad; Bailey, Brian (P.E.); Shimmel, David; Schulte, Steven; Weaver, Aaron; Piktel, Joseph; Dressler, Jared
Cc:	Debra Raggio; Merritt McGlynn; Colleen Nagel; Hackenberg, Martha
Subject:	[External] RE: Proposed Plan Approval 08-00060A KDI Wyalusing Power LLC/New Fortress Energy Site
Date:	Tuesday, July 29, 2025 8:04:01 PM
Attachments:	KDI Wyalusing Power LLC New Fortress 08-00060A Proposed Plan Approval_07.29.2025.pdf

Muhammad –

Attached are KDI Wyalusing Power LLC's comments on the proposed Plan Approval 08-00060A. These comments are being provided within 30 days of Notice being provided as shown by the email of transmission below. If you have any questions concerning our comments, please let us know so that we can arrange a call.

- John Slade

John F. Slade
Senior Consultant
jslade@all4inc.com / 610.422.1136
www.all4inc.com / Locations / Articles / Podcast / Training
ALL4 // ***STRATEGY WITH SOLUTION. PARTNERSHIP WITH A PURPOSE.***

From: Hackenberg, Martha <mahackenbe@pa.gov>
Sent: Tuesday, July 1, 2025 2:58 PM
To: Debra Raggio <draggio@newfortressenergy.com>; Merritt McGlynn <mmcglynn@all4inc.com>; John Slade <jslade@all4inc.com>
Cc: Piktel, Joseph <jpiktel@pa.gov>; Zaman, Muhammad <mzaman@pa.gov>; Dressler, Jared <jardressle@pa.gov>; Bailey, Brian (P.E.) <bribailey@pa.gov>; Shimmel, David <dshimmel@pa.gov>; Schulte, Steven <sschulte@pa.gov>; Weaver, Aaron <aaweaver@pa.gov>
Subject: Proposed Plan Approval 08-00060A KDI Wyalusing Power LLC/New Fortress Energy Site

Good afternoon.

Attached please find a proposed copy of Plan Approval 08-00060A for KDI Wyalusing Power LLC/New Fortress Energy Site located in Wyalusing Township, Bradford County, Pennsylvania. Please review the attached proposed operating permit and provide any comments within **30 days** of this notice.

If you have any questions, please contact Brian K. Bailey, P.E., Facilities Permitting Section, Air Quality Program by email bribailey@pa.gov or by phone 570.974.2604.

Respectfully,
Martha

Martha Hackenberg | Air Quality Program – Clerical Assistant 2
Department of Environmental Protection
North Central Regional Office
208 West Third Street Suite 101 | Williamsport PA 17701
Phone: 570.327.3638 | Fax: 570.327.3420
www.dep.pa.gov

KLONDIKE
Digital Infrastructure

111 W 19th Street, 8th Floor
New York, NY 10011

July 29, 2025

Muhammad Zaman
Environmental Program Manager, Facilities Permitting Section, Air Quality Program
Pennsylvania Department of Environmental Protection
Northcentral Regional Office
208 West Third Street, Suite 101
Williamsport, PA 17701

Re: Proposed Plan Approval Updates
Plan Approval 08-00060A
Wyalusing Township, Bradford County

Dear Mr. Zaman:

KDI Wyalusing Power LLC (KDI) is submitting this letter in response to the Pennsylvania Department of Environmental Protection (PADEP) Northcentral Regional Office's July 1, 2025 email from PADEP's Air Quality Program Clerical Assistant 2, Martha Hackenberg, providing the proposed Plan Approval 08-00060A (Plan Approval) for the KDI Wyalusing Energy Center (Facility). This Plan approval will serve as the PADEP's approval for KDI to construct and initially operate a natural gas-fired power generation facility, to be located in Wyalusing Township, Bradford County, Pennsylvania.

KDI has reviewed the proposed Plan Approval 08-00060A and has identified conditions that require correction and/or clarification . KDI's comments and proposed changes are listed below and illustrated as mark-ups in the attached draft Plan Approval 08-0006A (Attachment 1).

1. **The phone number, (703) 778-0842, for Debra L. Raggio, the Responsible Official and Plan Approval Contact Person, is incorrectly listed.**

   Update the Responsible Official and Plan Approval Contact Person phone number to **(703) 778-0841**.

2. **The Plan Approval refers to the eight natural gas-fired GE Model TM25000 self-contained simple cycle combustion turbines rated as "31 MW" in the following sections:**
   - **Plan Approval Description**
   - **Section D VII Additional Requirements, Condition #001 for Source IDs P101 through P108.**

   KDI is requesting that PADEP add clarifying language to each condition to specify that the combustion turbine megawatt rating is a "nominal rating" that is dependent on situational operating and ambient conditions. Proposed wording change for each applicable section:
   - **Plan Approval Description**: *This plan approval is for the construction of the Wyalusing Energy Center (WEC) consisting of eight (8) 31 MW **(nominal rating)** natural gas fired GE Model TM2500 self-contained simple cycle combustion turbines each equipped with a SCR and oxidation catalyst*

KLONDIKE
Digital Infrastructure

111 W 19th Street, 8th Floor
New York, NY 10011

emissions control. The plan approval is also for the construction of a diesel fired emergency fire pump engine.

- **Section D VII Additional Requirements, Condition #001 for Source IDs P101 through P108:** *Source ID P10X is a 31 MW **(nominal rating)** General Electric model TM2500 natural gas fired combustion turbine. The NO_X, CO and VOC air contaminant emissions from which shall be controlled by a BASF model CAMET oxidation catalyst (proposed Source ID C101A) and a SISU Energy Selective Catalytic Reduction unit (proposed Source ID C101B).*

3. **In Section C, II. Testing Requirements, Condition #006 (a) of the Plan Approval the Condition states subsequent testing is completed every two years from the previous tests for carbon monoxide, ammonia slip, volatile organic compounds (including formaldehyde) and total (filterable and condensable particulate matter).**

   KDI proposes to delete the carbon monoxide (CO) testing due to the proposed installation of CO CEMS that will provide continuous monitoring of CO emissions and to include language that will address the Facility's ability to petition PADEP to reduce the frequency of the stack testing upon demonstration of compliance based on completed source testing after the units are operational with the following proposed language:

   (a) *The permittee shall conduct initial EPA reference method testing on each of the turbines (Source IDs P101 – P108 within 180 days of the startup of the facility and subsequent testing every two years from the previous tests for ammonia slip, volatile organic compounds (including formaldehyde), and total (filterable and condensable) particulate matter. If the initial compliance test demonstrates that (Source IDs P101 – P108) meet emissions limitations, the Facility may submit a written request to the Northcentral Regional Office to revise the frequency of subsequent compliance tests, not to exceed 60 months from the date of the previous compliance test.*

4. **In Section C, II. Testing Requirements, Condition #006 (c) of the Plan Approval, the Condition states SO2 stack testing must be conducted in accordance with the provisions of 40 CFR Part 60 Subpart KKKK Section 60.4400 and must be done on all turbines.**

   The citation 40 CFR Part 60 Subpart KKKK Section 60.4400 should be corrected to the appropriate citation 40 CFR Part 60 Subpart KKKK Section 60.4415, which outlines four methodologies that may be used to demonstrate compliance with SO2 emissions standards. KDI proposes the following language:

   (c) SO2 compliance shall be demonstrated in accordance with the provisions of 40 CFR Part 60 Subpart KKKK Section 60.4415 for all eight turbines. It is the intent of KDI to utilize Section 60.4415(a)(1): The Facility may use a current, valid purchase contract, tariff sheet, or transportation contract for the fuel specifying the maximum total sulfur content. However KDI reserves the right to utilize all of the methods listed under Section 60.4415 to demonstrate compliance with the emission standard for SO2.

5. **In Section E, III. Monitoring Requirements, Condition #017 (a) of the Plan Approval, the Condition includes reference to the use of a volumetric flow system.**

111 W 19th Street, 8th Floor
New York, NY 10011

KDI proposes the removal of requirement to install a volumetric flow due to the proposed installation of a certified fuel flow meter at the Facility which then allows determination of compliance with all emission limits without the need for a volumetric flow meter. Below is proposed revised language for Condition #017:

(a) The permittee shall install, certify, maintain and operate continuous emission monitoring systems (CEMS) for nitrogen oxide emissions and carbon monoxide ~~as well as volumetric flow on the exhaust of the turbines~~ in accordance with all applicable requirements specified in 25 Pa. Code Chapter 139 and the Department's "Continuous Source Monitoring Manual." No CEMS ~~or flow monitoring system~~ may however be installed unless Phase I approval has first been obtained from the Department.

6. **In Section E, IV. Recordkeeping Requirements, Condition #021 (f) states comprehensive records must be kept for the number of startup and shutdowns of for the turbine each month.**

KDI requests the removal of (f) from Condition #021 due to the Facility being a Minor Source. Additionally, KDI will be including emissions from startup and shutdown events in their monthly and 12-month rolling emissions summaries to PADEP to demonstrate compliance with the emission limits.

7. **In Section E, I. Restrictions, Condition #005, the volatile organic compound emissions (measured by propane) from each of the turbines states each turbine shall not exceed 1.32 ppmv corrected to 15% 02 and 2.19 lb/hr.**

The post-control emissions rate for volatile organic compound emissions (measured by propane) at 15% O2 is listed as 3.43 ppmvd in Table E-1 as part of the December 26, 2024 submittal. KDI requests the discrepancy of 1.32 ppmv value be updated to 3.43 ppmv to accurately account for the post-control emissions rate, corresponding to the 2.19 lb/hr.

8. **In Section E, VI. Additional Requirements, Condition #024, the Condition refers to the timeline in which each catalytic oxidizer shall be changed out based on 26,280 hours of operation per turbine.**

The 26,280 hours of operation value is a limit based on three years of operation per turbine which is an estimate of the activation life of the catalyst. Typically, the manufacturer recommends sending them test plugs of the catalyst which are built into the catalyst structure for activation testing, and determination of replacement is based on this testing. Therefore, the catalyst will be replaced based on its remaining ability to reduce NO_x emissions and not on operation time. KDI proposes the revised *wording* for Condition #024:

Pursuant to the best available technology requirements of 25 Pa. Code Sections 127.1 and 127.12, each catalytic oxidizer associated with the turbines shall be changed out ***in accordance with manufacturer's and/or vendor's recommendations based on testing of remaining catalyst activation level***.

111 W 19th Street, 8th Floor
New York, NY 10011

9. **In Section E, VII. Additional Requirements, Condition #025, the Condition refers to the total number of startups for all eight combustion turbines not exceeding 365 startups in any 12 consecutive month period.**

   KDI proposes to delete this condition. There is an annual (12 consecutive months) emissions limit inclusive of all emissions which includes the steady-state operating conditions, as well as startup and shutdown operations.

Should you have any questions about this submittal, please feel free to contact me at 703-778-0841 x123 or draggio@newfortressenergy.com.

Sincerely,
KDI Wyalusing Power LLC

Debra Raggio
Executive Vice President, Head of Regulatory

cc: Brian K. Bailey (PADEP)
Joseph L. Piktel (PADEP)
Lily Hassan (KDI)
Merritt McGlynn (ALL4 LLC)
John Slade (ALL4 LLC)

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
AIR QUALITY PROGRAM

PLAN APPROVAL

Issue Date: Effective Date:

Expiration Date:

In accordance with the provisions of the Air Pollution Control Act, the Act of January 8, 1960, P.L. 2119, as amended, and 25 Pa. Code Chapter 127, the Owner, [and Operator if noted] (hereinafter referred to as permittee) identified below is authorized by the Department of Environmental Protection (Department) to construct, install, modify or reactivate the air emission source(s) more fully described in the site inventory list. This Facility is subject to all terms and conditions specified in this plan approval. Nothing in this plan approval relieves the permittee from its obligations to comply with all applicable Federal, State and Local laws and regulations.

The regulatory or statutory authority for each plan approval condition is set forth in brackets. All terms and conditions in this permit are federally enforceable unless otherwise designated as "State-Only" requirements.

Plan Approval No. 08-00060A

Federal Tax Id - Plant Code: 33-2410502-1

Owner Information

Name: KDI WYALUSING POWER LLC
Mailing Address: 111 W 19TH ST
8TH FLOOR
NEW YORK, NY 10011-4115

Plant Information

Plant: KDI WYALUSING POWER LLC/NEW FORTESS ENERGY SITE
Location: 08 Bradford County 08951 Wyalusing Township
SIC Code: 7374 Services - Data Processing Services

Responsible Official

Name: DEBRA L RAGGIO
Title: EXECUTIVE VP
Phone: (703) 778 - 0841 Email: draggio@newfortressenergy.com

Plan Approval Contact Person

Name: DEBRA L RAGGIO
Title: EXECUTIVE VP
Phone: (703)778 - 0841 Email: draggio@newfortressenergy.com

[Signature] _____

MUHAMMAD Q. ZAMAN, ENVIRONMENTAL PROGRAM MANAGER, NORTHCENTRAL REGION

Plan Approval Description

This plan approval is for the construction of the Wyalusing Energy Center (WEC) consisting of eight (8) 31 MW (nominal rating) natural gas fired GE Model TM2500 self-contained simple cycle combustion turbines equipped with a SCR and oxidation catalyst. The plan approval is also for the construction of a diesel fired emergency fire pump engine.

SECTION A. Table of Contents

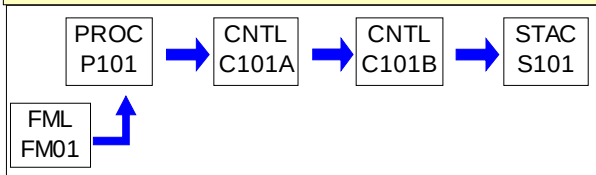
SECTION A. Table of Contents

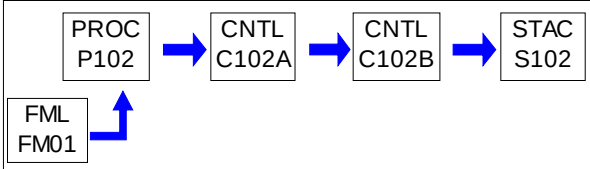
SECTION A. Plan Approval Inventory List

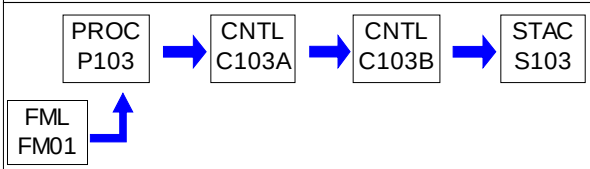
Source ID	Source Name	Capacity/Throughput	Fuel/Material
P101	COMBUSTION TURBINE 1	330.800 MMBTU/HR	
P102	COMBUSTION TURBINE 2	330.800 MMBTU/HR	
P103	COMBUSTION TURBINE 3	330.800 MMBTU/HR	
P104	COMBUSTION TURBINE 4	330.800 MMBTU/HR	
P105	COMBUSTION TURBINE 5	330.800 MMBTU/HR	
P106	COMBUSTION TURBINE 6	330.800 MMBTU/HR	
P107	COMBUSTION TURBINE 7	330.800 MMBTU/HR	
P108	COMBUSTION TURBINE 8	330.800 MMBTU/HR	
P201	FIRE PUMP		
P500	AMMONIA TANK		
C101A	OXIDATION CATALYST UNIT 1		
C101B	SCR UNIT 1		
C102A	OXIDATION CATALYST UNIT 2		
C102B	SCR UNIT 2		
C103A	OXIDATION CATALYST UNIT 3		
C103B	SCR UNIT 3		
C104A	OXIDATION CATALYST UNIT 4		
C104B	SCR UNIT 4		
C105A	OXIDATION CATALYST UNIT 5		
C105B	SCR UNIT 5		
C106A	OXIDATION CATALYST UNIT 6		
C106B	SCR UNIT 6		
C107A	OXIDATION CATALYST UNIT 7		
C107B	SCR UNIT 7		
C108A	OXIDATION CATALYST UNIT 8		
C108B	SCR UNIT 8		
FM01	NATURAL GAS LINE		
FM02	DIESEL TANK		
S101	TURBINE 1 STACK		
S102	TURBINE 2 STACK		
S103	TURBINE 3 STACK		
S104	TURBINE 4 STACK		
S105	TURBINE 5 STACK		
S106	TURBINE 6 STACK		
S107	TURBINE 7 STACK		
S108	TURBINE 8 STACK		
S201	FIRE PUMP STACK		
S500	AMMONIA TANK STACK		

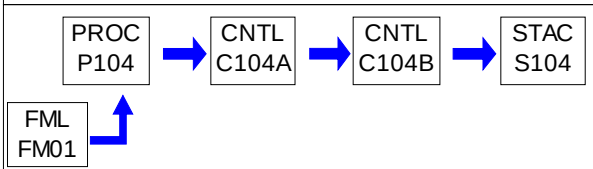
PERMIT MAPS

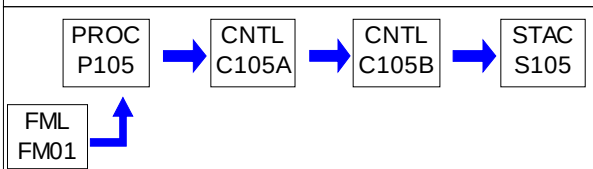
PERMIT MAPS

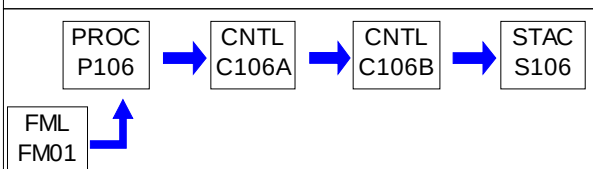

PROC P101
CNTL C101A
CNTL C101B
STAC S101
FML FM01

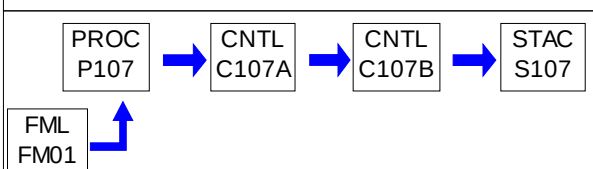

PROC P102
CNTL C102A
CNTL C102B
STAC S102
FML FM01

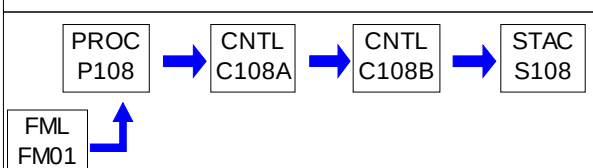

PROC P103
CNTL C103A
CNTL C103B
STAC S103
FML FM01

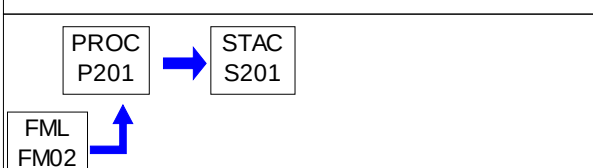

PROC P104
CNTL C104A
CNTL C104B
STAC S104
FML FM01


PROC P105
CNTL C105A
CNTL C105B
STAC S105
FML FM01

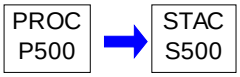

PROC P106
CNTL C106A
CNTL C106B
STAC S106
FML FM01


PROC P107
CNTL C107A
CNTL C107B
STAC S107
FML FM01


PROC P108
CNTL C108A
CNTL C108B
STAC S108
FML FM01


PROC P201
STAC S201
FML FM02

PERMIT MAPS



SECTION B. General Plan Approval Requirements

#001 [25 Pa. Code § 121.1]

Definitions

Words and terms that are not otherwise defined in this plan approval shall have the meanings set forth in Section 3 of the Air Pollution Control Act (35 P.S. § 4003) and 25 Pa. Code § 121.1.

