48-00091 LOWER MOUNT BETHEL ENERGY SES/BANGOR



# COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION AIR QUALITY PROGRAM

# TITLE V/STATE OPERATING PERMIT

Issue Date: January 19, 2023 Effective Date: January 19, 2023

Expiration Date: January 19, 2028

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 operate the air emission source(s) more fully described in this permit. This Facility is subject to all terms and conditions specified in this permit. Nothing in this permit 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 permit condition is set forth in brackets. All terms and conditions in this permit are federally enforceable applicable requirements unless otherwise designated as "State-Only" or "non-applicable" requirements.

### TITLE V Permit No: 48-00091

Federal Tax Id - Plant Code: 37-1908140-1

**Owner Information** Name: LMBE PROJECT COMPANY LLC Mailing Address: 6079 DEPUES FERRY RD BANGOR, PA 18013 Plant Information Plant: LOWER MOUNT BETHEL ENERGY SES/BANGOR Location: 48 Northampton County 48922 Lower Mount Bethel Township SIC Code: 4911 Trans. & Utilities - Electric Services Responsible Official Name: WILLIAM C LEWIS Title: PLANT MANAGER Phone: (610) 498 - 6255 Email: bill.lewis@talenenergy.com Permit Contact Person Name: JAMIE KLEINLE Title: ENV PROFESSIONAL Phone: (610) 498 - 6348 Email: jamie.kleinle@talenenergy.com [Signature] MARK J. WEJKSZNER, NORTHEAST REGION AIR PROGRAM MANAGER





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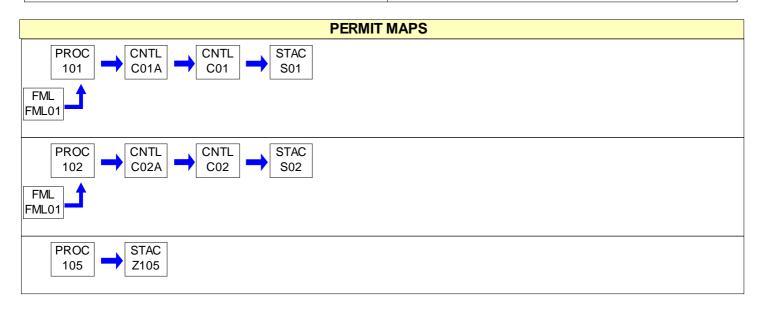
# Section H. Miscellaneous





# SECTION A. Site Inventory List

Source ID	Source Name	Capacity/Throughput	Fuel/Material
101	CCC TURBINE #1/DUCT BURNER W/LOW NOX BURNER	2,306.000 MMBTU/HR	
102	CCC TURBINE #2/DUCT BURNER W/LOW NOX BURNER	2,306.000 MMBTU/HR	
105	COOLING TOWER		
C01	UNIT 1 SCR		
C01A	UNIT 1 OXIDATION CATALYST		
C02	UNIT 2 SCR		
C02A	UNIT 2 OXIDATION CATALYST		
FML01	NATURAL GAS PIPELINE		
S01	UNIT 1 STACK		
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Z105	FUGITIVES		



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#001 [25 Pa. Code § 121.1]

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**Definitions** 

Words and terms that are not otherwise defined in this permit 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 § 121.7]

**Prohibition of Air Pollution** 

No person may permit air pollution as that term is defined in the act.

#003 [25 Pa. Code § 127.512(c)(4)]

**Property Rights** 

This permit does not convey property rights of any sort, or any exclusive privileges.

#004 [25 Pa. Code § 127.446(a) and (c)]

### **Permit Expiration**

This operating permit is issued for a fixed term of five (5) years and shall expire on the date specified on Page 1 of this permit. The terms and conditions of the expired permit shall automatically continue pending issuance of a new Title V permit, provided the permittee has submitted a timely and complete application and paid applicable fees required under 25 Pa. Code Chapter 127, Subchapter I and the Department is unable, through no fault of the permittee, to issue or deny a new permit before the expiration of the previous permit. An application is complete if it contains sufficient information to begin processing the application, has the applicable sections completed and has been signed by a responsible official.

#005 [25 Pa. Code §§ 127.412, 127.413, 127.414, 127.446(e), 127.503 & 127.704(b)]

#### **Permit Renewal**

- (a) An application for the renewal of the Title V permit shall be submitted to the Department at least six (6) months, and not more than 18 months, before the expiration date of this permit. The renewal application is timely if a complete application is submitted to the Department's Regional Air Manager within the timeframe specified in this permit condition.
- (b) The application for permit renewal shall include the current permit number, the appropriate permit renewal fee, a description of any permit revisions and off-permit changes that occurred during the permit term, and any applicable requirements that were promulgated and not incorporated into the permit during the permit term. The fees shall be made payable to "The Commonwealth of Pennsylvania Clean Air Fund" and submitted with the fee form to the respective regional office.
- (c) The renewal application shall also include submission of proof that the local municipality and county, in which the facility is located, have been notified in accordance with 25 Pa. Code § 127.413. The application for renewal of the Title V permit shall also include submission of compliance review forms which have been used by the permittee to update information submitted in accordance with either 25 Pa. Code § 127.412(b) or § 127.412(j).
- (d) The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information during the permit renewal process. The permittee shall also promptly provide additional information as necessary to address any requirements that become applicable to the source after the date a complete renewal application was submitted but prior to release of a draft permit.

#006 [25 Pa. Code §§ 127.450(a)(4) & 127.464(a)]

### **Transfer of Ownership or Operational Control**

- (a) In accordance with 25 Pa. Code § 127.450(a)(4), a change in ownership or operational control of the source shall be treated as an administrative amendment if:
  - (1) The Department determines that no other change in the permit is necessary;
- (2) A written agreement has been submitted to the Department identifying the specific date of the transfer of permit responsibility, coverage and liability between the current and the new permittee; and,
  - (3) A compliance review form has been submitted to the Department and the permit transfer has been approved by





the Department.

(b) In accordance with 25 Pa. Code § 127.464(a), this permit may not be transferred to another person except in cases of transfer-of-ownership which are documented and approved to the satisfaction of the Department.

# #007 [25 Pa. Code § 127.513, 35 P.S. § 4008 and § 114 of the CAA]

### **Inspection and Entry**

- (a) Upon presentation of credentials and other documents as may be required by law for inspection and entry purposes, the permittee shall allow the Department of Environmental Protection or authorized representatives of the Department to perform the following:
- (1) Enter at reasonable times upon the permittee's premises where a Title V source is located or emissions related activity is conducted, or where records are kept under the conditions of this permit;
  - (2) Have access to and copy or remove, at reasonable times, records that are kept under the conditions of this permit;
- (3) Inspect at reasonable times, facilities, equipment including monitoring and air pollution control equipment, practices, or operations regulated or required under this permit;
- (4) Sample or monitor, at reasonable times, substances or parameters, for the purpose of assuring compliance with the permit or applicable requirements as authorized by the Clean Air Act, the Air Pollution Control Act, or the regulations promulgated under the Acts.
- (b) 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.
- (c) Nothing in this permit condition shall limit the ability of the EPA to inspect or enter the premises of the permittee in accordance with Section 114 or other applicable provisions of the Clean Air Act.

