PLAN APPROVAL APPLICATION

Constellation Energy Generation LLC / Crane Clean Energy Center, Unit 1

Prepared By:

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Project 253902.0078

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1. EXECUTIVE SUMMARY

Constellation Energy Generation LLC plans on reactivating a facility under the name, the Crane Clean Energy Center, Unit 1 (Crane Facility). The Crane Facility is a nuclear power generating facility in Londonderry Township, Dauphin County, PA which was shutdown in 2019 primarily due to economic reasons. The Crane Facility was previously operating in accordance with Pennsylvania Department of Environmental Protection (PADEP) State Only Operating Permit No. 22-05029 issued on October 13, 2017.

During the last SOOP Renewal for the previous permit, Constellation removed multiple sources which are listed in Section 1.1. The Crane Facility is submitting this plan approval application in order to bring this facility back online and reactivate these sources without modification. The Crane Facility believes the information provided herein to be accurate and complete.

1.1 Facility Description

The Crane Facility is an electric services facility covered under Standard Industrial Classification (SIC) Code 4911. The facility's most recent permit consisted of the following emission sources. These sources and their associated stacks and emission points are being reactivated through this plan approval and should be included in the facility's plan approval:

Source ID FSP1: Fire Pump Fuel Oil – 295 HP

Source ID FSP3: Fire Pump Diesel – 295 HP

Source ID FX1A: Cummins Emergency Diesel Generator 1 – 755 HP

Source ID FX1B: Cummins Emergency Diesel Generator 2 – 755 HP

Source ID Y1A: Emergency Diesel Generator 1A – 4,320 HP

Source ID Y1B: Emergency Diesel Generator 1B – 4,320 HP

Source ID Y2: Security Unit Power Generator – 214 HP

Source ID B1A: Auxiliary Fuel Oil-fired Boiler A

Source ID B1B: Auxiliary Fuel Oil-fired Boiler B

Source ID C1A: Cooling Tower A

Source ID C1B: Cooling Tower B

Source ID Y4: Station Blackout Fuel Oil Generator

In addition to the sources in both lists above, the Crane Facility will also operate a propane-fired emergency generator. The potential to emit for this unit qualifies the for exemption from plan approval requirements according to 25 Pa Code 127.14(a)(8). See Appendix E for this PTE calculation.

1.2 Plan Approval Application Organization

This plan approval application is organized as follows:

- Section 2 contains an overview of regulatory applicability for the Crane Facility;
- Section 3 contains proposed changes to the Crane Facility;
- Appendix A contains the required PADEP application;
- Appendix B contains the compliance review form;
- Appendix C contains the required county and municipal notifications;
- Appendix D contains the permit redline;
- Appendix E contains the potential to emit calculations, and;
- Appendix F contains the application fee documentation.

2. REGULATORY REVIEW

A key part of any plan approval application is to examine the applicability of Federal and State air regulations to the facility as a whole, or to individual emission units. This section documents the applicability determinations made for Federal and State air quality regulations pertaining to the Crane Facility.

Specifically, this section summarizes the air permitting requirements and key air quality regulations that apply to the operation of the Crane Facility. Applicability of the following regulatory programs is addressed:

- Title V of the 1990 Clean Air Act Amendments;
- New Source Performance Standards (NSPS);
- National Emission Standards for Hazardous Air Pollutants (NESHAP);
- Pennsylvania State Implementation Plan (SIP) regulations.

In addition to providing a summary of applicable requirements, this section of the application also provides non-applicability determinations for certain regulations, allowing the PADEP to confirm that identified regulations are not applicable to the Crane Facility. Note that explanations of non-applicability are limited to those regulations for which there may be some question of applicability specific to the operations at the Crane Facility.

2.1 Title V Operating Permit Program

Title 40 of the Code of Federal Regulations Part 70 (40 CFR 70) establishes the federal Title V operating permit program. Pennsylvania has incorporated the provisions of the federal program in its Title V operating permit program in 25 Pa Code §127.503. The Title V major source thresholds are 10 tons per year (tpy) of a single HAP, 25 tpy of any combination of HAP, 50 tpy of VOC, and 100 tpy of all other regulated pollutants. Section C. Condition #006 of the Crane Facility's permit limits individual NO_X, SO_X, CO, PM_{10}, and $PM_{2.5}$ emissions to less than 100 tpy, VOC emissions to 50 tpy, and total and individual HAP to 25 and 10 tpy respectively. As such, potential emissions from the Crane Facility are limited to less than the major source thresholds, and the Crane Facility is classified as a synthetic minor source for Title V permitting.