#002 [25 Pa. Code § 127.12b (a) (b)]

Future Adoption of Requirements

The issuance of this plan approval does not prevent the future adoption by the Department of any rules, regulations or standards, or the issuance of orders necessary to comply with the requirements of the Federal Clean Air Act or the Pennsylvania Air Pollution Control Act, or to achieve or maintain ambient air quality standards. The issuance of this plan approval shall not be construed to limit the Department's enforcement authority.

#003 [25 Pa. Code § 127.12b]

Plan Approval Temporary Operation

This plan approval authorizes temporary operation of the source(s) covered by this plan approval provided the following conditions are met.

(a) When construction, installation, modification, or reactivation is being conducted, the permittee shall provide written notice to the Department of the completion of the activity approved by this plan approval and the permittee's intent to commence operation at least five (5) working days prior to the completion of said activity. The notice shall state when the activity will be completed and when the permittee expects to commence operation. When the activity involves multiple sources on different time schedules, notice is required for the commencement of operation of each source.

(b) Pursuant to 25 Pa. Code § 127.12b (d), temporary operation of the source(s) is authorized to facilitate the shakedown of sources and air cleaning devices, to permit operations pending the issuance of a permit under 25 Pa. Code Chapter 127, Subchapter F (relating to operating permits) or Subchapter G (relating to Title V operating permits) or to permit the evaluation of the air contaminant aspects of the source.

(c) This plan approval authorizes a temporary operation period not to exceed 180 days from the date of commencement of operation, provided the Department receives notice from the permittee pursuant to paragraph (a), above.

(d) The permittee may request an extension of the 180-day shakedown period if further evaluation of the air contamination aspects of the source(s) is necessary. The request for an extension shall be submitted, in writing, to the Department at least 30 days prior to the end of the initial 180-day shakedown period and shall provide a description of the compliance status of the source, a detailed schedule for establishing compliance, and the reasons compliance has not been established. This temporary operation period will be valid for a limited time and may be extended for additional limited periods, each not to exceed 180 days.

(e) The notice submitted by the permittee pursuant to subpart (a) above, prior to the expiration of the plan approval, shall modify the plan approval expiration date on Page 1 of this plan approval. The new plan approval expiration date shall be 180 days from the date of commencement of operation.

#004 [25 Pa. Code § 127.12(a) (10)]

Content of Applications

The permittee shall maintain and operate the sources and associated air cleaning devices in accordance with good engineering practice as described in the plan approval application submitted to the Department.

#005 [25 Pa. Code §§ 127.12(c) and (d) & 35 P.S. § 4013.2]

Public Records and Confidential Information

(a) The records, reports or information obtained by the Department or referred to at public hearings shall be available to the public, except as provided in paragraph (b) of this condition.

(b) Upon cause shown by the permittee that the records, reports or information, or a particular portion thereof, but not emission data, to which the Department has access under the act, if made public, would divulge production or sales figures or methods, processes or production unique to that person or would otherwise tend to affect adversely the

SECTION B. General Plan Approval Requirements

competitive position of that person by revealing trade secrets, including intellectual property rights, the Department will consider the record, report or information, or particular portion thereof confidential in the administration of the act. The Department will implement this section consistent with sections 112(d) and 114(c) of the Clean Air Act (42 U.S.C.A. § § 7412(d) and 7414(c)). Nothing in this section prevents disclosure of the report, record or information to Federal, State or local representatives as necessary for purposes of administration of Federal, State or local air pollution control laws, or when relevant in a proceeding under the act.

#006 [25 Pa. Code § 127.12b]

Plan Approval terms and conditions.

[Additional authority for this condition is derived from 25 Pa. Code Section 127.13]

(a) This plan approval will be valid for a limited time, as specified by the expiration date contained on Page 1 of this plan approval. Except as provided in § § 127.11a and 127.215 (relating to reactivation of sources; and reactivation), at the end of the time, if the construction, modification, reactivation or installation has not been completed, a new plan approval application or an extension of the previous approval will be required.

(b) If construction has commenced, but cannot be completed before the expiration of this plan approval, an extension of the plan approval must be obtained to continue construction. To allow adequate time for departmental action, a request for the extension shall be postmarked at least thirty (30) days prior to the expiration date. The request for an extension shall include the following:

(i) A justification for the extension,
(ii) A schedule for the completion of the construction

If construction has not commenced before the expiration of this plan approval, then a new plan approval application must be submitted and approval obtained before construction can commence.

(c) If the construction, modification or installation is not commenced within 18 months of the issuance of this plan approval or if there is more than an 18-month lapse in construction, modification or installation, a new plan approval application that meets the requirements of 25 Pa. Code Chapter 127, Subchapter B (related to plan approval requirements), Subchapter D (related to prevention of significant deterioration of air quality), and Subchapter E (related to new source review) shall be submitted. The Department may extend the 18-month period upon a satisfactory showing that an extension is justified.

#007 [25 Pa. Code § 127.32]

Transfer of Plan Approvals

(a) This plan approval may not be transferred from one person to another except when a change of ownership is demonstrated to the satisfaction of the Department and the Department approves the transfer of the plan approval in writing.

(b) Section 127.12a (relating to compliance review) applies to a request for transfer of a plan approval. A compliance review form shall accompany the request.

(c) This plan approval is valid only for the specific source and the specific location of the source as described in the application.

#008 [25 Pa. Code § 127.12(a)(4) & 35 P.S. § 4008 & § 114 of the CAA]

Inspection and Entry

(a) Pursuant to 35 P.S. § 4008, no person shall hinder, obstruct, prevent or interfere with the Department or its personnel in the performance of any duty authorized under the Air Pollution Control Act.

(b) The permittee shall also allow the Department to have access at reasonable times to said sources and associated air cleaning devices with such measuring and recording equipment, including equipment recording visual observations, as the Department deems necessary and proper for performing its duties and for the effective enforcement of the Air Pollution Control Act and regulations adopted under the act.

SECTION B. General Plan Approval Requirements

(c) Nothing in this plan approval condition shall limit the ability of the Environmental Protection Agency to inspect or enter the premises of the permittee in accordance with Section 114 or other applicable provisions of the Clean Air Act.

#009 [25 Pa. Code 127.13a]

Plan Approval Changes for Cause

This plan approval may be terminated, modified, suspended or revoked and reissued if one or more of the following applies:

(a) The permittee constructs or operates the source subject to the plan approval in violation of the act, the Clean Air Act, the regulations promulgated under the act or the Clean Air Act, a plan approval or permit or in a manner that causes air pollution.

(b) The permittee fails to properly or adequately maintain or repair an air pollution control device or equipment attached to or otherwise made a part of the source.

(c) The permittee fails to submit a report required by this plan approval.

(d) The Environmental Protection Agency determines that this plan approval is not in compliance with the Clean Air Act or the regulations thereunder.

#010 [25 Pa. Code §§ 121.9 & 127.216]

Circumvention

(a) The permittee, or any other person, may not circumvent the new source review requirements of 25 Pa. Code Chapter 127, Subchapter E by causing or allowing a pattern of ownership or development, including the phasing, staging, delaying or engaging in incremental construction, over a geographic area of a facility which, except for the pattern of ownership or development, would otherwise require a permit or submission of a plan approval application.

(b) No person may permit the use of a device, stack height which exceeds good engineering practice stack height, dispersion technique or other technique which, without resulting in reduction of the total amount of air contaminants emitted, conceals or dilutes an emission of air contaminants which would otherwise be in violation of this plan approval, the Air Pollution Control Act or the regulations promulgated thereunder, except that with prior approval of the Department, the device or technique may be used for control of malodors.

#011 [25 Pa. Code § 127.12c]

Submissions

Reports, test data, monitoring data, notifications shall be submitted to the:

Regional Air Program Manager
PA Department of Environmental Protection
(At the address given on the plan approval transmittal letter or otherwise notified)

#012 [25 Pa. Code § 127.12(a)(9) & 40 CFR Part 68]

Risk Management

(a) If required by Section 112(r) of the Clean Air Act, the permittee shall develop and implement an accidental release program consistent with requirements of the Clean Air Act, 40 CFR Part 68 (relating to chemical accident prevention provisions) and the Federal Chemical Safety Information, Site Security and Fuels Regulatory Relief Act (P.L. 106-40).

(b) The permittee shall prepare and implement a Risk Management Plan (RMP) which meets the requirements of Section 112(r) of the Clean Air Act, 40 CFR Part 68 and the Federal Chemical Safety Information, Site Security and Fuels Regulatory Relief Act when a regulated substance listed in 40 CFR § 68.130 is present in a process in more than the listed threshold quantity at the facility. The permittee shall submit the RMP to the Environmental Protection Agency according to the following schedule and requirements:

(1) The permittee shall submit the first RMP to a central point specified by the Environmental Protection Agency no later than the latest of the following:

SECTION B. General Plan Approval Requirements

(i) Three years after the date on which a regulated substance is first listed under § 68.130; or,
(ii) The date on which a regulated substance is first present above a threshold quantity in a process.

(2) The permittee shall submit any additional relevant information requested by the Department or the Environmental Protection Agency concerning the RMP and shall make subsequent submissions of RMPs in accordance with 40 CFR § 68.190.

(3) The permittee shall certify that the RMP is accurate and complete in accordance with the requirements of 40 CFR Part 68, including a checklist addressing the required elements of a complete RMP.

(c) As used in this plan approval condition, the term "process" shall be as defined in 40 CFR § 68.3. The term "process" means any activity involving a regulated substance including any use, storage, manufacturing, handling, or on-site movement of such substances or any combination of these activities. For purposes of this definition, any group of vessels that are interconnected, or separate vessels that are located such that a regulated substance could be involved in a potential release, shall be considered a single process.

#013 [25 Pa. Code § 127.25]

Compliance Requirement

A person may not cause or permit the operation of a source subject to § 127.11 (relating to plan approval requirements), unless the source and air cleaning devices identified in the application for the plan approval and the plan approval issued to the source, are operated and maintained in accordance with specifications in the application and conditions in the plan approval issued by the Department. A person may not cause or permit the operation of an air contamination source subject to this chapter in a manner inconsistent with good operating practices.

SECTION C. Site Level Plan Approval Requirements

I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §123.1]

Prohibition of certain fugitive emissions

The permittee shall not permit the emission of fugitive air contaminants into the outdoor atmosphere from a source other than the following:

(1) Construction or demolition of buildings or structures.

(2) Grading, paving and maintenance of roads and streets.

(3) Use of roads and streets. Emissions from material in or on trucks, railroad cars and other vehicular equipment are not considered as emissions from use of roads and streets.

(4) Clearing of land.

(5) Stockpiling of materials.

(6) Open burning operations.

(7) Blasting in open pit mines. Emissions from drilling are not considered as emissions from blasting.

(8) Sources and classes of sources other than those identified above, for which the permittee has obtained a determination from the Department that fugitive emissions from the source, after appropriate control, meet the following requirements:

(a) the emissions are of minor significance with respect to causing air pollution; and

(b) the emissions are not preventing or interfering with the attainment or maintenance of any ambient air quality standard.

 # 002 [25 Pa. Code §123.2]

Fugitive particulate matter

The permittee shall not permit fugitive particulate matter to be emitted into the outdoor atmosphere from a source specified in (1) through (8) in condition #001 if the emissions are visible at the point the emissions pass outside the permittee's property

 # 003 [25 Pa. Code §123.41]

Limitations

The permittee shall not permit the emission of visible air contaminants into the outdoor atmosphere in such a manner that the opacity of the emission is either of the following:

(1) Equal to or greater than 20% for a period or periods aggregating more than three minutes in any 1 hour.

(2) Equal to or greater than 60% at any time.

 # 004 [25 Pa. Code §123.42]

Exceptions

The emission limitations in condition #003 shall not apply when:

(1) The presence of uncombined water is the only reason for failure of the emission to meet the limitations;

(2) The emission results from the operation of equipment used solely to train and test persons in observing the opacity of visible emissions;

(3) The emission results from sources specified in condition #001 (1) through (8).

SECTION C. Site Level Plan Approval Requirements

II. TESTING REQUIREMENTS.

 # 005 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

(a) Pursuant to 25 Pa. Code Section 139.3, at least 60 calendar days prior to commencing a EPA reference method testing program, a test protocol shall be submitted to the Department for review and approval. The test protocol shall meet all applicable requirements specified in the most current version of the Department's Source Testing Manual.

(b) Pursuant to 25 Pa. Code Section 139.3, at least 15 calendar days prior to commencing an emission testing program, notification as to the date and time of testing shall be given to the appropriate Regional Office. Notification shall also be sent to the Division of Source Testing and Monitoring. Notification shall not be made without prior receipt of a protocol acceptance letter from the Department.

(c) Pursuant to 40 CFR Section 60.8(a), 40 CFR Section 61.13(f) and 40 CFR Section 63.7(g), complete test reports shall be submitted to the Department no later than 60 calendar days after completion of the on-site testing portion of an EPA reference method test program.

(d) Pursuant to 25 Pa. Code Section 139.53(b) a complete test report shall include a summary of the emission results on the first page of the report indicating if each pollutant measured is within permitted limits and a statement of compliance or noncompliance with all applicable permit conditions. The summary results will include, at a minimum, the following information:

1. A statement that the owner or operator has reviewed the report from the emissions testing body and agrees with the findings.
2. Permit number(s) and condition(s) which are the basis for the evaluation.
3. Summary of results with respect to each applicable permit condition.
4. Statement of compliance or non-compliance with each applicable permit condition.

(e) Pursuant to 25 Pa. Code Section 139.3, all submittals shall meet all applicable requirements specified in the most current version of the Department's Source Testing Manual.

(f) All testing shall be performed in accordance with the provisions of Chapter 139 of the Rules and Regulations of the Department of Environmental Protection.

(g) The permittee shall insure all federal reporting requirements contained in the applicable subpart of 40 CFR are followed, including timelines more stringent than those contained herein. In the event of an inconsistency or any conflicting requirements between state and the federal, the most stringent provision, term, condition, method or rule shall be used by default.

(h) Pursuant to 25 Pa. Code Section 139.53(a)(1) and 139.53(a)(3) all submittals, besides notifications, shall be accomplished through PSIMS*Online available through https://www.depgreenport.state.pa.us/ecomm/Login.jsp when it becomes available. If internet submittal can not be accomplished, two (2) copies of the submittal shall be sent to the Pennsylvania Department of Environmental Protection, North Central Regional Office, Air Quality Program Manager, 208 West Third Street, Suite 101, Williamsport PA, 17701 with deadlines verified through document postmarks.

(i) The permittee shall insure all federal reporting requirements contained in the applicable subpart of 40 CFR are followed,including timelines more stringent than those contained herein. In the event of an inconsistency or any conflicting requirements between state and the federal, the most stringent provision, term, condition, method or rule shall be used by default.

 # 006 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[Additional authority foir this plan approval condition is derived from 40 CFR Part 60 Subpart KKKK Section 60.4400 and 60.4415]

(a) The permittee shall conduct initial EPA reference method testing on each of the turbines (Source IDs P101 - P108) within 180 days of the startup of the facility and subsequent testing every two years from the previous tests for ammonia slip, volatile organic compounds (including formaldehyde), and total (filterable and condensable)

SECTION C. Site Level Plan Approval Requirements

particulate matter. If the initial compliance test demonstrates that (Source IDs P101 - P108) meet emissions limitations, the Facility may submit a written request to the Northcentral Regional Office to revise the frequency of subsequent compliance tests, not to exceed 60 months from the date of the previous compliance test.
(b) Nitrogen oxide (NOx) stack testing must be conducted in accordance with the provisions of 40 CFR Part 60 Subpart KKKK Section 60.4400 and must be done on all eight turbines.

(c) SO2 compliance shall be demonstrated in accordance with the provisions of 40 CFR Part 60 Subpart KKKK Section 60.4415 for all eight turbines. It is the intent of KDI to utilize Section 60.4415(a)(1): The Facility may use a current, valid purchase contract, tariff sheet, or transportation contract for the fuel specifying the maximum total sulfur content. However, KDI reserves the right to utilize all of the methods listed under Section 60.4415 to demonstrate compliance with the emission standard for SO2.

 # 007 [25 Pa. Code §139.1]
Sampling facilities.

Upon the request of the Department, the permittee shall provide adequate sampling ports, safe sampling platforms and adequate utilities for the performance by the Department of tests on a source. The Department will set forth, in the request, the time period in which the facilities shall be provided, as well as the specifications for such facilities.

 # 008 [25 Pa. Code §139.11]
General requirements.

(1) As specified in 25 Pa. Code Section 139.11(1), performance tests shall be conducted while the respective source is operating at maximum routine operating conditions or under such other conditions, within the capacity of the equipment, as may be requested by the Department.

(2) As specified in 25 Pa. Code Section 139.11(2), the Department will consider test results for approval where sufficient information is provided to verify the source conditions existing at the time of the test and where adequate data is available to show the manner in which the test was conducted. Information submitted to the Department shall include, at a minimum all of the following:

(a) A thorough source description, including a description of any air cleaning devices and the flue.
(b) Process conditions, for example, the charging rate of raw material or rate of production of final product, boiler pressure, oven temperature, and other conditions which may affect emissions from the process.
(c) The location of the sampling ports.
(d) Effluent characteristics, including velocity, temperature, moisture content, gas density (percentage CO, CO2, O2 and N2), static and barometric pressures.
(e) Sample collection techniques employed, including procedures used, equipment descriptions and data to verify that isokinetic sampling for particulate matter collection occurred and that acceptable test conditions were met.
(f) Laboratory procedures and results.
(g) Calculated results.

III. MONITORING REQUIREMENTS.

 # 009 [25 Pa. Code §127.12b]
Plan approval terms and conditions.

(a) The permittee shall conduct a daily inspection of the facility during daylight hours while the facility is operating to detect the presence of visible air contaminant emissions, visible fugitive air contaminant emissions and malodorous air contaminant emissions in excess of applicable emission limits.

(b) All visible air contaminant emissions, visible fugitive air contaminant emissions and malodorous air contaminant emissions observed to be in excess of an emission limit shall be reported to the manager of the facility at once.

IV. RECORDKEEPING REQUIREMENTS.

 # 010 [25 Pa. Code §135.3]
Reporting

(a) The permittee shall maintain and make available upon request of the Department such records, including computerized records that may be necessary to comply with 25 Pa. Code Section 135.3. These may include records of production, fuel usage, maintenance of production or pollution control equipment or other information determined by the Department to be necessary for identification and quantification of potential and actual air contaminant emissions.

(b) All records generated pursuant to this condition shall be retained for a minimum of five years and be made available to

SECTION C. Site Level Plan Approval Requirements

the Department upon request.

V. REPORTING REQUIREMENTS.

 # 011 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall submit all requested reports in accordance with the Department's suggested format.

 # 012 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

(a) The permittee shall report malfunctions, emergencies or incidents of excess emissions to the Department. A malfunction is any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. An emergency is any situation arising from sudden and reasonably unforeseeable events beyond the control of the owner or operator of a facility which requires immediate corrective action to restore normal operation and which causes the emission source to exceed emissions, due to unavoidable increases in emissions attributable to the situation. An emergency shall not include situations caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.

(b) When the malfunction, emergency or incident of excess emissions poses an imminent danger to the public health, safety, welfare, or environment, it shall be reported to the Department and the County Emergency Management Agency by telephone within one (1) hour after the discovery of the malfunction, emergency or incident of excess emissions. The owner or operator shall submit a written or emailed report of instances of such malfunctions, emergencies or incidents of excess emissions to the Department within three (3) business days of the telephone report.

(c) The report shall describe the following:

1. name, permit or authorization number, and location of the facility,
2. nature and cause of the malfunction, emergency or incident,
3. date and time when the malfunction, emergency or incident was first observed,
4. expected duration of excess emissions,
5. estimated rate of emissions,
6. corrective actions or preventative measures taken.

(d) Any malfunction, emergency or incident of excess emissions that is not subject to the notice requirements of paragraph (b) of this condition shall be reported to the Department by telephone within 24 hours (or by 4:00 PM of the next business day, whichever is later) of discovery and in writing or by e-mail within five (5) business days of discovery. The report shall contain the same information required by paragraph (c), and any permit specific malfunction reporting requirements.