# #008 [25 Pa. Code §§ 127.25, 127.444, & 127.512(c)(1)]

### **Compliance Requirements**

- (a) The permittee shall comply with the conditions of this permit. Noncompliance with this permit constitutes a violation of the Clean Air Act and the Air Pollution Control Act and is grounds for one (1) or more of the following:
  - (1) Enforcement action
  - (2) Permit termination, revocation and reissuance or modification
  - (3) Denial of a permit renewal application
- (b) A person may not cause or permit the operation of a source, which is subject to 25 Pa. Code Article III, unless the source(s) and air cleaning devices identified in the application for the plan approval and operating permit and the plan approval issued to the source are operated and maintained in accordance with specifications in the applications and the conditions in the plan approval and operating permit issued by the Department. A person may not cause or permit the operation of an air contamination source subject to 25 Pa. Code Chapter 127 in a manner inconsistent with good operating practices.
- (c) For purposes of Sub-condition (b) of this permit condition, the specifications in applications for plan approvals and operating permits are the physical configurations and engineering design details which the Department determines are essential for the permittee's compliance with the applicable requirements in this Title V permit.

# #009 [25 Pa. Code § 127.512(c)(2)]

### Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.





#### #010 [25 Pa. Code §§ 127.411(d) & 127.512(c)(5)]

### **Duty to Provide Information**

- (a) The permittee shall furnish to the Department, within a reasonable time, information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit.
- (b) Upon request, the permittee shall also furnish to the Department copies of records that the permittee is required to keep by this permit, or for information claimed to be confidential, the permittee may furnish such records directly to the Administrator of EPA along with a claim of confidentiality.

#### #011 [25 Pa. Code §§ 127.463, 127.512(c)(3) & 127.542]

### Reopening and Revising the Title V Permit for Cause

- (a) This Title V permit may be modified, revoked, reopened and reissued or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay a permit condition.
- (b) This permit may be reopened, revised and reissued prior to expiration of the permit under one or more of the following circumstances:
- (1) Additional applicable requirements under the Clean Air Act or the Air Pollution Control Act become applicable to a Title V facility with a remaining permit term of three (3) or more years prior to the expiration date of this permit. The Department will revise the permit as expeditiously as practicable but not later than 18 months after promulgation of the applicable standards or regulations. No such revision is required if the effective date of the requirement is later than the expiration date of this permit, unless the original permit or its terms and conditions has been extended.
- (2) Additional requirements, including excess emissions requirements, become applicable to an affected source under the acid rain program. Upon approval by the Administrator of EPA, excess emissions offset plans for an affected source shall be incorporated into the permit.
- (3) The Department or the EPA determines that this permit contains a material mistake or inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit.
- (4) The Department or the Administrator of EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- (c) Proceedings to revise this permit shall follow the same procedures which apply to initial permit issuance and shall affect only those parts of this permit for which cause to revise exists. The revision shall be made as expeditiously as practicable.
- (d) Regardless of whether a revision is made in accordance with (b)(1) above, the permittee shall meet the applicable standards or regulations promulgated under the Clean Air Act within the time frame required by standards or regulations.

#### #012 [25 Pa. Code § 127.543]

### Reopening a Title V Permit for Cause by EPA

As required by the Clean Air Act and regulations adopted thereunder, this permit may be modified, reopened and reissued, revoked or terminated for cause by EPA in accordance with procedures specified in 25 Pa. Code § 127.543.

#### #013 [25 Pa. Code § 127.522(a)]

### Operating Permit Application Review by the EPA

The applicant may be required by the Department to provide a copy of the permit application, including the compliance plan, directly to the Administrator of the EPA. Copies of title V permit applications to EPA, pursuant to 25 PA Code §127.522(a), shall be submitted, if required, to the following EPA e-mail box:

R3\_Air\_Apps\_and\_Notices@epa.gov

Please place the following in the subject line: TV [permit number], [Facility Name].





### #014 [25 Pa. Code § 127.541]

### **Significant Operating Permit Modifications**

When permit modifications during the term of this permit do not qualify as minor permit modifications or administrative amendments, the permittee shall submit an application for significant Title V permit modifications in accordance with 25 Pa. Code § 127.541. Notifications to EPA, pursuant to 25 PA Code §127.522(a), if required, shall be submitted, to the following EPA e-mail box:

R3\_Air\_Apps\_and\_Notices@epa.gov

Please place the following in the subject line: TV [permit number], [Facility Name].

### #015 [25 Pa. Code §§ 121.1 & 127.462]

### **Minor Operating Permit Modifications**

The permittee may make minor operating permit modifications (as defined in 25 Pa. Code §121.1), on an expedited basis, in accordance with 25 Pa. Code §127.462 (relating to minor operating permit modifications). Notifications to EPA, pursuant to 25 PA Code §127.462(c), if required, shall be submitted, to the following EPA e-mail box:

R3\_Air\_Apps\_and\_Notices@epa.gov

Please place the following in the subject line: TV [permit number], [Facility Name].

### #016 [25 Pa. Code § 127.450]

### **Administrative Operating Permit Amendments**

(a) The permittee may request administrative operating permit amendments, as defined in 25 Pa. Code §127.450(a). Copies of request for administrative permit amendment to EPA, pursuant to 25 PA Code §127.450(c)(1), if required, shall be submitted to the following EPA e-mail box:

R3\_Air\_Apps\_and\_Notices@epa.gov

Please place the following in the subject line: TV [permit number], [Facility Name].

(b) Upon final action by the Department granting a request for an administrative operating permit amendment covered under §127.450(a)(5), the permit shield provisions in 25 Pa. Code § 127.516 (relating to permit shield) shall apply to administrative permit amendments incorporated in this Title V Permit in accordance with §127.450(c), unless precluded by the Clean Air Act or the regulations thereunder.

### #017 [25 Pa. Code § 127.512(b)]

### **Severability Clause**

The provisions of this permit are severable, and if any provision of this permit is determined by the Environmental Hearing Board or a court of competent jurisdiction, or US EPA to be invalid or unenforceable, such a determination will not affect the remaining provisions of this permit.

### #018 [25 Pa. Code §§ 127.704, 127.705 & 127.707]

### **Fee Payment**

- (a) The permittee shall pay fees to the Department in accordance with the applicable fee schedules in 25 Pa. Code Chapter 127, Subchapter I (relating to plan approval and operating permit fees). The applicable fees shall be made payable to "The Commonwealth of Pennsylvania Clean Air Fund" with the permit number clearly indicated and submitted to the respective regional office.
- (b) Emission Fees. The permittee shall, on or before September 1st of each year, pay applicable annual Title V emission fees for emissions occurring in the previous calendar year as specified in 25 Pa. Code § 127.705. The permittee is not required to pay an emission fee for emissions of more than 4,000 tons of each regulated pollutant emitted from the facility.
- (c) As used in this permit condition, the term "regulated pollutant" is defined as a VOC, each pollutant regulated under Sections 111 and 112 of the Clean Air Act and each pollutant for which a National Ambient Air Quality Standard has been promulgated, except that carbon monoxide is excluded.