2.2 New Source Performance Standards

New Source Performance Standards (NSPS), located in 40 CFR 60, require new, modified, or reconstructed sources to control emissions to the level achievable by the best demonstrated technology as specified in the applicable provisions. Moreover, any source subject to a NSPS is also subject to the general provisions of NSPS Subpart A, except where expressly noted. The following section provides an applicability determination for NSPS regulations of relevance to the Crane Facility.

2.2.1 40 CFR Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

NSPS Subpart IIII applies manufacturers, owners, and operators of stationary compression ignition internal combustion engines. Because the Cummins diesel generators (Source IDs FX1A and FX1B) were constructed after April 1, 2006, and are not fire pump engines, they are subject to Subpart IIII according to

40 CFR60.4200(a)(2)(i). The Crane Facility will continue to comply with the requirements of Subpart IIII as written in Section E Group 005 of the Crane Facility's previous state-only operating permit.

2.3 National Emission Standards for Hazardous air Pollutants (Part 61 and 63 NESHAP)

National Emissions Standards for Hazardous Air Pollutants (NESHAP) are generally applicable to sources of Hazardous Air Pollutants (HAPs). Part 61 NESHAP standards are defined for specific pollutants while Part 63 NESHAP standards are for source categories where allowable emission limits are established on the basis of a maximum achievable control technology (MACT) determination for a particular source. A major HAP source is defined as having potential emissions in excess of 25 tpy for total HAPs and/or potential emissions in excess of 10 tpy for any individual HAP. The Crane Facility is an existing minor source of HAP emissions.

2.3.1 40 CFR Part 63, Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

NESHAP Subpart ZZZZ applies to stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. Sources IDs FSP1, FSP3, Y1A, Y1B, Y2, and Y4 are all emergency generators located at an area source of HAPs subject to the requirements of Subpart ZZZZ. Source ID FSP1 will be a new addition to this source group as an emergency generator. The Crane Facility will continue to comply with the applicable requirements of Subpart ZZZZ as outlined in Section E Group 003 of the facility's previous state-only operating permit.

2.3.2 40 CFR Part 63, Subpart JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources

NESHAP Subpart JJJJJJ applies to industrial, commercial, or institutional boilers located at an area source of HAP. Boilers, including oil-fired boilers that commenced construction after or reconstruction after June 4, 2010 are subject to this rule. This regulation state requirements for tune-ups and testing with either stack tests or monitoring equipment, as well as conducting fuel analyses. With the reactivation of the auxiliary boilers (Source IDs B1A and B1B) the Crane Facility is subject to the requirements of Subpart JJJJJJ.

2.4 Pennsylvania SIP Regulations

Air quality regulations for the Commonwealth of Pennsylvania, codified in 25 Pa Code Chapters 121 – 129 and 131 – 145, are examined for applicability in this section. The chapters containing potentially applicable requirements for the Crane Facility are discussed below.

2.4.1 25 Pa. Code 123.13 Standards for Contaminants - Particulate Matter Emissions

25 Pa. Code 123.13 defines particulate matter emissions limitations for processes. All the remaining emergency generators at the Crane Facility are limited to 0.04 grain particulate matter per dry standard cubic foot of effluent gas per 25 Pa. Code 123.13(c)(1)(i). The Crane Facility will continue to comply with this standard as outlined in the previous state-only operating permit.

2.4.2 25 Pa. Code 123.21 and 123.22 Standards for Contaminants - Sulfur Compound Emissions

25 Pa. Code 123.21 defines sulfur compound emissions limitations. For all emergency generators at the Crane Facility, the exhaust concentration of sulfur oxides, expressed as SO_2, in the effluent gas may not exceed 500 ppmvd. The Crane Facility will continue to comply with these requirements.

2.4.3 25 Pa. Code 123.31 Odor Emissions Limitations

25 Pa. Code 123.31 states that a person may 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. The Crane Facility will continue to comply with this requirement.

2.4.4 25 Pa. Code 123.41 Visible Emissions

25 Pa. Code 123.41 that visible air contaminants may not be emitted into the outdoor atmosphere such that the opacity of the emission is either equal to or greater than 20% for a period or periods aggregating more than 3 minutes in any 1 hour, or equal to or greater than 60% at any time, with exceptions listed in Section 123.42. The Crane Facility will continue to comply with this requirement as outlined in the previous state-only operating permit.