(e) During an emergency an owner or operator may continue to operate the source at their discretion provided they submit justification for continued operation of a source during the emergency and follow all the notification and reporting requirements in accordance with paragraphs (b)-(d), as applicable, including any permit specific malfunction reporting requirements.

(f) Reports regarding malfunctions, emergencies or incidents of excess emissions shall be submitted to the appropriate DEP Regional Office Air Program Manager.

(g) Any emissions resulted from malfunction or emergency are to be reported in the annual emissions inventory report, if the annual emissions inventory report is required by permit or authorization.

VI. WORK PRACTICE REQUIREMENTS.

 # 013 [25 Pa. Code §123.1]

Prohibition of certain fugitive emissions

The permittee shall take all reasonable actions to prevent particulate matter from becoming airborne as specified in 25 Pa. Code Section 123.1 subsection(s) (a)(1)-(7) or (a)(9). These actions shall include, but not be limited to, the following:

SECTION C. Site Level Plan Approval Requirements

(1) Use, where possible, of water or chemicals for control of dust in the demolition of buildings or structures, construction operations, the grading of roads or the clearing of land,

(2) Application of asphalt, oil, or suitable chemicals on dirt roads, material stockpiles and other surfaces which may give rise to airborne dusts,

(3) Paving and maintenance of roadways,

(4) Prompt removal of earth or other material from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water, or other means.

VII. ADDITIONAL REQUIREMENTS.

 # 014 [25 Pa. Code §129.14]

Open burning operations

The permittee shall not permit the open burning of material at this facility unless in accordance with 25 Pa. Code Section 129.14.

VIII. COMPLIANCE CERTIFICATION.

No additional compliance certifications exist except as provided in other sections of this plan approval including Section B (relating to Plan Approval General Requirements).

IX. COMPLIANCE SCHEDULE.

No compliance milestones exist.

SECTION D. Source Level Plan Approval Requirements

Source ID: P101 Source Name: COMBUSTION TURBINE 1

Source Capacity/Throughput: 330.800 MMBTU/HR

Conditions for this source occur in the following groups: TURBINES

I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

VII. ADDITIONAL REQUIREMENTS.

 # 001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Source ID P101 is a 31 MW (nominal rating) General Electric model TM2500 natural gas fired combustion turbine. The air contaminant emissions from which shall be controlled by a BASF model CAMET oxidation catalyst (ID C101A) and a SISU Energy Selective Catalytic Reduction unit (ID C101B).

SECTION D. Source Level Plan Approval Requirements

Source ID: P102 Source Name: COMBUSTION TURBINE 2

Source Capacity/Throughput: 330.800 MMBTU/HR

Conditions for this source occur in the following groups: TURBINES

I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

VII. ADDITIONAL REQUIREMENTS.

 # 001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Source ID P102 is a 31 MW (nominal rating) General Electric model TM2500 natural gas fired combustion turbine. The air contaminant emissions from which shall be controlled by a BASF model CAMET oxidation catalyst (ID C102A) and a SISU Energy Selective Catalytic Reduction unit (ID C102B).

SECTION D. Source Level Plan Approval Requirements

Source ID: P103 Source Name: COMBUSTION TURBINE 3

Source Capacity/Throughput: 330.800 MMBTU/HR

Conditions for this source occur in the following groups: TURBINES

I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

VII. ADDITIONAL REQUIREMENTS.

 # 001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Source ID P103 is a 31 MW (nominal rating) General Electric model TM2500 natural gas fired combustion turbine. The air contaminant emissions from which shall be controlled by a BASF model CAMET oxidation catalyst (ID C103A) and a SISU Energy Selective Catalytic Reduction unit (ID C103B).

SECTION D. Source Level Plan Approval Requirements

Source ID: P104 Source Name: COMBUSTION TURBINE 4

Source Capacity/Throughput: 330.800 MMBTU/HR

Conditions for this source occur in the following groups: TURBINES

I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

VII. ADDITIONAL REQUIREMENTS.

 # 001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Source ID P104 is a 31 MW (nominal rating) General Electric model TM2500 natural gas fired combustion turbine. The air contaminant emissions from which shall be controlled by a BASF model CAMET oxidation catalyst (ID C104A) and a SISU Energy Selective Catalytic Reduction unit (ID C104B).

SECTION D. Source Level Plan Approval Requirements

Source ID: P105 Source Name: COMBUSTION TURBINE 5

Source Capacity/Throughput: 330.800 MMBTU/HR

Conditions for this source occur in the following groups: TURBINES

I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

VII. ADDITIONAL REQUIREMENTS.

 # 001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Source ID P105 is a 31 MW (nominal rating) General Electric model TM2500 natural gas fired combustion turbine. The air contaminant emissions from which shall be controlled by a BASF model CAMET oxidation catalyst (ID C105A) and a SISU Energy Selective Catalytic Reduction unit (ID C105B).

SECTION D. Source Level Plan Approval Requirements

Source ID: P106 Source Name: COMBUSTION TURBINE 6

Source Capacity/Throughput: 330.800 MMBTU/HR

Conditions for this source occur in the following groups: TURBINES

I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

VII. ADDITIONAL REQUIREMENTS.

 # 001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Source ID P106 is a 31 MW (nominal rating) General Electric model TM2500 natural gas fired combustion turbine. The air contaminant emissions from which shall be controlled by a BASF model CAMET oxidation catalyst (ID C106A) and a SISU Energy Selective Catalytic Reduction unit (ID C106B).

SECTION D. Source Level Plan Approval Requirements

Source ID: P107 Source Name: COMBUSTION TURBINE 7

Source Capacity/Throughput: 330.800 MMBTU/HR

Conditions for this source occur in the following groups: TURBINES

I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

VII. ADDITIONAL REQUIREMENTS.

 # 001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Source ID P107 is a 31 MW (nominal rating) General Electric model TM2500 natural gas fired combustion turbine. The air contaminant emissions from which shall be controlled by a BASF model CAMET oxidation catalyst (ID C107A) and a SISU Energy Selective Catalytic Reduction unit (ID C107B).

SECTION D. Source Level Plan Approval Requirements

Source ID: P108 Source Name: COMBUSTION TURBINE 8

Source Capacity/Throughput: 330.800 MMBTU/HR

Conditions for this source occur in the following groups: TURBINES

I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

VII. ADDITIONAL REQUIREMENTS.

 # 001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Source ID P108 is a 31 MW (nominal rating) General Electric model TM2500 natural gas fired combustion turbine. The air contaminant emissions from which shall be controlled by a BASF model CAMET oxidation catalyst (ID C108A) and a SISU Energy Selective Catalytic Reduction unit (ID C108B).

SECTION D. Source Level Plan Approval Requirements

Source ID: P201 Source Name: FIRE PUMP

Source Capacity/Throughput:

I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4205]

Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

What emission standards must I meet for emergency engines if I am an owner or operator of a stationary CI internal co

Compliance with the particulate matter limitation in this condition will assure compliance with the provisions of 25 Pa. Code Section 123.13]

Pursuant to the best available technology provisions of 25 Pa. Code Sections 127.1 and 127.12, the air contaminant emissions from the exhaust of Source P201 shall not exceed the following limitations:

(a) nitrogen oxides + NMHC – 7.8 g/bhp-hr
(b) carbon monoxide – 3.7 g/bhp-hr and 0.06 tpy
(c) volatile organic compound – 0.15 g/bhp-hr
(d) particulate matter (PM/PM10/PM2.5) – 0.22 g/bhp-hr

Fuel Restriction(s).

 # 002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4207]

Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

What fuel requirements must I meet if I am an owner or operator of a stationary CI internal combustion engine subject t

Owners and operators of stationary CI ICE subject to 40 CFR Part 60 Subpart IIII with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 1090.305 for nonroad diesel fuel.

(a) Diesel fuel must meet the ULSD per-gallon standards of this section.

(b) Sulfur standard. Maximum sulfur content of 15 ppm.

(c) Cetane index or aromatic content. Diesel fuel must meet one of the following standards:

(1) Minimum cetane index of 40.

(2) Maximum aromatic content of 35 volume percent.

Operation Hours Restriction(s).

 # 003 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Pursuant to best available technology requirements of 25 Pa. Code Section 127.1 and 127.12, Source ID P201 shall not be operated in excess of 500 hours in any 12 consecutive month period.

SECTION D. Source Level Plan Approval Requirements

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

III. MONITORING REQUIREMENTS.

 # 004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4209]

Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

What are the monitoring requirements if I am an owner or operator of a stationary CI internal combustion engine?

Source ID P201 shall be equipped with a non-resettable hour meter.

IV. RECORDKEEPING REQUIREMENTS.

 # 005 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

(a) The permittee shall record the hours that Source P201 operated through the non-resettable hour meter and shall calculate the 12-consecutive month total hours of operation, including supporting documentation, to verify compliance with the operational restriction specified in this plan approval on a monthly basis. Additionally, the permittee shall record the time of operation of the engine and the reason the engine was in operation during that time.

(b) The information used to demonstrate compliance with this condition shall be kept for a minimum of five years and shall be made available to the Department upon request.

 # 006 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall keep accurate and comprehensive records of the following information for Source P201:

(a) the supporting information and calculations used to demonstrate that the emissions of from the exhaust of the engine comply with the emissions limitations.

(b) the fuel certification reports for each delivery of diesel fuel.

(c) The information used to demonstrate compliance with this condition shall be kept for a minimum of five years and shall be made available to the Department upon request.

V. REPORTING REQUIREMENTS.

 # 007 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4]

Subpart A - General Provisions

Address.

The submission of all requests, reports, applications, submittals and other communications required by the Standards of Performance for New Stationary Sources (40 CFR Part 60) shall be submitted to both the U. S. Environmental Protection Agency and the Department. The Environmental Protection Agency copies may be sent to:

R3_Air_Apps_and_Notices@epa.gov

and

The Pennsylvania Department of Environmental Protection
Air Quality Program Manager
208 W. Third Street, Suite 101
Williamsport, PA 17701-6448

SECTION D. Source Level Plan Approval Requirements

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VII. ADDITIONAL REQUIREMENTS.

 # 008 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Source P201 is a 125 brake horsepower diesel-fired fire pump engine.

 # 009 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4200]

Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

Am I subject to this subpart?

Source ID P201 is subject to 40 CFR Part 60 Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines. The permittee shall comply with all applicable requirements of this subpart.

 # 010 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4211]

Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

What are my compliance requirements if I am an owner or operator of a stationary CI internal combustion engine?

Source P201 shall be installed and configured according to the manufacturer's emission-related specifications.

 # 011 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6585]

Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

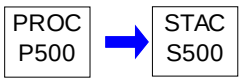
Am I subject to this subpart?

Source ID P201 is subject to 40 CFR Part 63 Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. The permittee will meet the requirements of Subpart ZZZZ by complying with 40 CFR Part 60 Subpart IIII. No further requirements from 40 CFR Part 63 Subpart ZZZZ apply.

SECTION D. Source Level Plan Approval Requirements

Source ID: P500 Source Name: AMMONIA TANK

Source Capacity/Throughput:



I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VII. ADDITIONAL REQUIREMENTS.

 # 001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Source ID P500 is a 22,000 gallon ammonia tank (19% aqueous).

SECTION E. Source Group Plan Approval Restrictions.

Group Name: TURBINES

Group Description: CT 1 - CT 8

Sources included in this group

ID	Name
P101	COMBUSTION TURBINE 1
P102	COMBUSTION TURBINE 2
P103	COMBUSTION TURBINE 3
P104	COMBUSTION TURBINE 4
P105	COMBUSTION TURBINE 5
P106	COMBUSTION TURBINE 6
P107	COMBUSTION TURBINE 7
P108	COMBUSTION TURBINE 8

I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[Compliance with this streamlined plan approval condition assures compliance with the terms and conditions of 40 CFR part 60 Subpart KKKK Section 60.4320(a)]

Pursuant to the best available technology requirements of 25 Pa. Code Sections 127.1 and 127.12, the nitrogen oxide emissions from each turbine shall not exceed 2.5 ppmv corrected to 15% O2 and 2.85 lb/hr.

 # 002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[Compliance with this streamlined plan approval condition assures compliance with the terms and conditions of 40 CFR part 60 Subpart KKKK Section 60.4330(a)(1) and (a)(2) and 25 Pa. Code Section 123.22]

Pursuant to the best available technology requirements of 25 Pa. Code Sections 127.1 and 127.12, the sulfur oxide emissions from each turbine shall not exceed 0.46 lb/hr and 0.90 lb/MWh gross output.

 # 003 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Pursuant to the best available technology requirements of 25 Pa. Code Sections 127.1 and 127.12, the carbon monoxide emissions from each of the turbines shall not exceed 5.0 ppmv corrected to 15% O2 and 3.47 lb/hr.

 # 004 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[Compliance with this streamlined plan approval condition assures compliance with the terms and conditions of 25 Pa. Code Section 123.13]

Pursuant to the best available technology requirements of 25 Pa. Code Sections 127.1 and 127.12, the particulate matter emissions from each of the turbines shall not exceed 3.00 lb/hr.

 # 005 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Pursuant to the best available technology requirements of 25 Pa. Code Sections 127.1 and 127.12, the volatile organic compound emissions (measured as propane) from each of the turbines shall not exceed 3.43 ppmv corrected to 15% O2 and 2.19 lb/hr.

SECTION E. Source Group Plan Approval Restrictions.

 # 006 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Pursuant to the best available technology requirements of 25 Pa. Code Sections 127.1 and 127.12, the ammonia slip contained in the exhaust of each of the turbines shall not exceed 5 ppmv corrected to 15% O2.

 # 007 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Pursuant to the best available technology requirements of 25 Pa. Code Sections 127.1 and 127.12, the greenhouse gas (GHG) emissions from each of the turbines shall not exceed 38,735 lb/hr.

 # 008 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Pursuant to the best available technology requirements of 25 Pa. Code Sections 127.1 and 127.12, the formaldehyde emissions from each of the turbines shall not exceed 0.09 lb/hr.

 # 009 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Pursuant to the best available technology requirements of 25 Pa. Code Sections 127.1 and 127.12, the sulfuric acid mist emissions from each of the turbines shall not exceed 0.07 lb/hr.

 # 010 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Pursuant to the best available technology requirements of 25 Pa. Code Sections 127.1 and 127.12, the total combined emissions from all eight (8) turbines (Source IDs P101 - P108) shall not exceed the following:

Nitrogen Oxides - 74.24 tons in any 12 consecutive month period
Carbon Monoxide - 93.18 tons in any 12 consecutive month period
Volatile Organic Compounds - 40.22 tons in any 12 consecutive month period
Particulate Matter (including PM10 and PM2,5) - 91.63 tons in any 12 consecutive month period
Sulfur Oxides - 13.26 tons in any 12 consecutive month period
Formaldehyde - 2.32 tons in any 12 consecutive month period
Sulfuric Acid Mist - 2.03 tons in any 12 consecutive month period
Greenhouse Gases (as CO2e) - 1,113,659 tons in any 12 consecutive month period.

The limits include emissions resulting from start-up and shutdown.

 # 011 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The cumulative emission of nitrogen oxides from all 8 combustion turbines (Source IDs P101 - P108) shall not exceed the limits below within (i) through (xii) for the first 12 consecutive months of operation.

(i) 37.12 tons the first month
(ii) 43.30 tons the first thought second months
(iii) 46.40 tons the first through third months
(iv) 49.49 tons the first through fourth months
(v) 52.58 tons the first through fifth months
(vi) 55.68 tons the first through sixth months
(vii) 58.77 tons the first through seventh months
(viii) 61.86 tons the first through eighth months
(ix) 64.96 tons the first through ninth months
(x) 68.05 tons the first through tenth months
(xi) 71.14 tons the first through eleventh months
(xii) 74.24 tons the first through twelfth months.

After the first 12 months of operation the turbines shall be restricted to the limits specified in Condition #010 of this section.

SECTION E. Source Group Plan Approval Restrictions.

 # 012 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The cumulative emissions of carbon monoxide from all 8 combustion turbines (Source IDs P101 - P108) shall not exceed the limits below within (i) through (xii) for the first 12 consecutive months of operation.

(i) 46.59 tons the first month
(ii) 54.36 tons the first thought second months
(iii) 58.24 tons the first through third months
(iv) 62.12 tons the first through fourth months
(v) 66.00 tons the first through fifth months
(vi) 69.89 tons the first through sixth months
(vii) 73.77 tons the first through seventh months
(viii) 77.65 tons the first through eighth months
(ix) 81.53 tons the first through ninth months
(x) 85.42 tons the first through tenth months
(xi) 89.30 tons the first through eleventh months
(xii) 93.18 tons the first through twelfth months.

After the first 12 months of operation the turbines shall be restricted to the limits specified in Condition #010 of this section.

 # 013 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The cumulative emission of volatile organic compounds (VOCs) from all 8 combustion turbines (Source IDs P101 - P108) shall not exceed the limits below within (i) through (xii) for the first 12 consecutive months of operation.

(i) 20.11 tons the first month
(ii) 23.46 tons the first though second months
(iii) 25.14 tons the first through third months
(iv) 26.81 tons the first through fourth months
(v) 28.49 tons the first through fifth months
(vi) 30.16 tons the first through sixth months
(vii) 31.84 tons the first through seventh months
(viii) 33.52 tons the first through eighth months
(ix) 35.19 tons the first through ninth months
(x) 36.87 tons the first through tenth months
(xi) 38.54 tons the first through eleventh months
(xii) 40.22 tons the first through twelfth months.

After the first 12 months of operation the turbines shall be restricted to the limits specified in Condition #010 of this section.

 # 014 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The cumulative emission of total particulate matter (including PM10 and PM2.5) from all 8 combustion turbines (Source IDs P101 - P108) shall not exceed the limits below within (i) through (xii) for the first 12 consecutive months of operation.

(i) 45.82 tons the first month
(ii) 53.45 tons the first through second months
(iii) 57.27 tons the first through third months
(iv) 61.09 tons the first through fourth months
(v) 64.91 tons the first through fifth months
(vi) 68.73 tons the first through sixth months
(vii) 72.54 tons the first through seventh months
(viii) 76.36 tons the first through eighth months
(ix) 80.18 tons the first through ninth months
(x) 84.00 tons the first through tenth months
(xi) 87.27 tons the first through eleventh months

SECTION E. Source Group Plan Approval Restrictions.

(xii) 91.63 tons the first through twelfth months.

After the first 12 months of operation the turbines shall be restricted to the limits specified in Condition #010 of this section.

Fuel Restriction(s).

 # 015 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Pursuant to the best available technology requirements of 25 Pa. Code Sections 127.1 and 127.12, the combustion turbines shall only be fired on pipeline quality natural gas.

Throughput Restriction(s).

 # 016 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Pursuant to the best available technology requirements of 25 Pa. Code Sections 127.1 and 127.12, the fuel usage of all eight combustion turbines (Source IDs P101 - P108) combined shall not exceed 18,560 MMSCF in any 12 consecutive month period.

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

III. MONITORING REQUIREMENTS.

 # 017 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[Additional authority for this plan approval condition is also derived from 40 CFR Part 60 Subpart KKKK Section 60.4335]

Pursuant to the best available technology requirements of 25 Pa. Code Sections 127.1 and 127.12,

(a) The permittee shall install, certify, maintain and operate continuous emission monitoring systems (CEMS) for nitrogen oxide emissions and carbon monoxide in accordance with all applicable requirements specified in 25 Pa. Code Chapter 139 and the Department's "Continuous Source Monitoring Manual." No CEMS may however be installed unless Phase I approval has first been obtained from the Department.

(b) The permittee shall submit a Phase I application to the Department for all CEMS and flow monitoring with turbine at least 180 days prior to the expected commencement of operation of each respective unit.