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# **SECTION B.** General Title V Requirements

- (d) Late Payment. Late payment of emission fees will subject the permittee to the penalties prescribed in 25 Pa. Code § 127.707 and may result in the suspension or termination of the Title V permit. The permittee shall pay a penalty of fifty percent (50%) of the fee amount, plus interest on the fee amount computed in accordance with 26 U.S.C.A. § 6621(a)(2) from the date the emission fee should have been paid in accordance with the time frame specified in 25 Pa. Code § 127.705(c).
- (e) The permittee shall pay an annual operating permit maintenance fee according to the following fee schedule established in 25 Pa. Code § 127.704(d) on or before December 31 of each year for the next calendar year.
- (1) Eight thousand dollars (\$8,000) for calendar years 2021—2025.
- (2) Ten thousand dollars (\$10,000) for calendar years 2026—2030.
- (3) Twelve thousand five hundred dollars (\$12,500) for the calendar years beginning with 2031.

### #019 [25 Pa. Code §§ 127.14(b) & 127.449]

### **Authorization for De Minimis Emission Increases**

- (a) This permit authorizes de minimis emission increases from a new or existing source in accordance with 25 Pa. Code §§ 127.14 and 127.449 without the need for a plan approval or prior issuance of a permit modification. The permittee shall provide the Department with seven (7) days prior written notice before commencing any de minimis emissions increase that would result from either: (1) a physical change of minor significance under § 127.14(c)(1); or (2) the construction, installation, modification or reactivation of an air contamination source. The written notice shall:
  - (1) Identify and describe the pollutants that will be emitted as a result of the de minimis emissions increase.
- (2) Provide emission rates expressed in tons per year and in terms necessary to establish compliance consistent with any applicable requirement.

The Department may disapprove or condition de minimis emission increases at any time.

- (b) Except as provided below in (c) and (d) of this permit condition, the permittee is authorized during the term of this permit to make de minimis emission increases (expressed in tons per year) up to the following amounts without the need for a plan approval or prior issuance of a permit modification:
- (1) Four tons of carbon monoxide from a single source during the term of the permit and 20 tons of carbon monoxide at the facility during the term of the permit.
- (2) One ton of NOx from a single source during the term of the permit and 5 tons of NOx at the facility during the term of the permit.
- (3) One and six-tenths tons of the oxides of sulfur from a single source during the term of the permit and 8.0 tons of oxides of sulfur at the facility during the term of the permit.
- (4) Six-tenths of a ton of PM10 from a single source during the term of the permit and 3.0 tons of PM10 at the facility during the term of the permit. This shall include emissions of a pollutant regulated under Section 112 of the Clean Air Act unless precluded by the Clean Air Act or 25 Pa. Code Article III.
- (5) One ton of VOCs from a single source during the term of the permit and 5.0 tons of VOCs at the facility during the term of the permit. This shall include emissions of a pollutant regulated under Section 112 of the Clean Air Act unless precluded by the Clean Air Act or 25 Pa. Code Article III.
- (c) In accordance with § 127.14, the permittee may install the following minor sources without the need for a plan approval:
- (1) Air conditioning or ventilation systems not designed to remove pollutants generated or released from other sources.
  - (2) Combustion units rated at 2,500,000 or less Btu per hour of heat input.



- (3) Combustion units with a rated capacity of less than 10,000,000 Btu per hour heat input fueled by natural gas supplied by a public utility, liquefied petroleum gas or by commercial fuel oils which are No. 2 or lighter, viscosity less than or equal to 5.82 c St, and which meet the sulfur content requirements of 25 Pa. Code § 123.22 (relating to combustion units). For purposes of this permit, commercial fuel oil shall be virgin oil which has no reprocessed, recycled or waste material added.
  - (4) Space heaters which heat by direct heat transfer.
  - (5) Laboratory equipment used exclusively for chemical or physical analysis.
  - (6) Other sources and classes of sources determined to be of minor significance by the Department.
- (d) This permit does not authorize de minimis emission increases if the emissions increase would cause one or more of the following:
- (1) Increase the emissions of a pollutant regulated under Section 112 of the Clean Air Act except as authorized in Subparagraphs (b)(4) and (5) of this permit condition.
- (2) Subject the facility to the prevention of significant deterioration requirements in 25 Pa. Code Chapter 127, Subchapter D and/or the new source review requirements in Subchapter E.
- (3) Violate any applicable requirement of the Air Pollution Control Act, the Clean Air Act, or the regulations promulgated under either of the acts.
- (4) Changes which are modifications under any provision of Title I of the Clean Air Act and emission increases which would exceed the allowable emissions level (expressed as a rate of emissions or in terms of total emissions) under the Title V permit.
- (e) Unless precluded by the Clean Air Act or the regulations thereunder, the permit shield described in 25 Pa. Code § 127.516 (relating to permit shield) shall extend to the changes made under 25 Pa. Code § 127.449 (relating to de minimis emission increases).
- (f) Emissions authorized under this permit condition shall be included in the monitoring, recordkeeping and reporting requirements of this permit.
- (g) Except for de minimis emission increases allowed under this permit, 25 Pa. Code § 127.449, or sources and physical changes meeting the requirements of 25 Pa. Code § 127.14, the permittee is prohibited from making physical changes or engaging in activities that are not specifically authorized under this permit without first applying for a plan approval. In accordance with § 127.14(b), a plan approval is not required for the construction, modification, reactivation, or installation of the sources creating the de minimis emissions increase.
- (h) The permittee may not meet de minimis emission threshold levels by offsetting emission increases or decreases at the same source.

### #020 [25 Pa. Code §§ 127.11a & 127.215]

#### **Reactivation of Sources**

- (a) The permittee may reactivate a source at the facility that has been out of operation or production for at least one year, but less than or equal to five (5) years, if the source is reactivated in accordance with the requirements of 25 Pa. Code §§ 127.11a and 127.215. The reactivated source will not be considered a new source.
- (b) A source which has been out of operation or production for more than five (5) years but less than 10 years may be reactivated and will not be considered a new source if the permittee satisfies the conditions specified in 25 Pa. Code § 127.11a(b).

### #021 [25 Pa. Code §§ 121.9 & 127.216]

#### Circumvention

(a) The owner of this Title V facility, 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 permit, 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.

# #022 [25 Pa. Code §§ 127.402(d) & 127.513(1)]

#### **Submissions**

(a) Reports, test data, monitoring data, notifications and requests for renewal of the permit shall be submitted to the:

Regional Air Program Manager

PA Department of Environmental Protection

(At the address given on the permit transmittal letter, or otherwise notified)

(b) Any report or notification for the EPA Administrator or EPA Region III should be addressed to:

Enforcement & Compliance Assurance Division Air, RCRA and Toxics Branch (3ED21) Four Penn Center 1600 John F. Kennedy Boulevard Philadelphia, PA 19103-2852

The Title V compliance certification shall be emailed to EPA at R3\_APD\_Permits@epa.gov.

(c) An application, form, report or compliance certification submitted pursuant to this permit condition shall contain certification by a responsible official as to truth, accuracy, and completeness as required under 25 Pa. Code § 127.402(d). Unless otherwise required by the Clean Air Act or regulations adopted thereunder, this certification and any other certification required pursuant to this permit shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

### #023 [25 Pa. Code §§ 127.441(c) & 127.463(e); Chapter 139; & 114(a)(3), 504(b) of the CAA]

# Sampling, Testing and Monitoring Procedures

- (a) The permittee shall perform the emissions monitoring and analysis procedures or test methods for applicable requirements of this Title V permit. In addition to the sampling, testing and monitoring procedures specified in this permit, the Permittee shall comply with any additional applicable requirements promulgated under the Clean Air Act after permit issuance regardless of whether the permit is revised.
- (b) The sampling, testing and monitoring required under the applicable requirements of this permit, shall be conducted in accordance with the requirements of 25 Pa. Code Chapter 139 unless alternative methodology is required by the Clean Air Act (including §§ 114(a)(3) and 504(b)) and regulations adopted thereunder.