2.4.5 25 Pa. Code 129.96-100 – Additional RACT Requirements for Major Sources of NO_X and VOCs

On April 23, 2016, PADEP finalized rulemaking amending 25 Pa Code Chapter 129 regulation for control of major sources of NO_X and VOC (referred to as "RACT II"). Per Section C, Condition #006 of the previous State Only Operating Permit, NO_X and VOC emissions from the Crane Facility are limited to less than the major source threshold. Therefore, the RACT II requirements of 129.96-100 are not applicable to the Crane Facility.

2.4.6 25 Pa. Code 129.111-115 – Additional RACT Requirements for Major Sources of NO_X and VOCs

On November 12, 2022, PADEP finalized rulemaking amending 25 Pa Code Chapter 129 regulation for control of major sources of NO_X and VOC (referred to as "RACT III"). Per Section C, Condition #006 of the previous State Only Operating Permit, NO_X and VOC emissions from the Crane Facility are limited to less than the major source threshold. Therefore, the RACT III requirements of 129.111-115 are not applicable to the Crane Facility.

3. PROPOSED CHANGES

The Crane Facility is requesting the following changes to the contents of the state-only operating permit as part of this application:

Cover Page: Update the Responsible Official information to the following
Name: Trevor Orth
Title: Plant Manager
Phone: (717) 533-5559
Email: trevor.orth@constellation.com

Cover Page: Update the Permit Contact Person to the following:
Name: Andrew Spriggle
Title: Senior Environmental Specialist
Email: andrew.spriggle@constellation.com

Cover Page: Update the owner name from "Exelon Generation Company LLC" to "Constellation Energy Generation LLC"

Cover Page: Update the facility name from "Exelon Generation Company LLC/Three Mile Island Nuclear Station" to "Constellation Energy Generation LLC/Crane Clean Energy Center"

ZZZZ: Source Group 003, Condition #001: Please update the language in this condition provided below to comply with the most recent updates to Subpart ZZZZ.

> *"§ 63.6640 How do I demonstrate continuous compliance with the emission limitations, operating limitations, and other requirements?*
> *(a) You must demonstrate continuous compliance with each emission limitation, operating limitation, and other requirements in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you according to methods specified in Table 6 to this subpart.*
>
> *TABLE 6 REQUIREMENTS*
>
> *9. FOR EACH existing emergency and black start stationary RICE <=500 HP located at a major source of HAP, existing nonemergency stationary RICE <100 HP located at a major source of HAP, EXISTING EMERGENCY and black start STATIONARY RICE LOCATED AT AN AREA SOURCE OF HAP, existing non-emergency stationary CI RICE <=300 HP located at an area source of HAP, existing non-emergency 2SLB stationary RICE located at an area source of HAP, existing non-emergency stationary SI RICE located at an area source of HAP which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, existing non-emergency 4SLB and 4SRB stationary RICE <=500 HP located at an area source of HAP, existing non-emergency 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate 24 hours or less per calendar year, and existing non-emergency 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that are remote stationary RICE, complying with the requirement to "Work or Management practices", you must demonstrate continuous compliance by:*
>
> *i. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or*

ii. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

[END OF TABLE 6 REQUIREMENTS]

(b) [NA – NOT SUBJECT TO EMISSION OR OPERATING LIMITATIONS]

(c) [NA – ANNUAL COMPLIANCE DEMONSTRATION NOT REQUIRED]

(d) [NA – NOT SUBJECT TO EMISSION OR OPERATING LIMITATIONS]

(e) You must also report each instance in which you did not meet the requirements in Table 8 to this subpart that apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to this subpart: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing emergency stationary RICE, an existing limited use stationary RICE, or an existing stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to this subpart, except for the initial notification requirements: a new or reconstructed stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new or reconstructed emergency stationary RICE, or a new or reconstructed limited use stationary RICE. [EXISTING EMERGENCY RICE AT AREA HAP SOURCES ARE NOT AMONG THOSE EXEMPTED FROM THIS SECTION]

(f) If you own or operate an emergency stationary RICE, you must operate the emergency stationary RICE according to the requirements in paragraphs (f)(1) through (4) of this section. In order for the engine to be considered an emergency stationary RICE under this subpart, any operation other than emergency operation, maintenance and testing, ~~emergency demand response~~, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (4) ~~of this section~~, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (4) ~~of this section~~, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

(1) There is no time limit on the use of emergency stationary RICE in emergency situations.