 # 018 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Pursuant to the best available technology requirements of 25 Pa. Code Section 127.1 and 127.12, an oxygen monitor shall be in the exhaust stack of each turbine to monitor oxygen levels to ensure maximum achievable combustion efficiency.

 # 019 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Pursuant to the best available technology requirements of 25 Pa. Code Sections 127.1 and 127.12, the permittee shall continuously monitor the amount of fuel combusted in each of the eight of the combustion turbines (Source IDs P101 - P108).

 # 020 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4345]

Subpart KKKK - Standards of Performance for Stationary Combustion Turbines

What are the requirements for the continuous emission monitoring system equipment, if I choose to use this option?

(a) Each NOX diluent CEMS must be installed and certified according to Performance Specification 2 (PS 2) in appendix B to this part, except the 7-day calibration drift is based on unit operating days, not calendar days. With state approval, Procedure 1 in appendix F to this part is not required. Alternatively, a NOX diluent CEMS that is installed and certified

SECTION E. Source Group Plan Approval Restrictions.

according to appendix A of part 75 of this chapter is acceptable for use under this subpart. The relative accuracy test audit (RATA) of the CEMS shall be performed on a lb/MMBtu basis.

(b) As specified in §60.13(e)(2), during each full unit operating hour, both the NOX monitor and the diluent monitor must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour, to validate the hour. For partial unit operating hours, at least one valid data point must be obtained with each monitor for each quadrant of the hour in which the unit operates. For unit operating hours in which required quality assurance and maintenance activities are performed on the CEMS, a minimum of two valid data points (one in each of two quadrants) are required for each monitor to validate the NOX emission rate for the hour.

(c) Each fuel flowmeter shall be installed, calibrated, maintained, and operated according to the manufacturer's instructions. Alternatively, with state approval, fuel flowmeters that meet the installation, certification, and quality assurance requirements of appendix D to part 75 of this chapter are acceptable for use under this subpart.

(d) Each watt meter, steam flow meter, and each pressure or temperature measurement device shall be installed, calibrated, maintained, and operated according to manufacturer's instructions.

(e) The owner or operator shall develop and keep on-site a quality assurance (QA) plan for all of the continuous monitoring equipment described in paragraphs (a), (c), and (d) of this section. For the CEMS and fuel flow meters, the owner or operator may, with state approval, satisfy the requirements of this paragraph by implementing the QA program and plan described in section 1 of appendix B to part 75of this chapter.

IV. RECORDKEEPING REQUIREMENTS.

 # 021 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall keep comprehensive records of the following relating to the operation of the combustion turbine:

(a) The amount on natural gas burned on a monthly basis
(b) The number of hours and the corresponding 12 CMP totals each turbine has been operated
(c) Tariff sheet or transportation contract for the natural gas being burned showing it meets the definition of pipeline quality.
(d) Stack test reports showing that each turbine complies with all emission limitations
(e) The rolling 12 CMP emission totals for NOx, CO, PM, SOx, VOC, formaldehyde and CO2e

These records shall be retained for a minimum of five years and be presented to the Department upon request.

V. REPORTING REQUIREMENTS.

 # 022 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall submit records annually, due March 1 each year, of the following relating to the opertion of each combustion turbine:

(a) The amount on natural gas burned on a monthly basis
(b) The number of hours and the corresponding 12 CMP totals each turbine has been operated
(c) Tariff sheet or transportation contract for the natural gas being burned showing it meets the dfefinition of pipeline quality.
(d) The rollling 12 CMP emission totals for NOx, CO, PM, SOx, VOC, formaldehyde and CO2e
(e) The number of startup and shut downs for the turbine each month.

 # 023 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4375]

Subpart KKKK - Standards of Performance for Stationary Combustion Turbines

What reports must I submit?

(a) For each affected unit required to continuously monitor parameters or emissions, or to periodically determine the fuel sulfur content under this subpart, you must submit reports of excess emissions and monitor downtime, in accordance with §60.7(c). Excess emissions must be reported for all periods of unit operation, including start-up, shutdown, and malfunction.

(b) For each affected unit that performs annual performance tests in accordance with §60.4340(a), you must submit a

SECTION E. Source Group Plan Approval Restrictions.

written report of the results of each performance test before the close of business on the 60th day following the completion of the performance test.

VI. WORK PRACTICE REQUIREMENTS.

 # 024 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Pursuant to the best available technology requirements of 25 Pa. Code Sections 127.1 and 127.12, each catalytic oxidizer associated with the turbines shall be changed out in accordance with manufacturer's and/or vendor's recommendations based on testing of remaining catalyst activation level.

VII. ADDITIONAL REQUIREMENTS .

 # 025 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4305]

Subpart KKKK - Standards of Performance for Stationary Combustion Turbines

Does this subpart apply to my stationary combustion turbine?

Source IDs P101 - P108 are subject to 40 CFR Part 60 Subpart KKKK, Standards of Performance for Stationary Combustion Turbines. The permittee shall comply with all applicable requirements of Subpart KKKK

SECTION F. Alternative Operation Requirements.

No Alternative Operations exist for this Plan Approval facility.

SECTION G. Emission Restriction Summary.

No emission restrictions listed in this section of the permit.

SECTION H. Miscellaneous.

****** End of Report ******

From:	Tracy Carluccio
To:	Piktel, Joseph; Bailey, Brian (P.E.); Hackenberg, Martha
Subject:	[External] Attached comment - Plan Approval Application 08-00060A KDI Wyalusing Power LLC, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating
Date:	Thursday, August 7, 2025 6:44:03 PM
Attachments:	DRN.Cmnt.to.PADEP.combineddocx.pdf

Please find attached Delaware Riverkeeper Network's comment to Muhammad Q. Zaman, Program Manager, Pennsylvania Department of Environmental Protection, Northcentral Region: Air Quality Program emailed, as instructed by PADEP, to jpiktel@pa.gov; bribailey@pa.gov; mahackenbe@pa.gov on the: "Plan Approval Application 08-00060A,
KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit."

Thank you,
Tracy Carluccio

Tracy Carluccio
Deputy Director
Delaware Riverkeeper Network
www.delawareriverkeeper.org
[redacted]

July 15, 2025

Muhammad Q. Zaman
Program Manager
Pennsylvania Department of Environmental Protection
Northcentral Region: Air Quality Program
208 W. 3rd Street, Suite 101
Williamsport, PA 17701-6448, 570-327-3636

Submitted electronically at jpiktel@pa.gov and by USPS mail

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit.

Dear Mr. Zaman,

Delaware Riverkeeper Network requests that a public hearing be held for the above referenced project and that the public comment period be extended to at least 60 days from 30 days.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. According to the Public Notice, the total combined emissions from all eight (8) turbines are planned to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period;
and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

DELAWARE RIVERKEEPER NETWORK
925 Canal Street, Suite 3701
Bristol, PA 19007
Office: (215) 369-1188
fax: (215)369-1181
drn@delawareriverkeeper.org
www.delawareriverkeeper.org

The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

The decisions that are made by the agency are improved when public participation is provided through ample opportunity. More people have the capacity to attend a hearing but may not have the time and capacity to compose written comment and submit it to the Department. A full and fair public participation process provides transparency, raises the profile of an issue that is consequential for the public, and increases accessibility for those who would be affected if the project were to be approved and operated. These are all important goals of open government.

We further request that the public hearing be made hybrid so that participation can be both in person and virtual, opening up access to those with different capacities.

We further request that the comment period be extended to a more reasonable period, at least 60 days. 30 days is simply not long enough for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

Several of these air pollutants are approaching the threshold that requires a Title V Air Permit. For instance, the Particulate Matter (PM10 and PM2.5 combined) is 91.63 tons and the threshold is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits is an important issue and elevates the dangers posed by the plan approval.

Delaware Riverkeeper Network requests that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process. This project would impact the air people breathe and the environment they live and work in. Ample public participation opportunities are needed to accomplish a full and fair process.

Thank you for your consideration.

Sincerely,

Tracy Carluccio
Deputy Director
Delaware Riverkeeper Network

Cc: Brian Bailey, Chief, Facilities Permitting Section, Air Quality Program bribailey@pa.gov
mahackenbe@pa.gov

From:	Tracy Carluccio
To:	Piktel, Joseph
Cc:	Bailey, Brian (P.E.); Hackenberg, Martha
Subject:	[External] KDI Wyalusing Power LLC; Wyalusing Township, Bradford Cunty, attached DRN comment
Date:	Tuesday, July 15, 2025 12:54:22 PM
Attachments:	DRNltrPADEPHearing7.15.pdf

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B.

Attached please find a comment with requests from Delaware Riverkeeper Network.

Thank you,
Tracy Carluccio

Tracy Carluccio
Deputy Director
Delaware Riverkeeper Network
[redacted]

July 15, 2025

Muhammad Q. Zaman
Program Manager
Pennsylvania Department of Environmental Protection
Northcentral Region: Air Quality Program
208 W. 3rd Street, Suite 101
Williamsport, PA 17701-6448, 570-327-3636

Submitted electronically at jpiktel@pa.gov and by USPS mail

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit.

Dear Mr. Zaman,

Delaware Riverkeeper Network requests that a public hearing be held for the above referenced project and that the public comment period be extended to at least 60 days from 30 days.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. According to the Public Notice, the total combined emissions from all eight (8) turbines are planned to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period;
and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

DELAWARE RIVERKEEPER NETWORK
925 Canal Street, Suite 3701
Bristol, PA 19007
Office: (215) 369-1188
fax: (215)369-1181
drn@delawareriverkeeper.org
www.delawareriverkeeper.org

The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

The decisions that are made by the agency are improved when public participation is provided through ample opportunity. More people have the capacity to attend a hearing but may not have the time and capacity to compose written comment and submit it to the Department. A full and fair public participation process provides transparency, raises the profile of an issue that is consequential for the public, and increases accessibility for those who would be affected if the project were to be approved and operated. These are all important goals of open government.

We further request that the public hearing be made hybrid so that participation can be both in person and virtual, opening up access to those with different capacities.

We further request that the comment period be extended to a more reasonable period, at least 60 days. 30 days is simply not long enough for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

Several of these air pollutants are approaching the threshold that requires a Title V Air Permit. For instance, the Particulate Matter (PM10 and PM2.5 combined) is 91.63 tons and the threshold is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits is an important issue and elevates the dangers posed by the plan approval.

Delaware Riverkeeper Network requests that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process. This project would impact the air people breathe and the environment they live and work in. Ample public participation opportunities are needed to accomplish a full and fair process.

Thank you for your consideration.

Sincerely,

Tracy Carluccio
Deputy Director
Delaware Riverkeeper Network

Cc: Brian Bailey, Chief, Facilities Permitting Section, Air Quality Program bribailey@pa.gov
mahackenbe@pa.gov

From:	Jean MacFarlane
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Wednesday, July 16, 2025 9:56:15 PM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Jean MacFarlane
[redacted]

From: Arthur Anderson
To: Bailey, Brian (P.E.)
Subject: [External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date: Wednesday, July 16, 2025 11:44:28 PM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Arthur Anderson
[redacted]

From:	Shannon Jacobs
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Thursday, July 17, 2025 10:24:41 AM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Shannon Jacobs
[redacted]

From:	Barbara Sonies
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Thursday, July 17, 2025 12:12:17 PM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Barbara Sonies
[redacted]

From: Catherine Folio
To: Bailey, Brian (P.E.)
Subject: [External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date: Thursday, July 17, 2025 12:12:34 PM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Catherine Folio
[redacted]

From: Catherine Folio
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Thursday, August 7, 2025 6:27:53 AM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit. Plan Approval Application 08-00060A

Dear Brian Bailey,

I oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. I ask that you reject the application.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the grid and not being classified as a utility. What is the true story – the proposed plan or KDI’s public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume

exempts them from certain regulations and allows the proposed turbines to be considered “best available technology”. Yet KDI states they have the capacity for “500+” megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even “low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death.”[11] NO2/NOx will negatively impact peoples’ lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. “Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant.”[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, “nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia.”[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion “contributes a large mortality burden”.[16]

The World Health Organization reports the health risks of PM10/PM2.5 are “capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts”.[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, “Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2.”[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are “watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation.”[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

Catherine Folio

[redacted]

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

From: william haegele
To: Bailey, Brian (P.E.)
Subject: [External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date: Thursday, July 17, 2025 12:12:57 PM

Dear Brian Bailey,

You DO realize that your decisions will HEAVILY IMPACT YOUR OWN GRAND CHILDREN and their probablility of having a sad, unhealty life?

Please don't screw over your constituents and YOUR LEGACY.

It's OK to harm our childrens future as long as everybody gets rich now?

Please use common sense and stop this. PA used to be a nice place to live but going backwards will drive me to another state that cares.

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to

include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

william haegele
[redacted]

From: William Haegele
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Saturday, July 26, 2025 11:57:09 AM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit.

Dear Brian Bailey,

Why do we continue to ignore the world we are leaving for our grand children? We shit all over the environment to the point where their lives will be a lousy imitation of what life in our country and state should be. They will have breathing issues and heavy metals in their bodies to deal with, all kinds of problems . ALL IN THE NAME OF WHAT...progress??????

WHat do you want to leave YOUR grand children?

I oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. I ask that you reject the application.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8

turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the grid and not being classified as a utility. What is the true story – the proposed plan or KDI's public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume exempts them from certain regulations and allows the proposed turbines to be considered "best available technology". Yet KDI states they have the capacity for "500+" megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even "low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death."[11] NO2/NOx will negatively impact peoples' lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. "Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant."[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, "nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia."[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion "contributes a large mortality burden".[16]

The World Health Organization reports the health risks of PM10/PM2.5 are "capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts".[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, "Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2."[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are "watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation."[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

William Haegele

[redacted]

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

From: William Haegele
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Thursday, August 7, 2025 4:51:15 PM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit. Plan Approval Application 08-00060A

Dear Brian Bailey,

I oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. I ask that you reject the application. PLEASE STOP THE GREEDY RICH BASTARDS from TRADING OUR WORLD FOR $$$$$$$$$.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the grid and not being classified as a utility. What is the true story – the proposed plan or KDI’s public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume

exempts them from certain regulations and allows the proposed turbines to be considered “best available technology”. Yet KDI states they have the capacity for “500+” megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even “low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death.”[11] NO2/NOx will negatively impact peoples’ lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. “Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant.”[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, “nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia.”[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion “contributes a large mortality burden”.[16]

The World Health Organization reports the health risks of PM10/PM2.5 are “capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts”.[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, “Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2.”[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are “watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation.”[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

William Haegele

[redacted]

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

From:	Yolanda Broad
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Thursday, July 17, 2025 12:16:15 PM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Yolanda Broad
[redacted]

From: Yolanda Broad
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Friday, July 25, 2025 12:41:16 AM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit.

Dear Brian Bailey,

I am opposed to the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. I ask that you reject the application.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives,but that we including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6]

Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the grid and not being classified as a utility. What is the true story – the proposed plan or KDI’s public statements? PADEP states in the

plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume exempts them from certain regulations and allows the proposed turbines to be considered "best available technology". Yet KDI states they have the capacity for "500+" megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*?

We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even "low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death."[11] NO2/NOx will negatively impact peoples' lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. "Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant."[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, "nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia."[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion "contributes a large mortality burden".[16]

The World Health Organization reports the health risks of PM10/PM2.5 are "capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts".[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, "Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2."[18] SO2 in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are "watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation."[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane into the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

Yolanda Broad

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

From:	Yolanda Broad
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Thursday, August 7, 2025 2:11:16 AM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Yolanda Broad

[redacted]

From:	THOMAS J. j. ANN MARIE FINN CUSICK
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Thursday, July 17, 2025 12:19:13 PM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

THOMAS J. j. ANN MARIE FINN CUSICK

[redacted]

From:	Jeanne Walton
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Thursday, July 17, 2025 12:22:40 PM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Jeanne Walton
[redacted]

From:	William Huber
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Thursday, July 17, 2025 12:25:11 PM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

William Huber
[redacted]

From:	Robbie Cross
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Thursday, July 17, 2025 12:26:10 PM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Robbie Cross
[redacted]

From:	Naomi Miller
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Thursday, July 17, 2025 12:26:14 PM

Dear Brian Bailey,

I have heard that the comment period for the Wyalusing Energy Center project will be too short for all stakeholders to hear about and absorb the implications if the project goes aheae. PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Naomi Miller
[redacted]

From:	Richard Metz
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Thursday, July 17, 2025 12:37:10 PM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Richard Metz
[redacted]

From:	Ji Montgomery
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Thursday, July 17, 2025 12:44:25 PM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Ji Montgomery
[redacted]

From: Ji Montgomery
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Sunday, July 27, 2025 11:49:21 PM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit.

Dear Brian Bailey,

I oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. I ask that you reject the application.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the grid and not being classified as a utility. What is the true story – the proposed plan or KDI’s public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume

exempts them from certain regulations and allows the proposed turbines to be considered “best available technology”. Yet KDI states they have the capacity for “500+” megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even “low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death.”[11] NO2/NOx will negatively impact peoples’ lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. “Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant.”[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, “nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia.”[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion “contributes a large mortality burden”.[16]

The World Health Organization reports the health risks of PM10/PM2.5 are “capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts”.[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, “Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2.”[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are “watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation.”[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

Ji Montgomery

[redacted]

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

From: Ji Montgomery
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Saturday, August 2, 2025 4:39:12 PM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit.

Dear Brian Bailey,

I oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. I ask that you reject the application.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the grid and not being classified as a utility. What is the true story – the proposed plan or KDI’s public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume

exempts them from certain regulations and allows the proposed turbines to be considered “best available technology”. Yet KDI states they have the capacity for “500+” megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even “low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death.”[11] NO2/NOx will negatively impact peoples’ lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. “Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant.”[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, “nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia.”[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion “contributes a large mortality burden”.[16]

The World Health Organization reports the health risks of PM10/PM2.5 are “capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts”.[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, “Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2.”[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are “watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation.”[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

Ji Montgomery

[redacted]

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

From:	Ji Montgomery
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Tuesday, August 12, 2025 1:31:21 AM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Ji Montgomery

[redacted]

From: Ji Montgomery
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Tuesday, August 12, 2025 1:30:52 AM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit. Plan Approval Application 08-00060A

Dear Brian Bailey,

I oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. I ask that you reject the application.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the grid and not being classified as a utility. What is the true story – the proposed plan or KDI’s public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume

exempts them from certain regulations and allows the proposed turbines to be considered “best available technology”. Yet KDI states they have the capacity for “500+” megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even “low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death.”[11] NO2/NOx will negatively impact peoples’ lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. “Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant.”[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, “nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia.”[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion “contributes a large mortality burden”.[16]

The World Health Organization reports the health risks of PM10/PM2.5 are “capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts”.[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, “Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2.”[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are “watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation.”[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

Ji Montgomery

[redacted]

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

From:	Daryl Ezzo
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Thursday, July 17, 2025 12:52:29 PM

Dear Brian Bailey,

Please let us not use ungodly amounts of natural resources (water and fossil fuels) to power unnecessary data centers that require ungodly amounts of energy with detrimental effects on the environment, merely to enable our children and grandchildren to live unhuman virtual lives online, instead of living real lives. This is a lose-lose-lose situation: losing God-given natural resources, losing God-given climate balance, and losing God-given humanity.

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and

digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Daryl Ezzo
[redacted]

From:	Pamela Nelson
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Thursday, July 17, 2025 1:15:12 PM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Pamela Nelson
[redacted]

From:	Elizabeth Dale Harris
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Thursday, July 17, 2025 1:18:21 PM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Elizabeth Dale Harris
[redacted]

From:	David Bressler
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Thursday, July 17, 2025 1:24:13 PM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

David Bressler
[redacted]

From:	Kathleen Peterson
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Thursday, July 17, 2025 1:32:14 PM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Kathleen Peterson
[redacted]

From:	Thanice Petrak
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Thursday, July 17, 2025 1:46:34 PM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Thanice Petrak
[redacted]

From:	Lois Oleksa
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Thursday, July 17, 2025 1:50:45 PM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Lois Oleksa
[redacted]

From:	Luana Goodwin
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Thursday, July 17, 2025 1:56:17 PM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Luana Goodwin
[redacted]

From:	Chris King
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Thursday, July 17, 2025 2:00:24 PM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Chris King
[redacted]

From:	Karen Bedics
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Thursday, July 17, 2025 2:25:29 PM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Karen Bedics

[redacted]

From:	Karen Elias
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Thursday, July 17, 2025 2:45:43 PM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system.