# #024 [25 Pa. Code §§ 127.511 & Chapter 135]

# **Recordkeeping Requirements**

- (a) The permittee shall maintain and make available, upon request by the Department, records of required monitoring information that include the following:
  - (1) The date, place (as defined in the permit) and time of sampling or measurements.
  - (2) The dates the analyses were performed.
  - (3) The company or entity that performed the analyses.
  - (4) The analytical techniques or methods used.





- (5) The results of the analyses.
- (6) The operating conditions as existing at the time of sampling or measurement.
- (b) The permittee shall retain records of the required monitoring data and supporting information for at least five (5) years from the date of the monitoring sample, measurement, report or application. Supporting information includes the calibration data and maintenance records and original strip-chart recordings for continuous monitoring instrumentation, and copies of reports required by the permit.
- (c) The permittee shall maintain and make available to the Department upon request, records including computerized records that may be necessary to comply with the reporting, recordkeeping and emission statement requirements in 25 Pa. Code Chapter 135 (relating to reporting of sources). In accordance with 25 Pa. Code Chapter 135, § 135.5, such records 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. If direct recordkeeping is not possible or practical, sufficient records shall be kept to provide the needed information by indirect means.

### #025 [25 Pa. Code §§ 127.411(d), 127.442, 127.463(e) & 127.511(c)]

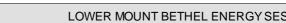
### **Reporting Requirements**

- (a) The permittee shall comply with the reporting requirements for the applicable requirements specified in this Title V permit. In addition to the reporting requirements specified herein, the permittee shall comply with any additional applicable reporting requirements promulgated under the Clean Air Act after permit issuance regardless of whether the permit is revised.
- (b) Pursuant to 25 Pa. Code § 127.511(c), the permittee shall submit reports of required monitoring at least every six (6) months unless otherwise specified in this permit. Instances of deviations (as defined in 25 Pa. Code § 121.1) from permit requirements shall be clearly identified in the reports. The reporting of deviations shall include the probable cause of the deviations and corrective actions or preventative measures taken, except that sources with continuous emission monitoring systems shall report according to the protocol established and approved by the Department for the source. The required reports shall be certified by a responsible official.
- (c) Every report submitted to the Department under this permit condition shall comply with the submission procedures specified in Section B, Condition #022(c) of this permit.
- (d) Any records, reports or information obtained by the Department or referred to in a public hearing shall be made available to the public by the Department except for such records, reports or information for which the permittee has shown cause that the documents should be considered confidential and protected from disclosure to the public under Section 4013.2 of the Air Pollution Control Act and consistent with Sections 112(d) and 114(c) of the Clean Air Act and 25 Pa. Code § 127.411(d). The permittee may not request a claim of confidentiality for any emissions data generated for the Title V facility.

### #026 [25 Pa. Code § 127.513]

### **Compliance Certification**

- (a) One year after the date of issuance of the Title V permit, and each year thereafter, unless specified elsewhere in the permit, the permittee shall submit to the Department and EPA Region III a certificate of compliance with the terms and conditions in this permit, for the previous year, including the emission limitations, standards or work practices. This certification shall include:
- (1) The identification of each term or condition of the permit that is the basis of the certification.
- (2) The compliance status.
- (3) The methods used for determining the compliance status of the source, currently and over the reporting period.
- (4) Whether compliance was continuous or intermittent.
- (b) The compliance certification shall be postmarked or hand-delivered no later than thirty days after each anniversary of the date of issuance of this Title V Operating Permit, or on the submittal date specified elsewhere in the permit, to the Department in accordance with the submission requirements specified in Section B, Condition #022 of this permit. The Title V compliance certification shall be emailed to EPA at R3\_APD\_Permits@epa.gov.



#### #027 [25 Pa. Code § 127.3]

48-00091

### **Operational Flexibility**

The permittee is authorized to make changes within the Title V facility in accordance with the following provisions in 25 Pa. Code Chapter 127 which implement the operational flexibility requirements of Section 502(b)(10) of the Clean Air Act and Section 6.1(i) of the Air Pollution Control Act:

- (1) Section 127.14 (relating to exemptions)
- (2) Section 127.447 (relating to alternative operating scenarios)
- (3) Section 127.448 (relating to emissions trading at facilities with federally enforceable emissions caps)
- (4) Section 127.449 (relating to de minimis emission increases)
- (5) Section 127.450 (relating to administrative operating permit amendments)
- (6) Section 127.462 (relating to minor operating permit amendments)
- (7) Subchapter H (relating to general plan approvals and operating permits)

#### #028 [25 Pa. Code §§ 127.441(d), 127.512(i) and 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 Title V facility. The permittee shall submit the RMP to the federal Environmental Protection Agency according to the following schedule and requirements:
- (1) The permittee shall submit the first RMP to a central point specified by EPA no later than the latest of the following:
- (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 EPA 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 permit 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.
- (d) If the Title V facility is subject to 40 CFR Part 68, as part of the certification required under this permit, the permittee shall:
- (1) Submit a compliance schedule for satisfying the requirements of 40 CFR Part 68 by the date specified in 40 CFR § 68.10(a); or,
- (2) Certify that the Title V facility is in compliance with all requirements of 40 CFR Part 68 including the registration and submission of the RMP.





- (e) If the Title V facility is subject to 40 CFR Part 68, the permittee shall maintain records supporting the implementation of an accidental release program for five (5) years in accordance with 40 CFR § 68.200.
- (f) When the Title V facility is subject to the accidental release program requirements of Section 112(r) of the Clean Air Act and 40 CFR Part 68, appropriate enforcement action will be taken by the Department if:
- (1) The permittee fails to register and submit the RMP or a revised plan pursuant to 40 CFR Part 68.
- (2) The permittee fails to submit a compliance schedule or include a statement in the compliance certification required under Section B, Condition #026 of this permit that the Title V facility is in compliance with the requirements of Section 112(r) of the Clean Air Act, 40 CFR Part 68, and 25 Pa. Code § 127.512(i).

### #029 [25 Pa. Code § 127.512(e)]

### **Approved Economic Incentives and Emission Trading Programs**

No permit revision shall be required under approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this Title V permit.

### #030 [25 Pa. Code §§ 127.516, 127.450(d), 127.449(f) & 127.462(g)]

# **Permit Shield**

- (a) The permittee's compliance with the conditions of this permit shall be deemed in compliance with applicable requirements (as defined in 25 Pa. Code § 121.1) as of the date of permit issuance if either of the following applies:
  - (1) The applicable requirements are included and are specifically identified in this permit.
- (2) The Department specifically identifies in the permit other requirements that are not applicable to the permitted facility or source.
- (b) Nothing in 25 Pa. Code § 127.516 or the Title V permit shall alter or affect the following:
- (1) The provisions of Section 303 of the Clean Air Act, including the authority of the Administrator of the EPA provided thereunder.
  - (2) The liability of the permittee for a violation of an applicable requirement prior to the time of permit issuance.
  - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act.
  - (4) The ability of the EPA to obtain information from the permittee under Section 114 of the Clean Air Act.
- (c) Unless precluded by the Clean Air Act or regulations thereunder, final action by the Department incorporating a significant permit modification in this Title V Permit shall be covered by the permit shield at the time that the permit containing the significant modification is issued.