(2) You may operate your emergency stationary RICE for ~~any combination of t~~he purpose~~s~~ specified in paragraph~~s~~ (f)(2)(i) ~~through (iii)~~ of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraphs (f)(3) and (4) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).

(i) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks

and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

(ii)-(iii) [VACATED AS OF 5/2/16 PER COURT ORDER]

(3) [NA – NOT A MAJOR HAP SOURCE]

(4) Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in nonemergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing ~~and emergency demand response~~ provided in paragraph (f)(2) of this section. Except as provided in paragraphs (f)(4)(i) and (ii) of this section, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(i) Prior to May 3, 2014, the 50 hours per year for non-emergency situations can be used for peak shaving or non-emergency demand response to generate income for a facility, or to otherwise supply power as part of a financial arrangement with another entity if the engine is operated as part of a peak shaving (load management program) with the local distribution system operator and the power is provided only to the facility itself or to support the local distribution system."

§ 63.6655 What records must I keep?

(a) [NA – NOT SUBJECT TO EMISSION OR OPERATING LIMITATIONS]

(b) [NA – NO CEMS OR CPMS]

(c) [NA – LFG NOT USED]

IIII: Source Group 005, Condition #001: Please update the conditions in Source Group 005 to include the updates to 40 CFR 60 Subpart IIII. These updates consist of the new electronic reporting method to be used after February 26, 2025. These new reporting regulations apply to the submission of performance tests for engines over 500 hp in 60.4214(f).

"(f) Beginning on February 26, 2025, within 60 days after the date of completing each performance test required by this subpart, you must submit the results of the performance test required under this section following the procedures specified in paragraphs (f)(1) and (2) of this section.

(1) Data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT website (https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert) at the time of the test. Submit the results of the performance test to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI), according to paragraph (g) of this section. The data must be submitted in a file format generated using the EPA's ERT. Alternatively, you may submit an electronic file consistent with the extensible markup language (XML) schema listed on the EPA's ERT website.

(2) Data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the test. The results of the performance test must be included as an attachment in the ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website. Submit the ERT generated package or alternative file to the EPA via CEDRI according to paragraph (g) of this section."

APPENDIX A. PADEP PLAN APPROVAL APPLICATON FORM

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

INSTRUCTIONS FOR COMPLETING A PLAN APPROVAL APPLICATION

- See the detailed instruction package available for plan approval applications.
- Use only the pages for the air cleaning devices that pertain to this project and remove the remaining pages.
- If there is more than one air cleaning device of the same type, copy the page for air cleaning devices and provide the appropriate information for each device.
- If the proposed source is connected to more than one stack and exhauster, copy the page for the stack and exhauster and provide the appropriate information for each stack and exhauster.
- Use additional sheets of paper, if the space provided is not sufficient to provide detailed information required for review and approval.
- Information may be grouped into a single attachment for each section or air cleaning device.
- Number all pages of the application (Sections A through G) accordingly.
- Attach any and all information for source and air cleaning device(s) for a thorough evaluation of the extent and nature of emissions.
- Identify, number and list all attachments made to this application (e.g., Attachment #1-Section A).
- Submit three (3) sets of the completed application with all attachments to the appropriate Regional Office.

2700-PM-AQ0021 Rev. 6/2004

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

Submit in Triplicate

COMBUSTION UNIT

Application for Plan Approval to Construct, Modify or Reactivate an Air Contamination Source and/or Install an Air Cleaning Device

This application and the General Information Form (GIF) must be included in the submittal

Before completing this form, read the instructions provided with this form.

Section A - Facility Name, Checklist And Certification

Organization Name or Registered Fictitious Name/Facility Name: Constellation Energy Generation LLC/Crane Clean Energy Center, Unit 1

DEP Client ID# (If Known): _____

Type of Review required and Fees:

Source which is not subject to NSPS, NESHAPs, MACT, NSR and PSD: ..... $_____
Source requiring approval under NSPS or NESHAPS or both: ..... $_____
Source requiring approval under NSR: ..... $_____
Source requiring the establishment of a MACT limitation: ..... $_____
Source requiring approval under PSD: ..... $_____

Applicant's Checklist

Check the following list to make sure that all the required documents are included.