The emissions that are being allowed are significant, and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at

least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Karen Elias
[redacted]

From:	anita nolan
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Thursday, July 17, 2025 2:51:07 PM

We need more reliable electric generation. Solar and wind don't begin to produce what we need/will need. Please get this plant approved and ignore the special interests.

Thank you

Anita Nolan

From:	Andrrw Thierry
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Thursday, July 17, 2025 3:05:14 PM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Andrrw Thierry
[redacted]

From:	Norma Van Dyke
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Thursday, July 17, 2025 3:21:18 PM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Norma Van Dyke
[redacted]

From:	Bernard Greenberg
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Thursday, July 17, 2025 3:24:08 PM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Bernard Greenberg
[redacted]

From:	Ned Connelly
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Thursday, July 17, 2025 3:31:38 PM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Ned Connelly
[redacted]

From:	Isaiah Guenther
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Thursday, July 17, 2025 4:12:13 PM

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Isaiah Guenther

[redacted]

[redacted]

From:	Nancy Bartley
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Thursday, July 17, 2025 4:15:14 PM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Nancy Bartley
[redacted]

From:	Kelly Davis
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Thursday, July 17, 2025 4:19:08 PM

Dear Sit or Madam,

I respectfully request that PADEP hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. While jobs are important, this project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Kelly Davis

[redacted]

[redacted]

From:	Norman Starr
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Thursday, July 17, 2025 4:46:12 PM

A project that will negatively impact those living in its vicinity for years to come must not be rushed through without due consideration.

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Norman Starr

[redacted]

From:	Chris DiGiulio
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Thursday, July 17, 2025 5:41:17 PM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Chris DiGiulio
[redacted]

From:	Walter Goodman
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Thursday, July 17, 2025 6:18:19 PM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Walter Goodman
[redacted]

From:	Mary Ann Leitch
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Thursday, July 17, 2025 6:20:48 PM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Mary Ann Leitch
[redacted]

From: Mary Ann Leitch
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Thursday, August 7, 2025 2:13:46 AM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit. Plan Approval Application 08-00060A

Dear Brian Bailey,

I oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. I ask that you reject the application.

THE AMOUNT OF POLUTANTS PROJECTED IS HORRIFYING - NOT GOOD FOR MAN OR BEAST - JUST SAY NO!

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the

grid and not being classified as a utility. What is the true story – the proposed plan or KDI's public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume exempts them from certain regulations and allows the proposed turbines to be considered "best available technology". Yet KDI states they have the capacity for "500+" megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even "low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death."[11] NO2/NOx will negatively impact peoples' lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. "Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant."[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, "nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia."[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion "contributes a large mortality burden".[16]

The World Health Organization reports the health risks of PM10/PM2.5 are "capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts".[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, "Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2."[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are "watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation."[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

Mary Ann Leitch

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

From:	Lisa Tull
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Thursday, July 17, 2025 6:33:37 PM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Lisa Tull
[redacted]

From:	Roberta Camp
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Thursday, July 17, 2025 6:53:20 PM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Roberta Camp
[redacted]

From: Roberta Camp
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Friday, July 25, 2025 10:03:46 PM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit.

Dear Brian Bailey,

I oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. I ask that you reject the application.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the grid and not being classified as a utility. What is the true story – the proposed plan or KDI’s public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume

exempts them from certain regulations and allows the proposed turbines to be considered “best available technology”. Yet KDI states they have the capacity for “500+” megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even “low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death.”[11] NO2/NOx will negatively impact peoples’ lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. “Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant.”[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, “nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia.”[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion “contributes a large mortality burden”.[16]

The World Health Organization reports the health risks of PM10/PM2.5 are “capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts”.[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, “Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2.”[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are “watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation.”[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

Roberta Camp

[redacted]

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

From:	Janet Amber
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Thursday, July 17, 2025 8:12:08 PM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Janet Amber
[redacted]

From:	Bruce and Lorraine McMahon
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Thursday, July 17, 2025 8:12:16 PM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Bruce and Lorraine McMahon

[redacted]

From:	Leanne Morical
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Thursday, July 17, 2025 8:33:36 PM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Leanne Morical
[redacted]

From: Leanne Morical
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Friday, July 25, 2025 1:11:20 AM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit.

Dear Brian Bailey,

I oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. I ask that you reject the application. Please protect the air I breathe.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the grid and not being classified as a utility. What is the true story – the proposed plan or KDI’s public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume

exempts them from certain regulations and allows the proposed turbines to be considered “best available technology”. Yet KDI states they have the capacity for “500+” megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even “low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death.”[11] NO2/NOx will negatively impact peoples’ lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. “Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant.”[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, “nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia.”[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion “contributes a large mortality burden”.[16]

The World Health Organization reports the health risks of PM10/PM2.5 are “capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts”.[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, “Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2.”[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are “watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation.”[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

Leanne Morical

[redacted]

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

From: Lea Morical
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Thursday, August 7, 2025 3:38:23 AM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit. Plan Approval Application 08-00060A

Dear Brian Bailey,

I oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. I ask that you reject the application.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the grid and not being classified as a utility. What is the true story – the proposed plan or KDI’s public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume

exempts them from certain regulations and allows the proposed turbines to be considered “best available technology”. Yet KDI states they have the capacity for “500+” megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even “low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death.”[11] NO2/NOx will negatively impact peoples’ lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. “Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant.”[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, “nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia.”[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion “contributes a large mortality burden”.[16]

The World Health Organization reports the health risks of PM10/PM2.5 are “capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts”.[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, “Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2.”[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are “watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation.”[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

Lea Morical

[redacted]

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

From:	Patricia Libbey
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Thursday, July 17, 2025 8:35:03 PM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Patricia Libbey
[redacted]

From: Patricia Libbey
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Friday, July 25, 2025 8:03:40 AM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit.

Dear Brian Bailey,

I oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. I ask that you reject the application.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the grid and not being classified as a utility. What is the true story – the proposed plan or KDI’s public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume

exempts them from certain regulations and allows the proposed turbines to be considered “best available technology”. Yet KDI states they have the capacity for “500+” megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even “low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death.”[11] NO2/NOx will negatively impact peoples’ lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. “Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant.”[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, “nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia.”[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion “contributes a large mortality burden”.[16]

The World Health Organization reports the health risks of PM10/PM2.5 are “capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts”.[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, “Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2.”[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are “watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation.”[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

Patricia Libbey

[redacted]

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

From:	Judy Turetsky
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Thursday, July 17, 2025 8:35:10 PM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Judy Turetsky
[redacted]

From: Judy Turetsky
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Friday, July 25, 2025 2:14:22 AM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit.

Dear Brian Bailey,

I oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. I ask that you reject the application.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the grid and not being classified as a utility. What is the true story – the proposed plan or KDI’s public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume

exempts them from certain regulations and allows the proposed turbines to be considered “best available technology”. Yet KDI states they have the capacity for “500+” megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even “low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death.”[11] NO2/NOx will negatively impact peoples’ lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. “Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant.”[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, “nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia.”[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion “contributes a large mortality burden”.[16]

The World Health Organization reports the health risks of PM10/PM2.5 are “capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts”.[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, “Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2.”[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are “watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation.”[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

Judy Turetsky

[redacted]

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

From:	Vincent Prudente
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Thursday, July 17, 2025 9:15:47 PM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Vincent Prudente
[redacted]

From: Vincent Prudente
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Friday, July 25, 2025 1:06:09 AM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit.

Dear Brian Bailey,

I oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. I ask that you reject the application.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the grid and not being classified as a utility. What is the true story – the proposed plan or KDI’s public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume

exempts them from certain regulations and allows the proposed turbines to be considered “best available technology”. Yet KDI states they have the capacity for “500+” megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even “low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death.”[11] NO2/NOx will negatively impact peoples’ lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. “Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant.”[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, “nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia.”[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion “contributes a large mortality burden”.[16]

The World Health Organization reports the health risks of PM10/PM2.5 are “capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts”.[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, “Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2.”[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are “watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation.”[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

Vincent Prudente

[redacted]

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

From:	Vincent Prudente
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Saturday, August 9, 2025 4:33:26 AM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Vincent Prudente

[redacted]

From: Vincent Prudente
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Saturday, August 9, 2025 4:32:56 AM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit. Plan Approval Application 08-00060A

Dear Brian Bailey,

I oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. I ask that you reject the application.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the grid and not being classified as a utility. What is the true story – the proposed plan or KDI’s public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume

exempts them from certain regulations and allows the proposed turbines to be considered “best available technology”. Yet KDI states they have the capacity for “500+” megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even “low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death.”[11] NO2/NOx will negatively impact peoples’ lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. “Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant.”[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, “nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia.”[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion “contributes a large mortality burden”.[16]

The World Health Organization reports the health risks of PM10/PM2.5 are “capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts”.[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, “Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2.”[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are “watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation.”[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

Vincent Prudente

[redacted]

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

From:	Joan Farb
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Thursday, July 17, 2025 11:26:40 PM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Joan Farb
[redacted]

From:	Linda Granato
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Thursday, July 17, 2025 11:31:30 PM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Linda Granato
[redacted]

From: Linda Granato
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Friday, July 25, 2025 12:38:19 AM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit.

Dear Brian Bailey,

I oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. I ask that you reject the application.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the grid and not being classified as a utility. What is the true story – the proposed plan or KDI’s public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume

exempts them from certain regulations and allows the proposed turbines to be considered “best available technology”. Yet KDI states they have the capacity for “500+” megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even “low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death.”[11] NO2/NOx will negatively impact peoples’ lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. “Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant.”[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, “nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia.”[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion “contributes a large mortality burden”.[16]

The World Health Organization reports the health risks of PM10/PM2.5 are “capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts”.[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, “Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2.”[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are “watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation.”[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

Linda Granato

[redacted]

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

From:	Boris Dirnbach
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Friday, July 18, 2025 12:14:14 AM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Boris Dirnbach
[redacted]

From:	Janet Cavallo
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Friday, July 18, 2025 7:10:21 AM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Janet Cavallo
[redacted]

From: Janet Cavallo
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Thursday, August 7, 2025 8:10:34 AM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit. Plan Approval Application 08-00060A

Dear Brian Bailey,

I oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. I ask that you reject the application.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the grid and not being classified as a utility. What is the true story – the proposed plan or KDI’s public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume

exempts them from certain regulations and allows the proposed turbines to be considered “best available technology”. Yet KDI states they have the capacity for “500+” megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even “low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death.”[11] NO2/NOx will negatively impact peoples’ lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. “Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant.”[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, “nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia.”[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion “contributes a large mortality burden”.[16]

The World Health Organization reports the health risks of PM10/PM2.5 are “capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts”.[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, “Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2.”[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are “watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation.”[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

Janet Cavallo

[redacted]

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

From:	Diane Dilendik
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Friday, July 18, 2025 7:43:26 AM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Diane Dilendik
[redacted]

From:	Jim Loveland
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Friday, July 18, 2025 5:56:23 PM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Jim Loveland
[redacted]

From: aggie perilli
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Friday, July 25, 2025 9:07:49 PM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit.

I oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. I ask that you reject the application.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the grid and not being classified as a utility. What is the true story – the proposed plan or KDI’s public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume

exempts them from certain regulations and allows the proposed turbines to be considered “best available technology”. Yet KDI states they have the capacity for “500+” megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even “low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death.”[11] NO2/NOx will negatively impact peoples’ lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. “Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant.”[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, “nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia.”[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion “contributes a large mortality burden”.[16]

The World Health Organization reports the health risks of PM10/PM2.5 are “capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts”.[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, “Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2.”[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are “watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation.”[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

aggie perilli

[redacted]

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

From: aggie perilli
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Thursday, August 7, 2025 2:06:50 AM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit. Plan Approval Application 08-00060A

I strongly oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. I ask that you reject the application.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the grid and not being classified as a utility. What is the true story – the proposed plan or KDI’s public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume exempts them from certain regulations and allows the proposed turbines to be considered “best available technology”. Yet KDI states they have the capacity for “500+” megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were

imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even "low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death."[11] NO2/NOx will negatively impact peoples' lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. "Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant."[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, "nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia."[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion "contributes a large mortality burden".[16]

The World Health Organization reports the health risks of PM10/PM2.5 are "capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts".[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, "Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2."[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are "watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation."[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

aggie perilli

[redacted]

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-

2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

From:	Ryan Dodson
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Saturday, July 19, 2025 10:35:10 PM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Ryan Dodson
[redacted]

From: Ryan Dodson
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Saturday, July 26, 2025 5:12:16 AM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit.

Dear Brian Bailey,

I oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. I ask that you reject the application.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the grid and not being classified as a utility. What is the true story – the proposed plan or KDI’s public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume

exempts them from certain regulations and allows the proposed turbines to be considered “best available technology”. Yet KDI states they have the capacity for “500+” megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even “low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death.”[11] NO2/NOx will negatively impact peoples’ lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. “Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant.”[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, “nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia.”[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion “contributes a large mortality burden”.[16]

The World Health Organization reports the health risks of PM10/PM2.5 are “capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts”.[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, “Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2.”[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are “watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation.”[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

Ryan Dodson

[redacted]

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

From:	Wanda Cole
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Sunday, July 20, 2025 11:10:14 AM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Wanda Cole
[redacted]

From:	Rex Destiny Roskos
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Sunday, July 20, 2025 1:25:14 PM

Dear Brian Bailey,

I would like the PADEP to hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 90 days be provided in order to include the public in this decision-making process.

Signed,

Rex Destiny Roskos
[redacted]

From:	ann albence
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Sunday, July 20, 2025 3:44:18 PM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

ann albence
[redacted]

From:	Marie Carota
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Tuesday, July 22, 2025 7:53:23 AM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Marie Carota
[redacted]

From:	Lauri Moon
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Tuesday, July 22, 2025 10:10:08 AM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Lauri Moon
[redacted]

From: Lauri Moon
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Thursday, August 7, 2025 10:55:34 AM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit. Plan Approval Application 08-00060A

Dear Brian Bailey,

I oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. I ask that you reject the application.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the grid and not being classified as a utility. What is the true story – the proposed plan or KDI’s public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume

exempts them from certain regulations and allows the proposed turbines to be considered “best available technology”. Yet KDI states they have the capacity for “500+” megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even “low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death.”[11] NO2/NOx will negatively impact peoples’ lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. “Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant.”[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, “nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia.”[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion “contributes a large mortality burden”.[16]

The World Health Organization reports the health risks of PM10/PM2.5 are “capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts”.[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, “Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2.”[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are “watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation.”[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

Lauri Moon

[redacted]

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

From:	Gracey Moralis
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Tuesday, July 22, 2025 11:33:38 AM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Gracey Moralis
[redacted]

From:	Zaman, Muhammad
To:	Bailey, Brian (P.E.); Piktel, Joseph
Subject:	FW: [External] Information regarding Plan approval 08-00060A, Wyalusing Energy Center. Company: KDI Wyalusing Power, LLC
Date:	Wednesday, July 23, 2025 10:20:48 AM

FYI

Muhammad Zaman | Environmental Program Manager
Department of Environmental Protection | Air Quality
North Central Regional Office
208 West Third Street Suite 101 | Williamsport PA 17701
Phone: 570.327.3648 | Fax: 570.327.3420
www.dep.pa.gov

From: [redacted]
Sent: Wednesday, July 23, 2025 7:05 AM
To: Dressler, Jared <jardressle@pa.gov>; Zaman, Muhammad <mzaman@pa.gov>
Cc: naugled@bradfordcountypa.gov; wyaltwp@gmail.com
Subject: [External] Information regarding Plan approval 08-00060A, Wyalusing Energy Center. Company: KDI Wyalusing Power, LLC

TO: Muhammad Q. Zaman, Program Manager, DEP Northcentral Region: Air Quality Program
Sent by Email to: jardressle@pa.gov; mzaman@pa.gov

FROM: Diana G. Dakey, [redacted]

RE: In response to publication in the Pennsylvania Bulletin, July 12, 2025:
Plan approval 08-00060A, Wyalusing Energy Center. Company: KDI Wyalusing Power, LLC,
Authorization ID: 1511828; Permit type: Minor Facility Plan Approval New Source Performance Std

DATE: July 23, 2025

CC:
Duane Naugle, Planning Director, Bradford County Planning Commission, sent by email to naugled@bradfordcountypa.gov
Marvin G. Meteer, Chair, Wyalusing Township Board of Supervisors, wyaltwp@gmail.com

==========

I was surprised to see publication in the Pennsylvania Bulletin that DEP was noticing intent to approve the Air Quality permit for the proposed KDI power plant in Wyalusing Township.

I am uncertain as to whether an Act 14 notice was properly sent to the municipality and the county; or whether the municipality and county understood their role and rights under Act 14. * I cannot find the Act 14 notice on the Bradford County web site. Nor can I find discussion of same in minutes. As a subscriber to the Rocket-Courier, I did not see any public hearing about the zoning for this project, such as that which took place a few years ago to consider zoning for the LNG plant.

I see in the Application, in Appendix D, p. 93, that on Dec. 20, 2024, notices were sent. https://files.dep.state.pa.us/RegionalResources/NCRO/NCROPortalFiles/CommunityInformation/Wyalusing_Energy_Center_PAApp_Redacted.pdf?form=MG0AV3

But, I then see in a letter from DEP of June 30, 2025, that the Act 14 notices were received October 17, 2018. https://files.dep.state.pa.us/RegionalResources/NCRO/NCROPortalFiles/CommunityInformation/KDI%20Wyalusing%20Power%20LLC%20New%20Fortress%2008-00060A%20Proposed%20Plan%20Approval_compiled.pdf?form=MG0AV3&form=MG0AV3

I do not reside in Wyalusing Township, Bradford County, but I became familiar with a previous project proposed for the same site several years ago – that being the LNG plant of New Fortress Energy, 08-0058A, for which a plan approval expired. That project's LNG transport would have harmed my community, thus I closely followed the local press on what happened at that site ever since.

I was aware at the time of the LNG plant proposal, that the Wyalusing Township board of supervisors approved the LNG plant as a "gas processing" plant with conditional uses in an ag-residential district. (Note: LNG manufacturing is an *industrial* use.) The zoning approval noted that it was good for two years. The facility was not constructed, so the zoning approval expired. An 8-turbine power plant is certainly an industrial use. Thus, even if the LNG zoning had not expired, the new proposed plant is nonconforming.

It is important for DEP get this right and ensure that local officials know what is proposed. DEP can't waste resources on an application that may never be able to be built. It is also important that the applicant is aware of the land-use limitations. Local governments need to be fully informed of the project so that they can fulfill their duties.

As noticed in the Pennsylvania Bulletin, "A public hearing may be held, if the Department of Environmental Protection, in its discretion, decides that such a hearing is warranted based on

the comments received. “ I strongly urge DEP to hold a public hearing to inform the public and the affected local governments (municipal and county) about the project, after which the local governments can take up the matter of land use and zoning and determine what zoning amendments are needed to place an industrial use in an ag-residential district.