### #031 [25 Pa. Code §135.3]

### Reporting

- (a) The permittee shall submit by March 1 of each year an annual emissions report for the preceding calendar year. The report shall include information for all active previously reported sources, new sources which were first operated during the preceding calendar year, and sources modified during the same period which were not previously reported. All air emissions from the facility should be estimated and reported.
- (b) A source owner or operator may request an extension of time from the Department for the filing of an annual emissions report, and the Department may grant the extension for reasonable cause.

# #032 [25 Pa. Code §135.4]

### **Report Format**

Emissions reports shall contain sufficient information to enable the Department to complete its emission inventory. Emissions reports shall be made by the source owner or operator in a format specified by the Department.





### I. RESTRICTIONS.

# **Emission Restriction(s).**

### # 001 [25 Pa. Code §123.1]

### Prohibition of certain fugitive emissions

- (a) No person may permit the emission into the outdoor atmosphere of fugitive air contaminant 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) N/A.
  - (8) N/A.
- (9) Sources and classes of sources other than those identified in paragraphs (1)-(6), for which the operator has obtained a determination from the Department that fugitive emissions from the source, after appropriate control, meet the following requirements:
  - (i) the emissions are of minor significance with respect to causing air pollution; and
- (ii) 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 Site Level Condition #001 if such emissions are visible at the point the emissions pass outside the permittee's property.

### # 003 [25 Pa. Code §123.31]

#### Limitations

#### MALODOROUS EMISSIONS:

The permittee shall not permit the emission into the outdoor atmosphere of any malodorous air contaminants from any source in such a manner that the malodors are detectable outside the property of the person on whose land the source is being operated.

# # 004 [25 Pa. Code §123.41]

# Limitations

### **VISIBLE EMISSIONS:**

A person may not permit the emission into the outdoor atmosphere of visible air contaminants 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.

### # 005 [25 Pa. Code §123.42]

### **Exceptions**

The limitations of Site Level Condition #004 shall not apply to a visible emission in any of the following instances:

- (1) When the presence of uncombined water is the only reason for failure of the emission to meet the limitations.
- (2) When the emission results from the operation of equipment used solely to train and test persons in observing the opacity of visible emissions.
- (3) When the emission results from sources specified in Site Level Condition #001.





### # 006 [25 Pa. Code §127.512]

### Operating permit terms and conditions.

Hazardous Air Pollutants (HAPs) for the entire facility shall be less than 10 tons per year for a single HAP and 25 tons per year for all the HAPs.

### # 007 [25 Pa. Code §127.512]

### Operating permit terms and conditions.

- (a) The permittee shall limit facility emissions of NOx to 208.8 tons during any consecutive 12-month period including emissions during start-up and shutdown of all sources.
- (b) The permittee shall limit facility emissions of carbon monoxide (CO) to 498.2 tons during any consecutive 12-month period including emissions during start-up and shutdown of all sources.
- (c) The permittee shall limit facility emissions of VOCs to 46.6 tons during any consecutive 12-month period including emissions during start-up and shutdown of all sources.

#### TESTING REQUIREMENTS.

#### # 008 [25 Pa. Code §139.1]

### Sampling facilities.

If requested by the Department, the permittee shall conduct performance (stack) tests in accordance with the provisions of Chapter 139 of the Rules and Regulations of the Department. The permittee will provide adequate sampling ports, safe sampling platforms, and adequate utilities for the performance by the Department of tests on such source(s). 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

#### Ш MONITORING REQUIREMENTS.

#### # 009 [25 Pa. Code §123.43]

# Measuring techniques

Visible emissions may be measured using using either of the following:

- (1) A device approved by the Department and maintained to provide accurate opacity measurements.
- (2) Observers, trained and qualified to measure plume opacity with the naked eye or with the aid of any devices approved by the Department.

#### RECORDKEEPING REQUIREMENTS. IV.

#### # 010 [25 Pa. Code §127.511]

# Monitoring and related recordkeeping and reporting requirements.

The facilities emissions shall be updated monthly and maintained on a 12-month rolling sum.

# [25 Pa. Code §127.511]

### Monitoring and related recordkeeping and reporting requirements.

Records required under this operating permit, 40 CFR Part 60 Subpart KKKK and 40 CFR Parts 72, 73, 75 and 77 shall be kept for a period of five (5) years in accordance with General Title V Requirement #025(b) and shall be made available to the Department upon request.

- (a) The permittee shall maintain records on all air pollution control system performance evaluations and records of calibration checks, adjustments and maintenance performed on all equipment which is subject to this operating permit.
- (b) The permittee shall maintain a copy of the manufacturer's specifications for the two combustion turbines, two duct burners, cooling tower and air pollution control equipment on-site.
- (c) The permittee shall maintain a copy of the manufacturer's specifications for all CEMs that are required by this operating permit.



- (d) The permittee shall keep a record of the date of malfunction, the time of the malfunction, the cause of the malfunction and the action taken to correct the malfunction.
- (e) The permittee shall keep a record of the results of the testing for cooling tower blowdown water total dissolved and suspended solids.

### V. REPORTING REQUIREMENTS.

#### # 012 [25 Pa. Code §127.511]

### Monitoring and related recordkeeping and reporting requirements.

- (a) With the exception noted below, the permittee shall report malfunctions which occur at this facility to the Department. As defined in 40 CFR Section 60.2 and incorporated by reference in 25 Pa. Code Chapter 122, 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. Malfunctions that are not resulting in, or potentially resulting in, air contaminant emissions in excess of an applicable air contaminant emission limitation and/or are not resulting in, or potentially resulting in, noncompliance with any condition contained in this operating permit do not have to be reported. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.
- (b) Failures that are caused in part by poor maintenance or careless operation shall be reported as excess emissions or deviations from the permit requirements.
- (c) When the malfunction, excess emission or deviation from the permit requirements poses an imminent and substantial danger to the public health and safety or potential harm to the environment, the permittee shall notify the Department by telephone no later than one hour after the incident.
- (d) Any malfunction, excess emission or deviation from the permit requirements that is not subject to the notice requirements of subsection (c) of this permit condition shall be reported to the Department within 24 hours of discovery. In notifying the Department, the permittee shall describe the following:
  - (i) name and location of the facility;
  - (ii) nature and cause of the malfunction or breakdown;
  - (iii) time when the malfunction or breakdown was first observed;
  - (iv) expected duration of excess emissions:
  - (v) estimated rate of emissions; and,
  - (vi) corrective actions or preventative measures taken.
- (e) The permittee shall notify the Department immediately when corrective measures have been accomplished.
- (f) Upon the request of the Department, the permittee shall submit a full written report to the Regional Air Program Manager within 15 days of the malfunction, excess emission or deviation from the permit requirements.

#### # 013 [25 Pa. Code §127.511]

# Monitoring and related recordkeeping and reporting requirements.

- (a) The reporting period for the semi-annual reports as required by SECTION B, Condition #026(b), shall be submitted within 60 days after the specified period (January - June period report shall be submitted by no later than September 1st, July - December period report shall be submitted by no later than March 1st).
- (b) Reports shall be in electronic or paper format and submitted to:

Northeast Regional Air Program Manager

PA Department of Environmental Protection

or

At the address given on the permit transmittal letter, or otherwise notified.