General Information Form (GIF)

Combustion Unit Plan Approval Application

Compliance Review Form or provide reference of most recently submitted compliance review form for facilities submitting on a periodic basis: _____

Proof of County and Municipal Notifications

Permit Fees

Addendum A: Source Applicable Requirements (only applicable to existing Title V facility)

Certification of Truth, Accuracy and Completeness by a Responsible Official

I, **Trevor Orth** , certify under penalty of law in 18 Pa. C. S. A. §4904, and 35 P.S. §4009(b) (2) that based on information and belief formed after reasonable inquiry, the statements and information in this application are true, accurate and complete.

(Signature): Trevor L. Orth Date: 10/30/2025

Name (Print): Trevor Orth Title: Plant Manager

OFFICIAL USE ONLY

Application No. _____ Unit ID _____ Site ID _____
DEP Client ID #: _____ APS. ID _____ AUTH. ID _____
Date Received _____ Date Assigned _____ Reviewed By _____
Date of 1st Technical Deficiency _____ Date of 2nd Technical Deficiency _____
Comments: _____

Section B - Combustion Unit Information

1. Combustion Units: ☐ Coal ☒ Oil ☐ Natural Gas Other: _____

Description: Auxiliary Boiler A and B

Manufacturer	Model No.	Number of units
Babcock&Wilcox		2

Maximum heat input (Btu/hr)	Rated heat input (Btu/hr)	Typical heat input (Btu/hr)	Furnace Volume
168,000	168,000	168,000	

Grate Area (if applicable)	Method of firing

Indicate how combustion air is supplied to boiler

Indicate the Steam Usage:

Mark and describe soot Cleaning Method:

i. Air Blown
ii. Steam Blown
iii. Brushed and Vacuumed
iv. Other _____
v. Frequency of Cleaning _____

Maximum Operating schedule

Hours/Day	Days/Week	Days/Year	Hours/Year
			100

Operational restrictions taken or requested, if any (e.g., bottlenecks or voluntary restrictions to limit potential to emit)

Capacity (specify units)

Per hour	Per day	Per week	Per year
2420 gal			242,000 gal

Typical Operating schedule

Hours/Day	Days/Week	Days/Year	Hours/Year
			100

Seasonal variations (Months): If variations exist, describe them.

Operating using primary fuel: _____ From _____ to _____
Operating using secondary fuel: _____ Form _____ to _____
Non-operating: From _____ to _____

2. Specify the primary, secondary and startup fuel. Furnish the details in item 3.
This source will only run on Diesel fuel.

Section B - Combustion Unit Information (Continued)

3. Fuel

Type	Quantity Hourly	Annually	Sulfur	% Ash (Weight)	BTU Content
Oil Number 2	2420 GPH @ 60°F	242 X 10^3 Gal	0.0015% by wt		137 MMBtu/Gal. & Lbs./Gal. @ 60 °F
Oil Number	GPH @ 60°F	X 10^3 Gal	% by wt		Btu/Gal. & Lbs./Gal. @ 60 °F
Oil Number	GPH @ 60°F	X 10^3 Gal	% by wt		Btu/Gal. & Lbs./Gal. @ 60 °F
Natural Gas	SCFH	X 10^6 Gal	gr/100 SCF		Btu/SCF
Gas (other)	SCFH	X 10^6 Gal	gr/100 SCF		Btu/SCF
Coal					
Other*					

***** Note: Describe and furnish information separately for other fuels in Addendum B.

4. Burner

Manufacturer	Model Number	Type of Atomization (Steam, air, press, mech., rotary cup)

Number of Burners	Maximum fuel firing rate (all burners)	Normal fuel firing rate

If oil, temperature and viscosity.

Maximum theoretical air requirement

Percent excess air 100% rating

Turndown ratio

Combustion modulation control (on/off, low-high fire, full automatic, manual). Describe.

Main burner flame ignition method (electric spark, auto gas pilot, hand-held torch, other). Describe.

5. Nitrogen Oxides (NO_x) control Options

Mark and describe the NO_x control options adopted

Low excess air (LEA)	Flue gas recirculation	Other. Limiting hours of operation
Over fire air (OFA)	Burner out of service	
Low-NO_x burner	Reburning	
Low NO_x burners with over fire air	Flue gas treatment (SCR / SNCR)	

Section B - Combustion Unit Information (Continued)

6. Miscellaneous Information

Describe fly ash reinjection operation
N/a

Describe, in detail, the equipment provided to monitor and to record the source(s) operating conditions, which may affect emissions of air contaminants. Show that they are reasonable and adequate.