The hearing should explore the project in its entirety. What is the source of the feed-gas? Will it necessitate pipelines or overland delivery of gas? How far into neighboring Wyoming and Lackawanna Counties will the air pollutants travel? Where will the data center be built? What will be the land disturbance? What if the ultimate data center requires more power than that being built by the dedicated power plant? Will power be pulled from the grid? Will additional turbines be built? What if the data center cannot comply with local noise ordinances?

The 30-day comment period, from the date of Pennsylvania Bulletin publication is not enough in that local governments typically meet only monthly.

DEP needs to send the Act 14 notice to downwind counties, such as Wyoming and Lackawanna.

The notice of a public hearing should be given to neighboring municipalities and counties who can be impacted by the air emissions from the power plant, as well as gas transportation to the power plant.

Thank you.

---

*

https://paenvironmentdaily.blogspot.com/2024/04/little-known-state-law-gives.html

Act 14: Little Known State Law Gives Municipalities, Counties First Chance To Comment On DEP Permits Before Applications Are Submitted; Critical First Step In Public Involvement. April 9, 2024

==========

Diana Dakey
[redacted]
[redacted]

From:	Sara Matthews
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Thursday, July 24, 2025 5:32:34 PM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Sara Matthews
[redacted]

From:	Josephine Gingerich
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Thursday, July 24, 2025 11:43:18 PM

Dear Brian Bailey,

Physicians for Social Responsibility PA strongly urges PADEP to hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Josephine Gingerich
[redacted]

From: Mary Mammarella
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Friday, July 25, 2025 12:08:12 AM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit.

Dear Brian Bailey,

I oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. Thus is a devil's bargain. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. I ask that you reject the application.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the grid and not being classified as a utility. What is the true story – the proposed plan or KDI’s public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume

exempts them from certain regulations and allows the proposed turbines to be considered “best available technology”. Yet KDI states they have the capacity for “500+” megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even “low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death.”[11] NO2/NOx will negatively impact peoples’ lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. “Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant.”[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, “nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia.”[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion “contributes a large mortality burden”.[16]

The World Health Organization reports the health risks of PM10/PM2.5 are “capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts”.[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, “Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2.”[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are “watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation.”[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

Mary Mammarella

[redacted]

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

From: Marcus Ferreira
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Friday, July 25, 2025 12:11:03 AM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit.

Dear Brian Bailey,

I oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. I ask that you reject the application.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the grid and not being classified as a utility. What is the true story – the proposed plan or KDI’s public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume

exempts them from certain regulations and allows the proposed turbines to be considered “best available technology”. Yet KDI states they have the capacity for “500+” megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even “low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death.”[11] NO2/NOx will negatively impact peoples’ lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. “Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant.”[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, “nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia.”[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion “contributes a large mortality burden”.[16]

The World Health Organization reports the health risks of PM10/PM2.5 are “capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts”.[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, “Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2.”[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are “watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation.”[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

Marcus Ferreira

[redacted]

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

From: Erin Johnson RN MSN MPH
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Friday, July 25, 2025 12:19:49 AM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit.

Dear Brian Bailey,

I am a public health nurse and the parent of a child diagnosed with leukemia at 11 months of age - an infant. Since August 2019, I have been working with children with complex medical needs.

I strongly oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. Air is connected around the globe - we live in a giant terrarium, and what affects one region eventually affects another.

Further, research already shows a connection between gas fracking and leukemia in children (see this article: https://theconversation.com/children-living-near-oil-and-gas-wells-face-higher-risk-of-rare-leukemia-studies-show-252994?fbclid=IwY2xjawLvemxleHRuA2FlbQIxMQABHuiwpdFA1rEY7RpG6tqxnyRGZXihlh6Y1cLgWbTUypc5CDpNhKpm0CCLgBkx_aem_5tIu2xFVnM4pcrTKxLaHmA)

As a parent who had to watch my child endure terrible treatment for cancer for 3 years, as a parent who had to leave my well-paying job, rely on Medicaid, SNAP, WIC and Unemployment to provide care in and out of the hospital for my child - including management of a central line, day and night management of horrific symptoms like mucositis, helping my child through pain that required powerful drugs like morphoine and dilaudid - I cannot support new initiatives that will compromise the health and well-being of Pennsylvania's children.

I ask that you reject the application.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO_2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO_2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO_2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the grid and not being classified as a utility. What is the true story – the proposed plan or KDI’s public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume exempts them from certain regulations and allows the proposed turbines to be considered “best available technology”. Yet KDI states they have the capacity for “500+” megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even "low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death."[11] NO2/NOx will negatively impact peoples' lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. "Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant."[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, "nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia."[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion "contributes a large mortality burden".[16]

The World Health Organization reports the health risks of PM10/PM2.5 are "capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts".[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, "Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2."[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are "watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation."[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

Erin Johnson RN, MSN, MPH

[redacted]

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

From: Patricia Rossi
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Friday, July 25, 2025 12:40:49 AM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit.

Dear Brian Bailey,

I oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. I ask that you reject the application.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the grid and not being classified as a utility. What is the true story – the proposed plan or KDI’s public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume

exempts them from certain regulations and allows the proposed turbines to be considered “best available technology”. Yet KDI states they have the capacity for “500+” megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even “low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death.”[11] NO2/NOx will negatively impact peoples’ lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. “Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant.”[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, “nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia.”[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion “contributes a large mortality burden”.[16]

The World Health Organization reports the health risks of PM10/PM2.5 are “capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts”.[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, “Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2.”[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are “watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation.”[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

Patricia Rossi

[redacted]

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

From: Patricia Rossi
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Thursday, August 7, 2025 1:59:35 AM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit. Plan Approval Application 08-00060A

Dear Brian Bailey,

I oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. I ask that you reject the application.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the grid and not being classified as a utility. What is the true story – the proposed plan or KDI’s public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume

exempts them from certain regulations and allows the proposed turbines to be considered “best available technology”. Yet KDI states they have the capacity for “500+” megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even “low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death.”[11] NO2/NOx will negatively impact peoples’ lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. “Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant.”[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, “nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia.”[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion “contributes a large mortality burden”.[16]

The World Health Organization reports the health risks of PM10/PM2.5 are “capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts”.[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, “Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2.”[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are “watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation.”[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

Patricia Rossi

[redacted]

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

From: René Sharpless Micheli
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Friday, July 25, 2025 1:05:38 AM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit.

Dear Brian Bailey,

I oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. I ask that you reject the application.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the grid and not being classified as a utility. What is the true story – the proposed plan or KDI’s public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume

exempts them from certain regulations and allows the proposed turbines to be considered “best available technology”. Yet KDI states they have the capacity for “500+” megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even “low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death.”[11] NO2/NOx will negatively impact peoples’ lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. “Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant.”[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, “nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia.”[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion “contributes a large mortality burden”.[16]

The World Health Organization reports the health risks of PM10/PM2.5 are “capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts”.[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, “Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2.”[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are “watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation.”[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

René Sharpless Micheli

[redacted]

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

From: Claudia Waits
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Friday, July 25, 2025 2:50:23 AM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit.

Dear Brian Bailey,

!!!!!!!I oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. I ask that you reject the application.!!!!

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the grid and not being classified as a utility. What is the true story – the proposed plan or KDI’s public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume

exempts them from certain regulations and allows the proposed turbines to be considered “best available technology”. Yet KDI states they have the capacity for “500+” megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even “low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death.”[11] NO2/NOx will negatively impact peoples’ lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. “Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant.”[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, “nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia.”[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion “contributes a large mortality burden”.[16]

The World Health Organization reports the health risks of PM10/PM2.5 are “capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts”.[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, “Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2.”[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are “watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation.”[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

Claudia Waits

[redacted]

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

From: mary more
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Friday, July 25, 2025 3:24:20 AM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit.

Dear Brian Bailey,

I oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. I ask that you reject the application.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the grid and not being classified as a utility. What is the true story – the proposed plan or KDI’s public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume

exempts them from certain regulations and allows the proposed turbines to be considered “best available technology”. Yet KDI states they have the capacity for “500+” megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even “low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death.”[11] NO2/NOx will negatively impact peoples’ lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. “Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant.”[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, “nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia.”[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion “contributes a large mortality burden”.[16]

The World Health Organization reports the health risks of PM10/PM2.5 are “capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts”.[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, “Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2.”[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are “watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation.”[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

mary more

[redacted]

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

From: Joseph Marlin
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Friday, July 25, 2025 9:16:07 AM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit.

Dear Brian Bailey,

I oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. I ask that you reject the application.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the grid and not being classified as a utility. What is the true story – the proposed plan or KDI’s public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume

exempts them from certain regulations and allows the proposed turbines to be considered “best available technology”. Yet KDI states they have the capacity for “500+” megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even “low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death.”[11] NO2/NOx will negatively impact peoples’ lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. “Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant.”[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, “nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia.”[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion “contributes a large mortality burden”.[16]

The World Health Organization reports the health risks of PM10/PM2.5 are “capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts”.[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, “Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2.”[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are “watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation.”[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

Joseph Marlin

[redacted]

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

From: Mary Tiebout
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Friday, July 25, 2025 11:46:35 AM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit.

Dear Brian Bailey,

I oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. I ask that you reject the application.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the grid and not being classified as a utility. What is the true story – the proposed plan or KDI’s public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume

exempts them from certain regulations and allows the proposed turbines to be considered “best available technology”. Yet KDI states they have the capacity for “500+” megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even “low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death.”[11] NO2/NOx will negatively impact peoples’ lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. “Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant.”[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, “nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia.”[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion “contributes a large mortality burden”.[16]

The World Health Organization reports the health risks of PM10/PM2.5 are “capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts”.[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, “Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2.”[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are “watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation.”[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

Mary Tiebout

[redacted]

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

From: Miranda Johnston
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Friday, July 25, 2025 12:19:51 PM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit.

Dear Brian Bailey,

I oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. I ask that you reject the application.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the grid and not being classified as a utility. What is the true story – the proposed plan or KDI’s public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume

exempts them from certain regulations and allows the proposed turbines to be considered “best available technology”. Yet KDI states they have the capacity for “500+” megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even “low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death.”[11] NO2/NOx will negatively impact peoples’ lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. “Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant.”[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, “nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia.”[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion “contributes a large mortality burden”.[16]

The World Health Organization reports the health risks of PM10/PM2.5 are “capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts”.[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, “Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2.”[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are “watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation.”[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

Miranda Johnston

[redacted]

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

From: Lisa Geyer
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Friday, July 25, 2025 2:02:42 PM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit.

Dear Brian Bailey,

I oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. I ask that you reject the application.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the grid and not being classified as a utility. What is the true story – the proposed plan or KDI’s public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume

exempts them from certain regulations and allows the proposed turbines to be considered “best available technology”. Yet KDI states they have the capacity for “500+” megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even “low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death.”[11] NO2/NOx will negatively impact peoples’ lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. “Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant.”[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, “nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia.”[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion “contributes a large mortality burden”.[16]

The World Health Organization reports the health risks of PM10/PM2.5 are “capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts”.[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, “Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2.”[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are “watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation.”[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

Lisa Geyer

[redacted]

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

From: Martha Carbone
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Friday, July 25, 2025 7:31:28 PM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit.

Dear Brian Bailey,

I oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. I ask that you reject the application.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the grid and not being classified as a utility. What is the true story – the proposed plan or KDI’s public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume

exempts them from certain regulations and allows the proposed turbines to be considered “best available technology”. Yet KDI states they have the capacity for “500+” megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even “low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death.”[11] NO2/NOx will negatively impact peoples’ lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. “Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant.”[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, “nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia.”[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion “contributes a large mortality burden”.[16]

The World Health Organization reports the health risks of PM10/PM2.5 are “capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts”.[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, “Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2.”[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are “watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation.”[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

Martha Carbone

[redacted]

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

From: Carol Carmon
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Friday, July 25, 2025 7:39:24 PM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit.

Dear Brian Bailey,

I oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. I ask that you reject the application.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the grid and not being classified as a utility. What is the true story – the proposed plan or KDI’s public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume

exempts them from certain regulations and allows the proposed turbines to be considered “best available technology”. Yet KDI states they have the capacity for “500+” megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even “low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death.”[11] NO2/NOx will negatively impact peoples’ lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. “Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant.”[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, “nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia.”[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion “contributes a large mortality burden”.[16]

The World Health Organization reports the health risks of PM10/PM2.5 are “capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts”.[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, “Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2.”[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are “watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation.”[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

Carol Carmon

[redacted]

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

From: Marnie Wilson
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Friday, July 25, 2025 10:26:50 PM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit.

Dear Brian Bailey,

I oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. I ask that you reject the application.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the grid and not being classified as a utility. What is the true story – the proposed plan or KDI’s public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume

exempts them from certain regulations and allows the proposed turbines to be considered “best available technology”. Yet KDI states they have the capacity for “500+” megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even “low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death.”[11] NO2/NOx will negatively impact peoples’ lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. “Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant.”[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, “nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia.”[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion “contributes a large mortality burden”.[16]

The World Health Organization reports the health risks of PM10/PM2.5 are “capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts”.[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, “Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2.”[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are “watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation.”[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

Marnie Wilson

[redacted]

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

From: Karen Norvig Berry
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Friday, July 25, 2025 10:54:23 PM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit.

Dear Brian Bailey,

I oppose the Air Quality Plan for the proposed KDI Wyalusing Energy Center.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1]

This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the

grid and not being classified as a utility. What is the true story – the proposed plan or KDI's public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume exempts them from certain regulations and allows the proposed turbines to be considered "best available technology". Yet KDI states they have the capacity for "500+" megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even "low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death."[11] NO2/NOx will negatively impact peoples' lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. "Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant."[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, "nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia."[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion "contributes a large mortality burden".[16]

The World Health Organization reports the health risks of PM10/PM2.5 are "capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts".[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, "Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2."[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are "watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation."[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

Karen Norvig Berry

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

From: Laura Michaels
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Saturday, July 26, 2025 1:04:46 AM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit.

Dear Brian Bailey,

I entirely oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. I ask that you vociferously reject the application.

The proposed project will release pollutants into the air that Pennsylvanians breathe, that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is an absurd choice, given it adds to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts? I encourage PADP to do better in holding Wyalusing Energy Center and all energy generation projects in PA to the highest expectations to protect public health and our natural environment.

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the

grid and not being classified as a utility. What is the true story – the proposed plan or KDI's public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume exempts them from certain regulations and allows the proposed turbines to be considered "best available technology". Yet KDI states they have the capacity for "500+" megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even "low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death."[11] NO2/NOx will negatively impact peoples' lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. "Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant."[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, "nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia."[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion "contributes a large mortality burden".[16]

The World Health Organization reports the health risks of PM10/PM2.5 are "capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts".[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, "Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2."[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are "watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation."[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval. I advocate that PADEP hold any and all energy generation plants to the standards they would demand if their own children lived immediately downwind of those plants.

Signed,

Laura Michaels

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

From: Joe Wolfgang
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Saturday, July 26, 2025 7:01:13 AM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit.

Dear Brian Bailey,

Don't rush-do it right as the public health is number one and many hate the whole idea of AI!

I oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. I ask that you reject the application.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the

grid and not being classified as a utility. What is the true story – the proposed plan or KDI's public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume exempts them from certain regulations and allows the proposed turbines to be considered "best available technology". Yet KDI states they have the capacity for "500+" megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even "low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death."[11] NO2/NOx will negatively impact peoples' lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. "Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant."[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, "nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia."[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion "contributes a large mortality burden".[16]

The World Health Organization reports the health risks of PM10/PM2.5 are "capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts".[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, "Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2."[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are "watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation."[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

Joe Wolfgang

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

From: Joe Wolfgang
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Thursday, August 7, 2025 7:51:09 PM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit. Plan Approval Application 08-00060A

Dear Brian Bailey,

Just an awful idea as there is no plan for the safe disposal of the waste from the oil and gas industry. Hard to believe this is even considered with all the Ur and Th and Ra and Sr going into the public's air ane water.

I oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. I ask that you reject the application.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality

plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the grid and not being classified as a utility. What is the true story – the proposed plan or KDI's public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume exempts them from certain regulations and allows the proposed turbines to be considered "best available technology". Yet KDI states they have the capacity for "500+" megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even "low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death."[11] NO2/NOx will negatively impact peoples' lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. "Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant."[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, "nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia."[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion "contributes a large mortality burden".[16]

The World Health Organization reports the health risks of PM10/PM2.5 are "capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts".[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, "Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2."[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are "watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation."[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

Joe Wolfgang

[redacted]

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

From:	Beatrice Zovich
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Saturday, July 26, 2025 10:40:15 AM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Beatrice Zovich
[redacted]

From:	Daniel J Shields
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Saturday, July 26, 2025 12:09:25 PM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Daniel J Shields
[redacted]

From: Daniel J Shields
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Saturday, July 26, 2025 12:09:13 PM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit.

Dear Brian Bailey,

I oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. I ask that you reject the application.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the grid and not being classified as a utility. What is the true story – the proposed plan or KDI’s public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume

exempts them from certain regulations and allows the proposed turbines to be considered “best available technology”. Yet KDI states they have the capacity for “500+” megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even “low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death.”[11] NO2/NOx will negatively impact peoples’ lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. “Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant.”[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, “nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia.”[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion “contributes a large mortality burden”.[16]

The World Health Organization reports the health risks of PM10/PM2.5 are “capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts”.[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, “Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2.”[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are “watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation.”[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

Daniel J Shields

[redacted]

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

From:	Lisa Payne
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Saturday, July 26, 2025 12:56:11 PM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Lisa Payne
[redacted]

From: Lisa Payne
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Saturday, July 26, 2025 12:55:55 PM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit.

Dear Brian Bailey,

I oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. I ask that you reject the application.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the grid and not being classified as a utility. What is the true story – the proposed plan or KDI’s public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume

exempts them from certain regulations and allows the proposed turbines to be considered “best available technology”. Yet KDI states they have the capacity for “500+” megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even “low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death.”[11] NO2/NOx will negatively impact peoples’ lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. “Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant.”[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, “nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia.”[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion “contributes a large mortality burden”.[16]

The World Health Organization reports the health risks of PM10/PM2.5 are “capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts”.[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, “Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2.”[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are “watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation.”[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

Lisa Payne

[redacted]

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

From:	Sarah Thompson
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Saturday, July 26, 2025 7:20:24 PM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Sarah Thompson
[redacted]

From:	Sarah Thompson
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Thursday, August 7, 2025 7:41:28 AM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Sarah Thompson

[redacted]

From: Amy Page
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Sunday, July 27, 2025 12:57:46 PM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit.

Dear Brian Bailey,

AS USUAL, WHITE MEN (because it's always white men and I'm white!) ARE WORKING YET AGAIN TO RUIN AIR QUALITY FOR THEIR OWN PROFIT!!! WHITE MEN ARE A SCOURGE, A PLAGUE, A CURSE ON THIS PLANET AND ITS CURRENT STATE IS ENTIRELY THEIR DOING!!!! BUT HERE WE GO AGAIN!!

I oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. I ask that you reject the application.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet

KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the grid and not being classified as a utility. What is the true story – the proposed plan or KDI's public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume exempts them from certain regulations and allows the proposed turbines to be considered "best available technology". Yet KDI states they have the capacity for "500+" megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even "low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death."[11] NO2/NOx will negatively impact peoples' lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. "Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant."[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, "nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia."[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion "contributes a large mortality burden".[16]

The World Health Organization reports the health risks of PM10/PM2.5 are "capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts".[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, "Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2."[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are "watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation."[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

Amy Page

[redacted]

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

From:	Andy Switzer
To:	Bailey, Brian (P.E.)
Subject:	[External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date:	Monday, July 28, 2025 4:27:47 PM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit.