#### # 014 [25 Pa. Code §127.513]

# Compliance certification.

The reporting period for the certificate of compliance required by SECTION B, Condition #026 shall be for the previous calendar year, and it shall be submitted within 60 days after the specified period but no later than March 1st.





#### # 015 [25 Pa. Code §135.3] Reporting

- (a) A person who owns or operates a source to which this chapter applies, and who has previously been advised by the Department to submit a source (AIMS) report, shall submit by March 1 of each year a source report for the preceding calendar year. The report shall include information for all previously reported sources, new sources which were first operated during the proceeding calendar year and sources modified during the same period which were not previously reported.
- (b) A person who receives initial notification by the Department that a source report is necessary shall submit an initial source report within 60 days after receiving the notification or by March 1 of the year following the year for which the report is required, whichever is later.
- (c) A source owner or operator may request an extension of time from the Department for the filing of a source report, and the Department may grant the extension for reasonable cause.

### WORK PRACTICE REQUIREMENTS.

#### #016 [25 Pa. Code §123.1]

### Prohibition of certain fugitive emissions

The permittee Shall take all reasonable actions to prevent particulate matter from becoming airborne from any source specified in Site Level Condition #001. These actions shall include, but not be limited to, the following:

- (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, water 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.

#### # 017 [25 Pa. Code §123.41]

# Limitations

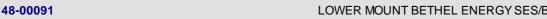
**VISIBLE EMISSIONS:** 

Equipment shall be maintained and operated in accordance with accepted industry practices to optimize combustion efficiency and to comply with Site Level Condition #004.

#### # 018 [25 Pa. Code §129.14]

#### Open burning operations

- (a) No person may permit the open burning of material in an area outside of air basins in a manner that:
- (1) The emissions are visible, at any time, at the point such emissions pass outside the property of the person on whose land the open burning is being conducted.
- (2) Malodorous air contaminants from the open burning are detectable outside the property of the person on whose land the open burning is being conducted.
  - (3) The emissions interfere with the reasonable enjoyment of life or property.
  - (4) The emissions cause damage to vegetation or property.
  - (5) The emissions are or may be deleterious to human or animal health.
- (b) Exceptions: The requirements of subsection (a) does not apply where the open burning operations result from:
- (1) A fire set to prevent or abate a fire hazard, when approved by the Department and set by or under the supervision of a
  - (2) A fire set for the purpose of instructing personnel in fire fighting, when approved by the Department.





- (3) A fire set for the prevention and control of disease or pests, when approved by the Department.
- (4) A fire set in conjunction with the production of agricultural commodities in their unmanufactured state on the premises of the farm operation.
- (5) A fire set for the purpose of burning domestic refuse, when the fire is on the premises of a structure occupied solely as a dwelling by two families or less and when the refuse results from the normal occupancy of such structure.
  - (6) A fire set solely for recreational or ceremonial purposes.
  - (7) A fire set solely for cooking food.

#### VII. ADDITIONAL REQUIREMENTS.

#### #019 [25 Pa. Code §121.7] Prohibition of air pollution.

The permittee may not permit the presence in the outdoor atmosphere of any form of contaminant, including, but not limited to, the discharging from stacks, chimneys, openings, buildings, structures, open fires, vehicles, processes or any other source of any smoke, soot, fly ash, dust, cinders, dirt, noxious or obnoxious acids, fumes, oxides, gases, vapors, odors, toxic, hazardous or radioactive substances, waste or other matter in a place, manner or concentration inimical or which may be inimical to public health, safety or welfare or which is or may be injurious to human, plant or animal life or to property or which unreasonably interferes with the comfortable enjoyment of life or property.

#### VIII. **COMPLIANCE CERTIFICATION.**

No additional compliance certifications exist except as provided in other sections of this permit including Section B (relating to Title V General Requirements).

#### IX. COMPLIANCE SCHEDULE.

No compliance milestones exist.

# \*\*\* Permit Shield In Effect \*\*\*







#### SECTION D. **Source Level Requirements**

Source ID: 101 Source Name: CCC TURBINE #1/DUCT BURNER W/LOW NOX BURNER

> Source Capacity/Throughput: 2,306.000 MMBTU/HR

Conditions for this source occur in the following groups: GROUP 01



#### RESTRICTIONS. I.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V 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 permit including Section B (Title V 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 permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### RECORDKEEPING REQUIREMENTS.

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

### REPORTING REQUIREMENTS.

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

#### **WORK PRACTICE REQUIREMENTS.** VI.

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

#### VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

# \*\*\* Permit Shield in Effect. \*\*\*





# **SECTION D.** Source Level Requirements

Source ID: 102 Source Name: CCC TURBINE #2/DUCT BURNER W/LOW NOX BURNER

Source Capacity/Throughput: 2,306.000 MMBTU/HR

Conditions for this source occur in the following groups: GROUP 01



### I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V 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 permit including Section B (Title V 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 permit including Section B (Title V 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 permit including Section B (Title V 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 permit including Section B (Title V 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 permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

### VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

# \*\*\* Permit Shield in Effect. \*\*\*

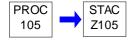




# **SECTION D.** Source Level Requirements

Source ID: 105 Source Name: COOLING TOWER

Source Capacity/Throughput:



### I. RESTRICTIONS.

# **Emission Restriction(s).**

# 001 [25 Pa. Code §127.512]

Operating permit terms and conditions.

The permittee shall limit the total dissolved/suspended solids in the cooling tower blowdown water to 1250 ppmw, or less.

### II. TESTING REQUIREMENTS.

# 002 [25 Pa. Code §127.512]

Operating permit terms and conditions.

The permittee shall test the cooling tower water for total dissolved and suspended solids on a semi-annual basis.

#### III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

### IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

#### V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

### VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

#### VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

# \*\*\* Permit Shield in Effect. \*\*\*







#### SECTION E. **Source Group Restrictions.**

Group Name: **GROUP 01** 

48-00091

Group Description: Combustion Turbines

Sources included in this group

ID	Name
101	CCC TURBINE #1/DUCT BURNER W/LOW NOX BURNER
102	CCC TURBINE #2/DUCT BURNER W/LOW NOX BURNER
C01	UNIT 1 SCR
C01A	UNIT 1 OXIDATION CATALYST
C02	UNIT 2 SCR
C02A	UNIT 2 OXIDATION CATALYST

### I. RESTRICTIONS.

# **Emission Restriction(s).**

#### # 001 [25 Pa. Code §127.512]

### Operating permit terms and conditions.

Pursuant to the Best Available Control Technology (BACT) provisions of 25 PA Code Section 127.83, the permittee shall limit the emissions from each combustion turbine with duct burner to the following:

- (a) Carbon monoxide (at more than 70% load) 6 ppmvd (0.0131 pounds per million BTU), measured 1-hour average on a dry volume basis corrected to 15% oxygen, calculated from a 3 hour rolling block average.
- (b) Carbon monoxide (at less than 70% load) 19 ppmvd (0.0439 pounds per million BTU), measured 1-hour average on a dry volume basis corrected to 15% oxygen, calculated from a 3 hour rolling block average.
- (c) Sulfur dioxide 0.0027 pounds per million BTU
- (d) Particulate matter (TSP/PM10) 0.0135 pounds per million BTU
- (e) Sulfuric acid mist (H2 SO4) 0.0008 pounds per million BTU

#### # 002 [25 Pa. Code §127.512]

### Operating permit terms and conditions.

Pursuant to the Best Available Technology (BAT) provisions of 25 PA Code Section 127.1, the permittee shall limit the emission of ammonia for each selective catalytic reduction (SCR) system exhaust to 10 ppmvd, measured dry volume corrected to 15% oxygen, under normal operation.