Describe each proposed modification to an existing source.

N/a - Source is being reactivated without modification.

Describe how emissions will be minimized especially during start up, shut down, combustion upsets and/or disruptions. Provide emission estimates for start up, shut down and upset conditions. Provide duration of start up and shut down.

Operation is limited to 100 hours per year per unit.

Describe in detail with a schematic diagram of the control options adopted for SO_2 (if applicable).
N/a

Anticipated milestones:

Expected commencement date of construction/reconstruction: _____
Expected completion date of construction/reconstruction: _____
Anticipated date(s) of start-up: Q2/Q3 of 2026

Section C - Air Cleaning Device

1. Precontrol Emissions*

Emission Rate

Pollutant	Maximum Emission Rate				Calculation/ Estimation Method
	Specify Units	Pounds/Hour	Hours/Year	Tons/Year	
PM		4.84	100	0.242	
PM_{10}		4.84	100	0.242	
SOx		0.52	100	0.026	
CO		12.10	100	0.605	
NO_x		58.08	100	2.904	
VOC		0.48	100	0.024	
Others: (e.g., HAPs)	-----	-----	-----		-----
See PTE Calcs					

* These emissions must be calculated based on the requested operating schedule and/or process rate, e.g., operating schedule for maximum limits or restricted hours of operation and/or restricted throughput. Describe how the emission values were determined. Attach calculations. See Appendix E

2. Gas Conditioning

Water quenching ☐ YES ☐ NO Water injection rate _____GPM

Radiation and convection cooling ☐ YES ☐ NO

Air dilution ☐ YES ☐ NO
If YES, _____ CFM

Forced draft ☐ YES ☐ NO

Water cooled duct work ☐ YES ☐ NO

Other _____

Inlet volume
_____ ACFM@ _____ °F

Outlet volume
_____ ACFM@ _____ °F _____ % Moisture

Describe the system in detail.

Section C - Air Cleaning Device (Continued)

3. Inertial and Cyclone Collectors

Manufacturer	Type	Model No.

Pressure Drop (in. of water)	Inlet Volume	Outlet Volume
	_____ ACFM @ _____ °F	_____ ACFM @ _____°F _____% Moisture

Number of Individual Cyclone(s)	Outlet Straightening Vanes Used? ☐ Yes ☐ No

Length of Cyclone(s) Cylinder (ft)	Diameter of Cyclone(s) Cylinder	Length of cyclone(s) cone (ft)

Inlet Diameter (ft) or Duct Area (ft^2) of Cyclone(s)	Outlet Diameter (ft) or Duct area (ft^2) of cyclone(s)

If a multi-clone or multi-tube unit is installed, will any of the individual cyclones or cyclone tubes be blanked or blocked off?

Describe any exhaust gas recirculation loop to be employed.

Attach particle size efficiency curve

Emission data

Inlet	Outlet	Removal Efficiency (%)

Section C - Air Cleaning Device (Continued)

4. Fabric Collector

Equipment Specifications

Manufacturer	Model No. ☐ Pressurized Design ☐ Suction Design	
Number of Compartments	Number of Filters Per Compartment	Is Baghouse Insulated? ☐ Yes ☐ No

Can each compartment be isolated for repairs and/or filter replacement? ☐ Yes ☐ No

Are temperature controls provided? (Describe in detail) ☐ Yes ☐ No

Dew point at maximum moisture _____ °F | Design inlet volume _____ SCFM

Type of Fabric

Material _____ ☐ Felted ☐ Membrane

Weight _____ oz/sq.yd ☐ Woven ☐ Others: List: _____

Thickness _____ in ☐ Felted-Woven

Fabric permeability (clean) @ ½" water-Δ P _____ CFM/sq.ft.

Filter dimensions _____ Diameter/Width _____

Effective area per filter _____ | Maximum operating temperature (°F) _____

Effective air to cloth ratio Minimum _____ Maximum _____

Drawing of Fabric Filter

A sketch of the fabric filter showing all access doors, catwalks, ladders and exhaust ductwork, location of each pressure and temperature indicator should be attached.

Operation and Cleaning

Volume of gases handled _____ ACFM _____ °F	Pressure drop across collector (in. of water). Describe the equipment to be used to monitor the pressure drop.