Dear Brian Bailey,

I oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. I ask that you reject the application.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the grid and not being classified as a utility. What is the true story – the proposed plan or KDI’s public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume

exempts them from certain regulations and allows the proposed turbines to be considered “best available technology”. Yet KDI states they have the capacity for “500+” megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even “low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death.”[11] NO2/NOx will negatively impact peoples’ lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. “Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant.”[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, “nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia.”[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion “contributes a large mortality burden”.[16]

The World Health Organization reports the health risks of PM10/PM2.5 are “capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts”.[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, “Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2.”[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are “watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation.”[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

Andy Switzer

[redacted]

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

From: John Dulik
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Wednesday, July 30, 2025 11:38:59 AM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit.

Dear Brian Bailey,

I oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. I ask that you reject the application.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the grid and not being classified as a utility. What is the true story – the proposed plan or KDI’s public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume

exempts them from certain regulations and allows the proposed turbines to be considered “best available technology”. Yet KDI states they have the capacity for “500+” megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even “low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death.”[11] NO2/NOx will negatively impact peoples’ lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. “Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant.”[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, “nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia.”[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion “contributes a large mortality burden”.[16]

The World Health Organization reports the health risks of PM10/PM2.5 are “capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts”.[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, “Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2.”[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are “watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation.”[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

John Dulik

[redacted]

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

From: Priester, Ruth
To: Bailey, Brian (P.E.); Shimmel, David; Schulte, Steven; Zaman, Muhammad
Cc: Thetford, Daniel; Lehman, Megan
Subject: FW: Environmental Complaint Form Submission for BRADFORD
Date: Thursday, July 31, 2025 9:14:27 AM

Good Morning,

See the on-line complaint down below. Being that nothing has happened yet, I am not going to treat it as a complaint. Dan states the complainant should have submitted his concerns through the active public comment period and not file a complaint.

Ruth Priester | Service Representative
Department of Environmental Protection | Assistant Regional Director's Office
North Central Regional Office
208 West Third Street Suite 101 | Williamsport PA 17701
Phone: 570.327.3564 | Fax: 570.327.3565
www.dep.pa.gov

From: donotreply@pa.gov <donotreply@pa.gov>
Sent: Wednesday, July 30, 2025 4:15 PM
To: EP, NCRO COMPLAINTS <RA-EPNCROCOMPLAINTS@pa.gov>
Cc: EP, OnBase Notifications <RA-EP-ONBASENOT@pa.gov>
Subject: Environmental Complaint Form Submission for BRADFORD

Submitter Information	
Name: RICHARD SLATER	**Email Address:** [redacted]
Street Address: [redacted]	**City:** [redacted]
State: [redacted]	**Zip Code:** [redacted]
Home Telephone: [redacted] **Cell Phone:**	**Work Telephone:**
Are you or a family member experiencing health symptoms directly related to this concern? No	
Complaint Information	
Location of Problem - County: BRADFORD **Know who is responsible:** **Name:** / **State:** **Address:** / **ZipCode:**	**Location of Problem - Township/Borough/City:** WYSOX TOWNSHIP

City:	Phone Number:	

Problem Description | Directions	
Problem Description:	Directions:
I own a cabin and a small plot of land on the Susquehanna river in [redacted]. There is a proposal in place by Klondike Digital Infrastructure to build a data center very near my property. The site of the data center is the same site that New Fortress Energy proposed building a LNG processing plant on a few years ago. The act 14 notice to proceed with the LNG plant expired several years ago. Now it appears that KDI is trying to use the same expired Act 14 notice for their data center.	Make KDI and NFE submit a new Act 14 notice for their data center. Or better yet, don?t allow this ticking bomb to be built anywhere near a populated area - especially mine. Thanks

From: Kalle Weeks
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Thursday, July 31, 2025 3:01:19 PM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit.

Dear Brian Bailey,

I oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. I ask that you reject the application.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the grid and not being classified as a utility. What is the true story – the proposed plan or KDI’s public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume

exempts them from certain regulations and allows the proposed turbines to be considered “best available technology”. Yet KDI states they have the capacity for “500+” megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even “low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death.”[11] NO2/NOx will negatively impact peoples’ lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. “Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant.”[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, “nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia.”[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion “contributes a large mortality burden”.[16]

The World Health Organization reports the health risks of PM10/PM2.5 are “capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts”.[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, “Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2.”[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are “watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation.”[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

Kalle Weeks

[redacted]

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

From:	Jessica Wilson
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Sunday, August 3, 2025 9:35:07 PM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Jessica Wilson
[redacted]

From: Jessica Wilson
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Sunday, August 3, 2025 9:35:25 PM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit.

Dear Brian Bailey,

I oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. I ask that you reject the application.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the grid and not being classified as a utility. What is the true story – the proposed plan or KDI’s public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume

exempts them from certain regulations and allows the proposed turbines to be considered “best available technology”. Yet KDI states they have the capacity for “500+” megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even “low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death.”[11] NO2/NOx will negatively impact peoples’ lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. “Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant.”[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, “nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia.”[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion “contributes a large mortality burden”.[16]

The World Health Organization reports the health risks of PM10/PM2.5 are “capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts”.[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, “Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2.”[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are “watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation.”[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

Jessica Wilson

[redacted]

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

From: Michael Zuckerman
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Thursday, August 7, 2025 2:00:15 AM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit. Plan Approval Application 08-00060A

Dear Brian Bailey,

I oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. I ask that you reject the application.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the grid and not being classified as a utility. What is the true story – the proposed plan or KDI’s public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume

exempts them from certain regulations and allows the proposed turbines to be considered “best available technology”. Yet KDI states they have the capacity for “500+” megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even “low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death.”[11] NO2/NOx will negatively impact peoples’ lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. “Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant.”[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, “nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia.”[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion “contributes a large mortality burden”.[16]

The World Health Organization reports the health risks of PM10/PM2.5 are “capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts”.[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, “Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2.”[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are “watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation.”[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

Michael Zuckerman

[redacted]

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

From:	Margaret Morgan
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Thursday, August 7, 2025 2:34:36 AM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Margaret Morgan

[redacted]

From: Dean Marshall
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Thursday, August 7, 2025 2:34:49 AM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit. Plan Approval Application 08-00060A

Dear Brian Bailey,

I oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. I ask that you reject the application.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the grid and not being classified as a utility. What is the true story – the proposed plan or KDI’s public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume

exempts them from certain regulations and allows the proposed turbines to be considered “best available technology”. Yet KDI states they have the capacity for “500+” megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even “low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death.”[11] NO2/NOx will negatively impact peoples’ lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. “Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant.”[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, “nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia.”[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion “contributes a large mortality burden”.[16]

The World Health Organization reports the health risks of PM10/PM2.5 are “capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts”.[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, “Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2.”[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are “watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation.”[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

Dean Marshall

[redacted]

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

From:	Robert Morgan
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Thursday, August 7, 2025 2:36:13 AM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Robert Morgan

[redacted]

From: Robin Spurlino
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Thursday, August 7, 2025 3:08:39 AM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit. Plan Approval Application 08-00060A

Dear Brian Bailey,

I oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. I ask that you reject the application.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the grid and not being classified as a utility. What is the true story – the proposed plan or KDI’s public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume

exempts them from certain regulations and allows the proposed turbines to be considered “best available technology”. Yet KDI states they have the capacity for “500+” megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even “low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death.”[11] NO2/NOx will negatively impact peoples’ lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. “Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant.”[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, “nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia.”[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion “contributes a large mortality burden”.[16]

The World Health Organization reports the health risks of PM10/PM2.5 are “capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts”.[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, “Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2.”[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are “watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation.”[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

Robin Spurlino

[redacted]

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

From: Robin Spurlino
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Saturday, August 9, 2025 5:53:33 PM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit. Plan Approval Application 08-00060A

Dear Brian Bailey,

I oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. I ask that you reject the application.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the grid and not being classified as a utility. What is the true story – the proposed plan or KDI’s public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume

exempts them from certain regulations and allows the proposed turbines to be considered “best available technology”. Yet KDI states they have the capacity for “500+” megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even “low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death.”[11] NO2/NOx will negatively impact peoples’ lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. “Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant.”[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, “nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia.”[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion “contributes a large mortality burden”.[16]

The World Health Organization reports the health risks of PM10/PM2.5 are “capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts”.[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, “Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2.”[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are “watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation.”[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

Robin Spurlino

[redacted]

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

From:	Paul & Bonnie Stoeckl
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Thursday, August 7, 2025 3:40:34 AM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Paul & Bonnie Stoeckl

[redacted]

From: Christopher Dunham
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Thursday, August 7, 2025 7:13:42 AM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit. Plan Approval Application 08-00060A

Dear Brian Bailey,

I oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. I ask that you reject the application.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the grid and not being classified as a utility. What is the true story – the proposed plan or KDI’s public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume

exempts them from certain regulations and allows the proposed turbines to be considered “best available technology”. Yet KDI states they have the capacity for “500+” megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even “low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death.”[11] NO2/NOx will negatively impact peoples’ lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. “Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant.”[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, “nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia.”[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion “contributes a large mortality burden”.[16]

The World Health Organization reports the health risks of PM10/PM2.5 are “capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts”.[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, “Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2.”[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are “watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation.”[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

Christopher Dunham

[redacted]

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

From: Heather Nelson
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Thursday, August 7, 2025 7:39:48 AM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit. Plan Approval Application 08-00060A

Dear Brian Bailey,

I oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. I ask that you reject the application.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the grid and not being classified as a utility. What is the true story – the proposed plan or KDI’s public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume

exempts them from certain regulations and allows the proposed turbines to be considered “best available technology”. Yet KDI states they have the capacity for “500+” megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even “low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death.”[11] NO2/NOx will negatively impact peoples’ lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. “Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant.”[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, “nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia.”[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion “contributes a large mortality burden”.[16]

The World Health Organization reports the health risks of PM10/PM2.5 are “capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts”.[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, “Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2.”[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are “watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation.”[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

Heather Nelson

[redacted]

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

From: Mary prosser
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Thursday, August 7, 2025 7:49:34 AM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit. Plan Approval Application 08-00060A

Dear Brian Bailey,

I oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. I ask that you reject the application.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the grid and not being classified as a utility. What is the true story – the proposed plan or KDI’s public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume

exempts them from certain regulations and allows the proposed turbines to be considered “best available technology”. Yet KDI states they have the capacity for “500+” megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even “low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death.”[11] NO2/NOx will negatively impact peoples’ lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. “Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant.”[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, “nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia.”[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion “contributes a large mortality burden”.[16]

The World Health Organization reports the health risks of PM10/PM2.5 are “capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts”.[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, “Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2.”[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are “watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation.”[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

Mary prosser

[redacted]

From:	Thomas Posey
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Thursday, August 7, 2025 7:52:12 AM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Thomas Posey

[redacted]

From:	Peter Tran
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Thursday, August 7, 2025 12:55:21 PM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Peter Tran

[redacted]

From: Matt Neumaier
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Thursday, August 7, 2025 4:31:02 PM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit. Plan Approval Application 08-00060A

Dear Brian Bailey,

I oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. I ask that you reject the application.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the grid and not being classified as a utility. What is the true story – the proposed plan or KDI’s public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume

exempts them from certain regulations and allows the proposed turbines to be considered “best available technology”. Yet KDI states they have the capacity for “500+” megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even “low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death.”[11] NO2/NOx will negatively impact peoples’ lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. “Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant.”[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, “nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia.”[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion “contributes a large mortality burden”.[16]

The World Health Organization reports the health risks of PM10/PM2.5 are “capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts”.[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, “Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2.”[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are “watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation.”[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

Matt Neumaier

[redacted]

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

From:	Lois Drumheller
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Thursday, August 7, 2025 4:44:45 PM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Lois Drumheller

[redacted]

From: Lois Drumheller
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Thursday, August 7, 2025 4:44:16 PM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit. Plan Approval Application 08-00060A

Dear Brian Bailey,

I oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. I ask that you reject the application.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the grid and not being classified as a utility. What is the true story – the proposed plan or KDI’s public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume

exempts them from certain regulations and allows the proposed turbines to be considered “best available technology”. Yet KDI states they have the capacity for “500+” megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even “low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death.”[11] NO2/NOx will negatively impact peoples’ lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. “Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant.”[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, “nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia.”[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion “contributes a large mortality burden”.[16]

The World Health Organization reports the health risks of PM10/PM2.5 are “capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts”.[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, “Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2.”[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are “watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation.”[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

Lois Drumheller

[redacted]

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

From: julie Kaye
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Thursday, August 7, 2025 10:27:08 PM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit. Plan Approval Application 08-00060A

Dear Brian Bailey,

I oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. I ask that you reject the application.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the grid and not being classified as a utility. What is the true story – the proposed plan or KDI’s public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume

exempts them from certain regulations and allows the proposed turbines to be considered “best available technology”. Yet KDI states they have the capacity for “500+” megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even “low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death.”[11] NO2/NOx will negatively impact peoples’ lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. “Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant.”[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, “nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia.”[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion “contributes a large mortality burden”.[16]

The World Health Organization reports the health risks of PM10/PM2.5 are “capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts”.[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, “Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2.”[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are “watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation.”[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

julie Kaye

[redacted]

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

From: Sandy FReid
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Friday, August 8, 2025 7:20:11 AM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit. Plan Approval Application 08-00060A

Dear Brian Bailey,

I oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. I ask that you reject the application.

Signed,

Sandy FReid

[redacted]

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

From:	Chris Stanton
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Friday, August 8, 2025 9:30:17 AM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Chris Stanton

[redacted]

From:	Jill Hardina
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Saturday, August 9, 2025 1:20:36 AM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Jill Hardina

[redacted]

From: Rose Meixell Neith
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Sunday, August 10, 2025 6:54:19 AM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit. Plan Approval Application 08-00060A

Dear Brian Bailey,

I oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. I ask that you reject the application.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center

will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the grid and not being classified as a utility. What is the true story – the proposed plan or KDI’s public statements? PADEP states in the

plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume exempts them from certain regulations and allows the proposed turbines to be considered "best available technology". Yet KDI states they have the capacity for "500+" megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even "low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death."[11] NO2/NOx will negatively impact peoples' lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. "Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant."[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, "nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia."[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion "contributes a large mortality burden".[16]

The World Health Organization reports the health risks of PM10/PM2.5 are "capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts".[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, "Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2."[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are "watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation."[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

Rose Meixell Neith

[redacted]

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

From: Sandra Folzer
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Sunday, August 10, 2025 5:03:13 PM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit. Plan Approval Application 08-00060A

Dear Brian Bailey,

I oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. I ask that you reject the application.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the grid and not being classified as a utility. What is the true story – the proposed plan or KDI’s public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume

exempts them from certain regulations and allows the proposed turbines to be considered “best available technology”. Yet KDI states they have the capacity for “500+” megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even “low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death.”[11] NO2/NOx will negatively impact peoples’ lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. “Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant.”[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, “nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia.”[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion “contributes a large mortality burden”.[16]

The World Health Organization reports the health risks of PM10/PM2.5 are “capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts”.[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, “Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2.”[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are “watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation.”[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

Sandra Folzer

[redacted]

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

From:	Adam Mahonske
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Sunday, August 10, 2025 6:12:09 PM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Adam Mahonske

[redacted]

From:	dennis yaz yaz
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Monday, August 11, 2025 7:29:12 AM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

dennis yaz yaz

[redacted]

From: Ellen Blais
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Monday, August 11, 2025 8:59:48 AM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit. Plan Approval Application 08-00060A

Dear Jim WeltyBrian Bailey,

As head of the coalition to build natural gas-powered Energy Center in Walusing, I ask you to observe the required sixty-day period for public comment. This plant would only add to pollution causing more global warming and more floods and fires in Pennsylvania. And for a technology, AI, that is both unregulated and unproven. This is a very short-sighted move, and it will help no one but the natural gas industry.

See the further supporting information below although I'm sure you are familiar with it already.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality

plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the grid and not being classified as a utility. What is the true story – the proposed plan or KDI's public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume exempts them from certain regulations and allows the proposed turbines to be considered "best available technology". Yet KDI states they have the capacity for "500+" megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even "low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death."[11] NO2/NOx will negatively impact peoples' lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. "Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant."[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, "nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia."[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion "contributes a large mortality burden".[16]

The World Health Organization reports the health risks of PM10/PM2.5 are "capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts".[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, "Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2."[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are "watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation."[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

Ellen Blais

[redacted]

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

From: Karen Feridun
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Monday, August 11, 2025 2:39:22 PM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit. Plan Approval Application 08-00060A

Dear Brian Bailey,

I oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. I ask that you reject the application.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the grid and not being classified as a utility. What is the true story – the proposed plan or KDI’s public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume

exempts them from certain regulations and allows the proposed turbines to be considered “best available technology”. Yet KDI states they have the capacity for “500+” megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even “low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death.”[11] NO2/NOx will negatively impact peoples’ lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. “Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant.”[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, “nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia.”[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion “contributes a large mortality burden”.[16]

The World Health Organization reports the health risks of PM10/PM2.5 are “capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts”.[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, “Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2.”[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are “watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation.”[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

Karen Feridun

[redacted]

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

From: Amber Notaro
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Monday, August 11, 2025 2:53:19 PM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit. Plan Approval Application 08-00060A

Dear Brian Bailey,

I oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. I ask that you reject the application.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the grid and not being classified as a utility. What is the true story – the proposed plan or KDI’s public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume

exempts them from certain regulations and allows the proposed turbines to be considered “best available technology”. Yet KDI states they have the capacity for “500+” megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even “low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death.”[11] NO2/NOx will negatively impact peoples’ lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. “Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant.”[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, “nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia.”[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion “contributes a large mortality burden”.[16]

The World Health Organization reports the health risks of PM10/PM2.5 are “capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts”.[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, “Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2.”[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are “watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation.”[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

Amber Notaro

[redacted]

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

From:	Daniel Lidon
To:	Bailey, Brian (P.E.)
Subject:	[External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date:	Monday, August 11, 2025 3:01:12 PM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit. Plan Approval Application 08-00060A

Dear Brian Bailey,

I oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. I ask that you reject the application.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the grid and not being classified as a utility. What is the true story – the proposed plan or KDI’s public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume

exempts them from certain regulations and allows the proposed turbines to be considered “best available technology”. Yet KDI states they have the capacity for “500+” megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even “low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death.”[11] NO2/NOx will negatively impact peoples’ lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. “Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant.”[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, “nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia.”[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion “contributes a large mortality burden”.[16]

The World Health Organization reports the health risks of PM10/PM2.5 are “capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts”.[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, “Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2.”[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are “watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation.”[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

Daniel Lidon

[redacted]

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

From:	Tina Shelton
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Monday, August 11, 2025 3:37:10 PM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Tina Shelton

[redacted]

From: Tina Shelton
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Monday, August 11, 2025 3:38:12 PM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit. Plan Approval Application 08-00060A

Dear Brian Bailey,

I oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. I ask that you reject the application.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the grid and not being classified as a utility. What is the true story – the proposed plan or KDI’s public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume

exempts them from certain regulations and allows the proposed turbines to be considered “best available technology”. Yet KDI states they have the capacity for “500+” megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even “low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death.”[11] NO2/NOx will negatively impact peoples’ lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. “Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant.”[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, “nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia.”[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion “contributes a large mortality burden”.[16]

The World Health Organization reports the health risks of PM10/PM2.5 are “capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts”.[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, “Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2.”[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are “watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation.”[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

Tina Shelton

[redacted]

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

From: Gillian Graber
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Monday, August 11, 2025 4:14:39 PM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit. Plan Approval Application 08-00060A

Dear Brian Bailey,

I oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. I ask that you reject the application.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the grid and not being classified as a utility. What is the true story – the proposed plan or KDI’s public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume

exempts them from certain regulations and allows the proposed turbines to be considered “best available technology”. Yet KDI states they have the capacity for “500+” megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even “low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death.”[11] NO2/NOx will negatively impact peoples’ lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. “Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant.”[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, “nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia.”[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion “contributes a large mortality burden”.[16]

The World Health Organization reports the health risks of PM10/PM2.5 are “capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts”.[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, “Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2.”[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are “watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation.”[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

Gillian Graber

[redacted]

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

From:	Barbara Brandom
To:	Bailey, Brian (P.E.)
Subject:	[External] I request a hybrid public hearing and comment period extension for the KDI Wyalusing Energy Center Project
Date:	Monday, August 11, 2025 6:04:19 PM

Dear Brian Bailey,

PADEP must hold a public hearing and extend the written comment period to 60 days regarding the Wyalusing Energy Center project proposed in Bradford County, PA. This project will negatively affect our air quality and impact our health and environment. The negative effects of air pollution do not respect state boundaries. The effects of air pollution from this project will be felt down wind, in areas of high population density in New York, New Jersey and Pennsylvania.