#### # 003 [25 Pa. Code §127.512]

### Operating permit terms and conditions.

The Department reserves the right to revise the emission limits for the turbines and impose more stringent emissions limits based on actual emissions data.

#### # 004 [25 Pa. Code §127.512]

### Operating permit terms and conditions.

Pursuant to the Lowest Achievable Emission Rate (LAER) provisions of 25 PA Code Section 127.205 and RACT II provisions of 25 PA Code 129.97(g)(2)(ii)(C), the permittee shall limit the emissions from each combustion turbine with duct burner to the following (measured 1-hour average on a dry volume basis corrected to 15% oxygen):

- (a) NOx 3.5 ppmvd (0.0131 pounds per million BTU) calculated from a 3-hour rolling block average.
- (b) VOCs (as methane) 3.0 ppmvd (0.0046 pounds per million BTU).

#### # 005 [25 Pa. Code §127.512]

### Operating permit terms and conditions.

Compliance with the alternative NOx RACT emissions limit of 4 ppmvd @ 15% O2 as per the NOx emissions averaging plan shall be determined by comparing the daily sum of actual emissions from all sources included in the plan (Source IDs





# SECTION E. Source Group Restrictions.

101 and 102) to the alternative NOx RACT emissions limit. The owner or operator shall calculate the alternative facility-wide NOx RACT emissions limitation using a 30-operating day rolling average for the air contamination sources included in the emission averaging plan by using the equation in 25 Pa. Code 129.98(e).

### Fuel Restriction(s).

# 006 [25 Pa. Code §127.512]

Operating permit terms and conditions.

The combustion turbines shall be fired by natural gas only.

# 007 [25 Pa. Code §127.512]

Operating permit terms and conditions.

The duct burners shall be fired by natural gas only.

# **Operation Hours Restriction(s).**

# 008 [25 Pa. Code §127.512]

Operating permit terms and conditions.

The emissions restriction conditions (except for Condition #005) apply at all times except during periods of start-up and shutdown as defined as follows:

CEMS data substitution will be conducted per the Talen Generation, LLC – Lower Mount Bethel Energy Power Plant (PA 48-00091B) U1 and U2 Short Term Ib/event Alternate Data Substitution Petition Request Letter approved by PADEP on August 16, 2022.

- 1. Load change to < 50% Normalized load without intention to shutdown; SCR System upset without intention to shutdown:
- a. In the event of a unit upset, turbine operation at less than 50% of its base normalized load shall be allowed for a period of time no greater than 1 hour per occurrence. Turbine operation at less than 50% of its base normalized load shall be limited to a maximum of six occurrences per turbine per calendar year.
- b. In the event of an SCR system upset, turbine operation without SCR operation outside of startup and shutdown periods shall be allowed for a period of time no greater than 1 hour per occurrence. Turbine operation without SCR operation outside of startup and shutdown periods shall be limited to a maximum of six occurrences per turbine per calendar year.
  - c. Emissions per CCCT during a unit/SCR upset shall be limited as follows:
    - i. NOx 290 lb/event
    - ii. CO 2,610 lb/event
    - iii. VOC 40 lb/event
- 2. "Extended startups of up to twelve hours to perform tuning or commissioning shall be allowed up to a maximum of three occurrences per turbine per calendar year." Emissions per CCCT during an extended start up shall be limited as follows:
  - a. NOx 840 lb/event
  - b. CO 10.960 lb/event
  - c. VOC 160 lb/event
- 3. Cold start-up: Refers to restarts made more than 48 hours after shutdown; cold start-up periods shall not exceed 4 hours per occurrence. Emissions per CCCT during a cold start-up shall be limited as follows:
  - a. NOx 420 lb/event
- b. CO 5,480 lb/event
- c. VOC 80 lb/event
- 4. Warm Start-up: Refers to restarts made more than 8 hours but less than 48 hours after shutdown; warm start-up periods shall not exceed 3 hours per occurrence. Emissions per CCCT during a warm start-up shall be limited as follows:
  - a. NOx 350 lb/event
  - b. CO 5,480 lb/event
  - c. VOC 60 lb/event





# SECTION E. Source Group Restrictions.

- 5. Hot Start-up: Refers to restarts made 8 hours or less after shutdown; hot start-up periods shall not exceed 2 hours per occurrence. Emissions per CCCT during a hot start-up shall be limited as follows:
  - a. NOx 290 lb/event
  - b. CO 2,610 lb/event
  - c. VOC 40 lb/event
- 6. Shutdown: Commences with operation at less than 50% normalized load with intent to shutdown. Shutdown periods shall not exceed 1 hour per occurrence. Emissions per CCCT during a shutdown shall be limited as follows:
  - a. NOx 130 lb/event
  - b. CO 560 lb/event
  - c. VOC 20 lb/even

#### II. TESTING REQUIREMENTS.

### # 009 [25 Pa. Code §127.512]

Operating permit terms and conditions.

The permittee shall comply with all applicable Performance Testing requirements specified in 40 CFR Part 60 Subpart KKKK 60.4400 through 60.4415.

### III. MONITORING REQUIREMENTS.

### # 010 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

The permittee shall monitor and record the following parameters for each SCR system:

- (a) Catalyst bed inlet gas temperature
- (b) Ammonia solution injection rate
- (c) Ammonia solution concentration
- (d) Ammonia slip.

# # 011 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

The permittee shall comply with all applicable Monitoring requirements specified in 40 CFR Part 60 Subpart KKKK 60.4335 through 60.4370.

### # 012 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

Per 25 Pa. Code 129.100(a)(1), The permittee shall utilize Department certified CEMS to calculate actual emission when determining compliance with the NOx RACT averaging plan. The mass NOx emissions from each source within the averaging plan shall be calculated for each hour of operation and expressed in pounds per hour, which will be used in calculations to determine compliance on a 30-operating day rolling average.

### IV. RECORDKEEPING REQUIREMENTS.

#### # 013 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

The permittee shall record the following for each start-up and shutdown for the combustion turbines with duct burners:

- (a) the date, time and duration of each event.
- (b) the type of event (i.e., extended startup, cold startup, warm startup, hot startup or shutdown).

### # 014 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

The permittee shall, at the minimum, record the following:

- (a) Monthly fuel consumption for each combustion turbine with duct burners
- (b) 12-month rolling total fuel consumption for each combustion turbine with duct burners
- (c) Monthly emissions of TSP/PM10, SO2, NOx, CO and VOC
- (d) 12-month rolling total of the emissions of TSP/PM10, SO2, NOx, CO and VOC







#### SECTION E. **Source Group Restrictions.**

(e) Results of fuel sampling

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(f) SCR monitoring results.

#### # 015 [25 Pa. Code §127.511]

### Monitoring and related recordkeeping and reporting requirements.

For each unit/SCR upset which results in turbine operation at less than 50% of its normalized base load or turbine operation without SCR outside of startup and shutdown periods, the permittee shall record the following:

- (a) The date, time and duration of the event
- (b) The event type (i.e., < 50% normalized load without intent to shutdown or SCR system upset without intention to shutdown)

#### # 016 [25 Pa. Code §127.511]

### Monitoring and related recordkeeping and reporting requirements.

All emissions shall be determined by the methods found in 40 CFR Part 60 Subpart KKKK, the Plan Approval Application and supplemental materials and Continuous Emission Monitoring Manual.

#### # 017 [25 Pa. Code §127.511]

### Monitoring and related recordkeeping and reporting requirements.

The permittee shall comply with the recordkeeping requirements established in 25 Pa. Code Chapter 139. Subchapter C (relating to requirements for source monitoring for stationary sources), for the continuous emissions monitoring system for nitrogen oxides (as NO2), carbon monoxide (CO) and diluent gas (O2 or CO2), (and) the "Record Keeping and Reporting" requirements in the Department's Continuous Source Monitoring Manual, Revision No. 8, 274-0300-001. Records shall be retained for at least 5 years and shall be made available to the Department upon request. Compliance with any subsequently issued revision to the Continuous Source Monitoring Manual will constitute compliance with this permit condition

### V. REPORTING REQUIREMENTS.

### [25 Pa. Code §127.511]

# Monitoring and related recordkeeping and reporting requirements.

The combustion turbines are subject to Subpart KKKK of the Standards of Performance for New Stationary Sources and shall comply with all applicable requirements of this Subpart. 40 CFR §60.4 requires submission of copies of all requests. reports, applications, submittals and other communications to both EPA and the Department in electronic or paper format. The EPA copies shall be forwarded to:

**Enforcement & Compliance Assurance Division** Air, RCRA and Toxics Branch (3ED21) United States Environmental Protection Agency Region 3

and

Regional Air Program Manager

PA Department of Environmental Protection

At the address given on the permit transmittal letter, or otherwise notified.

### [25 Pa. Code §127.511]

### Monitoring and related recordkeeping and reporting requirements.

The permittee shall comply with all applicable Reporting requirements specified in 40 CFR Part 60 Subpart KKKK 60.4375 through 60.4395.

### VI. WORK PRACTICE REQUIREMENTS.

### [25 Pa. Code §127.511]

### Monitoring and related recordkeeping and reporting requirements.

The permittee shall operate and maintain both combustion turbines and air pollution control equipment in accordance with manufacturer's specifications as well as good air pollution control practices.





# **SECTION E.** Source Group Restrictions.

### # 021 [25 Pa. Code §127.512]

Operating permit terms and conditions.

The permittee shall operate and maintain both duct burners in accordance with manufacturer's specifications as well as good air pollution control practices.

### VII. ADDITIONAL REQUIREMENTS.

### # 022 [25 Pa. Code §127.511]

### Monitoring and related recordkeeping and reporting requirements.

Continuous Emission Monitoring Systems and components for nitrogen oxides (as NO2), carbon monoxide (CO) and diluent gas (O2 or CO2) must be operated and maintained in accordance with the requirements established in 25 Pa. Code Chapter 139, Subchapter C (relating to requirements for source monitoring for stationary sources) and the "Quality Assurance" requirements in the Department's Continuous Source Monitoring Manual, Revision No. 8, 274-0300-001. Compliance with any subsequently issued revision to the Continuous Source Monitoring Manual will constitute compliance with this permit condition

### # 023 [25 Pa. Code §127.511]

### Monitoring and related recordkeeping and reporting requirements.

The permittee shall comply with all applicable General Compliance requirements specified in 40 CFR Part 60 Subpart KKKK 60.4333.

### # 024 [25 Pa. Code §127.511]

### Monitoring and related recordkeeping and reporting requirements.

The Department reserves the right to use the CEMs data, stack test results, and the operating parameters determined during optimization of the turbines and their associated air cleaning devices to verify emission rates, to establish emission factors, and to develop compliance assurance measures in the Operating Permit.

### # 025 [25 Pa. Code §127.512]

#### Operating permit terms and conditions.

Source ID 101 and Source ID 102 of this group are affected existing sources subject to the applicable requirements of the Cross State Air Pollution Rule (CSAPR).

LMBE will continue to comply with monitoring, recordkeeping, and reporting requirements in 40 CFR 97 Subparts AAAAA, CCCCC, EEEEE, as applicable.

# # 026 [25 Pa. Code §127.512]

# Operating permit terms and conditions.

The combustion turbines are subject to the Title IV Acid Rain Program of the Clean Air Act Amendments of 1990 and shall comply with all applicable provisions of that Title, to include the following:

40 CFR Part 72 Permits Regulation

40 CFR Part 73 Sulfur Dioxide Allowance System
40 CFR Part 75 Continuous Emission Monitoring
40 CFR Part 77 Excess Emissions

# \*\*\* Permit Shield in Effect. \*\*\*



# **SECTION F.** Alternative Operation Requirements.

No Alternative Operations exist for this Title V facility.



# **SECTION G.** Emission Restriction Summary.

No emission restrictions listed in this section of the permit.







### SECTION H. Miscellaneous.

- (a) The Department received the operating permit application for this facility on 10/22/2020. The facility is required to pay an Annual Operating Permit Maintenance Fee in accordance with Pennsylvania Code, Title 25, Chapter 127, Section 127.704(d). The Annual Maintenance Fee is due on or before December 31 of each year for the next calendar year.
- (b) This permit is a renewal of Operating Permit TV 48-00091 and includes conditions from Plan Approval No. 48-00091B issued 02/05/2019.
- (c) This is a Title V Operating Permit facility.
- (d) The following is a list of sources that have been determined by the Department to be of minor significance under 25 Pa. Code, Chapter 127, Section 127.14(a)(8) and are not regulated in this TV Operating Permit. However, this determination does not exempt the sources from compliance with all applicable air quality regulations specified in 25 Pa. Code Chapters 121-143:

RFD #9992 approved 11/10/2022 to remove the VOC 5-year testing as stated in Plan Approval 48-00091B.

- The 331 BHP emergency diesel fire pump is subject to the work practice standards under 40 CFR 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants, Reciprocation Internal Combustion Engines (RICE NESHAPS). (63.6603, 63.6605, 63.6625, 63.6640, 63.6655).
- Four (4) 4 MMBtu/hr natural gas fired heaters exempt per 25 Pa. Code 127.14(a)(5) (two of which were included in RFD# 48-0721).
- Per 63.6603(a) and Table 2d (Item #4)
- o Change oil and filter every 500 hours of operation or annually, whichever comes first. Sources have the option to utilize an oil analysis program described in 40 CFR §63.6625(i) in order to extend the specified oil change requirement in Table 2d. o Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and o Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
- Per 63.6605(b)
- o Operate and maintain the engine in a manner consistent with safety and good air pollution control practices for minimizing emissions.
- Per 63.6625(e), (f), (h), (i)
- o Operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan.
- o Install a non-resettable hour meter.
- o Minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes
  - o May utilize the optional oil analysis program in order to extend the specified oil change requirement in Tables 2d.
- Per 63.6640(a), (b), (f)
- o Comply with applicable requirements and report deviations as applicable.
- o Operate the engine as an emergency engine under the rule.
- Per 63.6655 maintain compliance records as applicable.

LMBE will continue to comply with these requirements

RFD# 48-0721 approved 01/15/2014, two gas fired heaters.

Secondary Responsible Official:

Name: Dale Lebsack Title: President - PJM Phone: (281) 203-5327





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