The total combined emissions from the eight self-contained combustion turbines at the project in any 12 consecutive month period include 74.24 tons of Nitrogen Oxides, 93.18 tons of Carbon Monoxide, 40.22 tons of volatile organic compounds, 91.36 tons of Particulate Matter that include PM10 and PM2.5, 2.32 tons of Formaldehyde, and other air pollutants. The project will also emit 1,113,659 tons of Greenhouse Gases in any 12 consecutive month period.

According to the World Health Organization:

· Long-term and short-term exposure to particulate matter is associated with morbidity and death from cardiovascular and respiratory diseases. Long-term exposure has been linked to lung cancer.

· Carbon Monoxide makes it difficult for oxygen to bind to cells which can damage tissues. Exposure also causes exhaustion, dizziness, difficulty breathing, and death at high levels of exposure.

· Formaldehyde can cause eye, nose, and throat irritation during short term exposure but long-term exposure has been associated with nasopharyngeal cancer.

Additionally, NOx is known to damage lung tissue, impact breathing, and cause respiratory issues. The American Lung Association links exposure to Volatile Organic Compounds to include irritation of the eyes, nose and throat, cause headaches and dizziness with long term exposure damaging the liver, kidneys, and central nervous system. The emissions that are being allowed are significant and the public should have the opportunity to speak at a hearing directly to the decisionmakers at the Department on this plan. A public hearing provides an accessible way for people to share their concerns and voice their opinions, adding a much-needed opportunity for input into this project that will have substantial impact on their lives.

A 30 day comment period is not enough time for people to find out about the project, read, and digest what is being proposed and how it would impact them, their families, and/or businesses

and livelihoods. The summer months are when many families are on vacation or out of town, leaving some to not even find out about the proposal until it is too late. The significance of the emissions from this project require more time for the public to consider the ramifications, at least 60 days.

I strongly request that a hybrid Public Hearing and an extension of the public comment period to at least 60 days be provided in order to include the public in this decision-making process.

Signed,

Barbara Brandom

[redacted]

From: Barbara Brandom
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Monday, August 11, 2025 5:58:35 PM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit. Plan Approval Application 08-00060A

Dear Brian Bailey,

As a retired physician with training in public health, I strongly oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its many adverse impacts. I ask that you reject the application.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

To elaborate on the permanent negative effects of a few of these compounds; nitrogen and sulfur oxides interact with oxygen in the presence of sunlight to produce ozone. Ozone produces permanent damage to lungs, which is cummulative, and places humans at greater risk of mortality from respiratory infections. Particulate matter also has a cummulative negative effect, by increasing inflammatory processes through out the body. This results in pulmonary, cardiovascular and neurologic injury and acceleration of degenerative diseases such as Alzheimer's disease. We are now experiencing the early effects of global warming. The Arctic is warming faster that we are in the middle latitudes. As the permafrost continues to melt global warming will rapidly accelerate causing mush more severe changes in climate and weather.

Now is the time to stop burning fossil fuels.

For all these reasons I urge rejection of this proposal for the KDI Wyalusing Energy Center.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for

irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the grid and not being classified as a utility. What is the true story – the proposed plan or KDI's public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume exempts them from certain regulations and allows the proposed turbines to be considered "best available technology". Yet KDI states they have the capacity for "500+" megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even "low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death."[11] NO2/NOx will negatively impact peoples' lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. "Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant."[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, "nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia."[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion "contributes a large mortality burden".[16]

The World Health Organization reports the health risks of PM10/PM2.5 are "capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts".[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, "Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2."[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are "watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation."[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally,

nationally, and on a global scale.

In closing, I oppose this proposed air quality plan and advocate that PADEP deny final approval.

Signed,

Barbara Brandom

[redacted]

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

From: Paul Carluccio
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Tuesday, August 12, 2025 10:01:41 AM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit. Plan Approval Application 08-00060A

Dear Brian Bailey,

I oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. I ask that you reject the application.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the grid and not being classified as a utility. What is the true story – the proposed plan or KDI’s public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume

exempts them from certain regulations and allows the proposed turbines to be considered “best available technology”. Yet KDI states they have the capacity for “500+” megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even “low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death.”[11] NO2/NOx will negatively impact peoples’ lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. “Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant.”[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, “nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia.”[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion “contributes a large mortality burden”.[16]

The World Health Organization reports the health risks of PM10/PM2.5 are “capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts”.[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, “Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2.”[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are “watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation.”[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

Paul Carluccio

[redacted]

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

[redacted]

August 2, 2025

Regional Air Quality Program Manager
PA Department of Environmental Protection
208 West Third Street Suite 101
Willamsport, PA 17701

RECEIVED
AUG - 7 2025
AIR QUALITY
PM 8/5/25

Re: Proposal Plan Approval 08-00060 A

Dear Sir/Madam:

I am writing to you to express my concern with the air quality from the proposed gas turbine power plant especially due to its close proximity (about 1 mile) from the Wyalusing Area Schools, their playing fields and a local daycare facility. It is well known that children, especially young children, are more susceptible to airborne pollutants than adults. Children are particularly vulnerable to air pollution due to their developing respiratory systems, higher breathing rates, and increased activity levels. While gas turbine power plants have lower emissions than coal powered, they still emit various pollutants that can significantly affect air quality. This is especially true in the proposed location, in a narrow river valley, where wind patterns can trap emissions. Because the proposed plant is situated near schools, this becomes a public health concern.

The particular potential pollutant concerns relate to:

Nitrogen Oxides (NOx): These are a key pollutant emitted from gas turbines. NOx can react with volatile organic compounds in the air to form ground-level ozone, which is a significant contributor to smog.

Particulate Matter (PM): Though gas turbines generally produce less particulate matter compared to coal or diesel engines, some fine particles can still be emitted, which can aggravate respiratory conditions.

Given the location in a narrow river valley there are additional challenges due to limited air circulation which can trap the pollutants near to the schools. We frequently experience temperature inversions which can trap the pollutants near to the ground, increasing the concentrations near to the schools. These higher levels of pollutants can adversely affect our young people who will be exposed during recess and sports activities.

I am raising these concerns for your consideration based on the proposed location of the power generating plan.

Thank you for your consideration,

Jonathan Naugle

[redacted]

From: Tamela Trussell
To: Bailey, Brian (P.E.)
Subject: [External] Re: 08-00060A: KDI Wyalusing Power LLC. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s)
Date: Wednesday, August 13, 2025 4:29:14 AM

Re: 08-00060A: KDI Wyalusing Power LLC, 111 West 19th Street, New York, NY 10011-4115, Wyalusing Township, Bradford County. Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) Under the Air Pollution Control Act (35 P.S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter B. Actions May Include the Administrative Amendments of an Associated Operating Permit. Plan Approval Application 08-00060A

Dear Brian Bailey,

I oppose the approval of the Air Quality Plan for the proposed KDI Wyalusing Energy Center. This project does not benefit me or my community and it will degrade the area and the regional environment without any fair justification for its adverse impacts. I ask that you reject the application.

The proposed project will release criteria air pollutants that negatively impact air quality, the environment, and human health. Total combined emissions from the eight fracked gas turbines and the diesel fire pump are projected to be:

Nitrogen Oxides—74.24 tons in any 12 consecutive month period;
Carbon Monoxide—93.18 tons in any 12 consecutive month period;
Volatile Organic Compounds—40.22 tons in any 12 consecutive month period;
Particulate Matter (including PM10 and PM2.5)—91.63 tons in any 12 consecutive month period;
Sulfur Oxides—13.26 tons in any 12 consecutive month period;
Formaldehyde—2.32 tons in any 12 consecutive month period;
Sulfuric Acid Mist—2.03 tons in any 12 consecutive month period; and
Greenhouse Gases (as CO2 e)—1,113,659 tons in any 12 consecutive month period.

These emissions are significant and will have substantial impact on our lives, including our health, the health of the Susquehanna River and the environment, locally, regionally, and on a wider scale. An example of how an important air quality standard is being skirted by the proposed plan is the allowance of the Particulate Matter (PM10 and PM2.5 combined) at 91.63 tons when the threshold for a more comprehensive Title V permit is 100 tons. The air quality plan must be designed to protect air quality from degradation in order to protect public health and skirting under regulatory limits to avoid environmental controls is unacceptable.

The plan to use simple cycle (also known as single cycle) combustion engines instead of combined cycle engines is adding to the pollution burden that will be placed on the region. “Combined cycle plants are generally more efficient and capable of producing more electricity from the same amount of fuel compared to simple cycle plants, making them a more favorable option for many modern power generation’s needs.”[1] This efficiency also entails less pollution as shown in a comparison of combined cycle and simple cycle turbines – combined cycle combustion decreases NOx emissions by 14 percent over simple-cycle combustion and CO2 emissions by 5 percent.[2] Simple cycle engines are usually used only to meet peak power needs. Employing them at the Wyalusing Energy Center will mean these more polluting turbines will be running 24/7/365 as if they were always fulfilling peak demand. Simple cycle turbines are often used for backup, not as primary energy. Why is PADP allowing such an inefficient and polluting energy system despite the negative environmental and public health impacts?

In addition to these criteria pollutants, other pollutants are emitted by the gas-powered combustion turbines. “Several hazardous air pollutants (HAPs) are emitted from stationary combustion turbines. These HAP emissions are formed during combustion or result from HAP compounds contained in the fuel burned.”[3] These pollutants are in addition to the criteria air pollutants and include 1,3 butadiene, acetaldehyde, acrolein, benzene, ethylbenzene, formaldehyde, naphthalene, poly aromatic hydrocarbons (PAH), propylene oxide, toluene, and xylenes.[4]

The proposed diesel-powered fire engine is limited to 500 hours per year but will emit pollution because diesel fuel contains sulfur (see SO and SO2 discussion below for adverse health effects), even though it is stated they will use low sulfur fuel. Federal law requires a 15-ppm limit on sulfur in diesel fuel, which is what is required in the proposed air quality plan. But there still will be significant sulfur emissions in aggregate from both the turbines and the fire engine. Burning diesel fuel also emits exhaust containing nitrogen oxides, particulate matter, and a toxic mix of up to 40 contaminants.[5] These all have dangerous human health effects.[6] Why is PADEP allowing the fire engine to use diesel fuel? It is also not clear what the fire engine will be used for. A fire engine is also used for irrigation to even out the distribution of water in a facility and we know data canters require extensive cooling. Is the 500 hours solely based on the possible need for sprinklers in a fire or for more routine cooling needs at the data center? Sulfuric acid mist is also added to the allowed pollutants, compounding the unacceptable dangers posed by toxic sulfur emissions.

The proposed air quality plan is being offered for comment separate from and before any other permits are proposed or made public for this project. For instance, we do not know the size of the data center, we cannot offer an informed opinion as to whether these 8 turbines are going to produce enough electricity for the data center. It is well known that data centers require enormous amounts of consistent electricity. And there is conflicting information from KDI. We are told that the turbines will not be connected to the grid yet KDI advertises on its website that 1,000+ MW existing electrical interconnect exists at the Wyalusing site.[7] The proposed air quality plan says KDI is avoiding several air pollution limits and requirements including combined cycle redundancy by not connecting to the grid and not being classified as a utility. What is the true story – the proposed plan or KDI’s public statements? PADEP states in the plan that keeping the output of the turbines limited to 218 megawatts of electricity and limiting the amount of fuel they can consume

exempts them from certain regulations and allows the proposed turbines to be considered “best available technology”. Yet KDI states they have the capacity for “500+” megawatts of electricity for a data center at this site.[8] The various limits in the proposed plan were imposed at the request of KDI, according to PADEP, allowing them to avoid certain regulatory requirements. What is the real plan? Will the data center end up connecting to the grid to get the consistent power needed? Is the undisclosed plan to come back in the future to ask for more turbines and other expansions after the project is built and is a *fait accompli*? We need to know NOW what this project entails and how it will impact the region and our communities. A comprehensive and simultaneous permit review could disclose how much energy and water will be needed for the data center, what the environmental footprint of the data center facilities will be, the upstream and downstream emissions, the local environmental impacts and day-to-day changes that would result from this project. PADEP, why are you segmenting the review of the various components of this project and not disclosing the facts we need?

The proposed plan states that Selective Catalytic Reduction (SCR) will be used to reduce pollution from the turbines, such as NOx. It is also stated that water will be required for the SCR process and wastewater will be discharged yet there is no mention of a water permit or a discharge permit for the water used by the turbines. This must be corrected by PADEP in order to provide full information on water use for the SCR system and the wastewater discharge from the SCR system.

Negative human health effects of criteria air pollutants will impact me and my community. These effects include:

NOx is known to cause damage to the human respiratory system which can range from irritation and coughing to permanent lung damage and worsening symptoms of those who have asthma, as per U.S. Environmental Protection Agency (USEPA)[9] and the federal Agency for Toxic Substances and Disease Registry (ATSDR).[10] Even “low levels of nitrogen oxides in the air can irritate your eyes, nose, throat, and lungs, possibly causing you to cough and experience shortness of breath, tiredness, and nausea. Exposure to low levels can also result in fluid build-up in the lungs 1 or 2 days after exposure. Breathing high levels of nitrogen oxides can cause rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of body tissues, a build-up of fluid in your lungs, and death.”[11] NO2/NOx will negatively impact peoples’ lungs and heart and will impair neurological development[12].

Volatile organic compounds (VOCs) are a group of chemicals that can turn from a liquid to a vapor in the air. “Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system and other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant.”[13]

PM2.5 stands for tiny particulate matter (particle pollution) per the USEPA[14]. PM10 are particles larger than 2.5 and still dangerous. PM2.5 air pollution has been linked to a variety of health issues. In a study published in the National Library of Medicine, “nine causes of death were associated with PM2.5 air pollution: cardiovascular disease, cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia.”[15] A study published in Environmental Research found that 10.2 million premature deaths worldwide result from small particulates released when fossil fuels are burned and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. The study demonstrates PM2.5 from fossil fuel combustion “contributes a large mortality burden”.[16]

The World Health Organization reports the health risks of PM10/PM2.5 are “capable of penetrating deep into the lung and enter the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts”.[17] Long term and short-term exposure to PM10/PM2.5 come with these health risks and including, for some, death.

Sulfur Oxides include sulfur dioxide (SO2), which has the worst impacts. According to the USEPA, “Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO2.”[18] SO2in the atmosphere can react with other compounds to form small particles, increasing particulate matter (PM) in the air.[19] SO harm trees and other vegetation and degrade water quality.

Carbon monoxide creates difficulty breathing and makes it difficult for the body to bind oxygen to its cells because carbon monoxide diffuses across lung tissue and into the bloodstream.[20]

Formaldehyde is classified as a probable human carcinogen by USEPA, and as a known human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program under the Department of Health and Human Services.[21] Its short term effects for some individuals are “watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation.”[22]

Greenhouse Gas Emissions are known to warm the atmosphere, worsening the climate crisis. Fossil gas is primarily methane, the most powerful of greenhouse gases over a 20-year time frame. The release of methane to the atmosphere will occur from the extraction point at the fracked well head, through pipelines and compressor stations, to storage tanks – that is, throughout the fracked gas cradle to grave pathway. But PADEP only considers the greenhouse gas emitted when the gas is burned by the turbine as CO2e, which is still substantial and will contribute to atmospheric warming and the devastating climate impacts being experienced locally, regionally, nationally, and on a global scale.

In closing, I oppose the proposed air quality plan and advocate that PADEP deny final approval.

Signed,

Tamela Trussell

[redacted]

---

[1] https://www.quora.com/What-is-the-difference-between-simple-cycle-and-combined-cycle-in-power-plants

[2] TABLE 2-1 PDF Page 20 https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[3] https://www.epa.gov/sites/default/files/2020-07/documents/combustion-turbines_eia_neshap_final_08-2003.pdf

[4] Id.

[5] https://oehha.ca.gov/air/health-effects-diesel-exhaust

[6] Id.

[7] https://www.newfortressenergy.com/klondike

[8] Id.

[9] United States Environmental Protection Agency, *Basic Information about NO2,* https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Effects%20of%20NO,-2&text=Breathing%20air%20with%20a%20high,about%20Particulate%20Matter%20and%20Ozone .

[10] ToxFAQs for Nitrogen Oxides at https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69

[11] *Id.*

[12] Morgan, Z.E.M., Bailey, M.J., Trifonova, D.I. *et al.* Prenatal exposure to ambient air pollution is associated with neurodevelopmental outcomes at 2 years of age. *Environ Health* **22**, 11 (2023). Published January 24, 2023. https://doi.org/10.1186/s12940-022-00951-y

[13] https://www.lung.org/clean-air/at-home/indoor-air-pollutants/volatile-organic-compounds

[14] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902821/

[16] Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Environmental Research, https://doi.org/10.1016/j.envres.2021.110754. Published 2021.

[17] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[18] USEPA, Sulfur Dioxide Basics, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

[19] Id.

[20] World Health Organization, *Air quality, energy and health,* https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants

[21] https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet

[22] Id.

[redacted]

August 2, 2025

Regional Air Quality Program Manager
PA Department of Environmental Protection
208 West Third Street Suite 101
Willamsport, PA 17701

RECEIVED
AUG - 7 2025
AIR QUALITY
PM 8/5/25

Re: Proposal Plan Approval 08-00060 A

Dear Sir/Madam:

I am writing to you to express my concern with the air quality from the proposed gas turbine power plant especially due to its close proximity (about 1 mile) from the Wyalusing Area Schools, their playing fields and a local daycare facility. It is well known that children, especially young children, are more susceptible to airborne pollutants than adults. Children are particularly vulnerable to air pollution due to their developing respiratory systems, higher breathing rates, and increased activity levels. While gas turbine power plants have lower emissions than coal powered, they still emit various pollutants that can significantly affect air quality. This is especially true in the proposed location, in a narrow river valley, where wind patterns can trap emissions. Because the proposed plant is situated near schools, this becomes a public health concern.

The particular potential pollutant concerns relate to:

Nitrogen Oxides (NOx): These are a key pollutant emitted from gas turbines. NOx can react with volatile organic compounds in the air to form ground-level ozone, which is a significant contributor to smog.

Particulate Matter (PM): Though gas turbines generally produce less particulate matter compared to coal or diesel engines, some fine particles can still be emitted, which can aggravate respiratory conditions.

Given the location in a narrow river valley there are additional challenges due to limited air circulation which can trap the pollutants near to the schools. We frequently experience temperature inversions which can trap the pollutants near to the ground, increasing the concentrations near to the schools. These higher levels of pollutants can adversely affect our young people who will be exposed during recess and sports activities.

I am raising these concerns for your consideration based on the proposed location of the power generating plan.

Thank you for your consideration.

Jonathan Naugle

[redacted]