Type of filter cleaning

☐ Manual Cleaning ☐ Bag Collapse ☐ Reverse Air Jets

☐ Mechanical Shakers ☐ Sonic Cleaning ☐ Other: _____

☐ Pneumatic Shakers ☐ Reverse Air Flow

If compressed air is required for collector operation, describe the equipment with the compressor to provide dry air free from oil.

Cleaning Initiated By

☐ Timer Frequency if timer actuated _____

☐ Expected pressure drop range _____ in. of water ☐ Other Specify _____

Does air cleaning device employ hopper heaters, hopper vibrators or hopper level detectors? If yes, describe.

Describe the warning/alarm system that protects against operation when the unit is not meeting design requirements.

Emissions Data

Pollutant	Inlet	Outlet	Removal Efficiency (%)

Section C - Air Cleaning Device (Continued)

5. Wet Collection Equipment: _____

Equipment Specifications

Manufacturer	Type	Model No.

Design Inlet Volume (SCFM)	Relative Particulate/Gas Velocity (ejector scrubbers only)

Describe the internal features (e.g., variable throat, gas/liquid diffusion plates, spray nozzles, liquid redistributors, bed limiters, etc.).

Describe pH monitoring and pH adjustment systems, if applicable.

Describe mist eliminator or separator (type, configuration, backflush capability, frequency).

Attach particulate size efficiency curve.

Operating Parameters

Inlet volume of gases handled _____ (ACFM) @_____°F	Outlet volume of gases handled _____ (ACFM) @_____ °F _____% Moisture

Liquid flow rates. Describe equipment provided to measure liquid flow rates to scrubber (e.g., quenching section, recirculating solution, makeup water, bleed flow, etc.)

Describe scrubber liquid supply system (amount of make-up and recirculating liquid, capacity of recirculating liquid system, etc).

State pressure drop range (in water) across scrubber (e.g., venturi throat, packed bed, etc.) only. Describe the equipment provide to measure the pressure drop. Do not include duct or de-mister losses.

Describe the warning/alarm system that protects against operation when unit is not meeting design requirements.

Emissions Data

Pollutant	Inlet	Outlet	Removal Efficiency (%)

Section C - Air Cleaning Device (Continued)

6. Electrostatic Precipitator

Equipment specifications

Manufacturer	Model No.	☐ Wet ☐ Dry ☐ Single-Stage ☐ Two-Stage

Gas distribution grids ☐ YES ☐ NO

Design inlet volume (SCFM) _____

Maximum operating temperature (°F) _____

Total collecting surface area _____ sq. ft. Collector plates size length _____ ft. x width _____ ft.

Number of fields _____ Number of collector plates/field _____. Spacing between collector plates _____inches.

Maximum gas velocity _____ ft/sec. Minimum gas treatment time: _____ sec.

Total discharge electrode length _____ ft.

Number of discharge electrodes _____ Number collecting electrode rappers _____

Rapper control ☐ Magnetic ☐ Pneumatic ☐ Other _____

Describe in detail

Operating parameters

Inlet gas temperature (°F) _____ Outlet gas temperature (°F) _____	State pressure drop range (water gauge) across collector only. Describe the equipment.
Volume of gas handled (ACFM) _____	Dust resistivity (ohm-cm). Will resistivity vary?

Power requirements

Number and size of Transformer Rectifier sets by electrical field

Field No.	No. of Sets	Each Transformer KVA	Each Rectifier	
			KV Ave./Peak	MaDC

Current density	Corona power	Corona power density
_____ Micro amperes/ft^2	_____ Watts/1000 ACFM	_____ Watts/ft^2

Will a flue gas conditioning system be employed? If yes, describe it.

Does air cleaning device employ hopper heaters, hopper vibrators or hopper level detectors? If yes, describe.

Describe the warning/alarm system that protects against operation when unit is not meeting design requirements.

Emissions data

Pollutant	Inlet	Outlet	Removal Efficiency (%)

Section C - Air Cleaning Device (Continued)

7. Absorption Equipment: _____

Equipment specifications

Manufacturer	Type	Model No

Design inlet volume (SCFM)	Tower height (ft) and inside diameter (ft)
Packing type and size (if applicable)	Height of packing (ft) (if applicable)
Number of trays (if applicable)	Number of bubble caps (if applicable)

Configuration: ☐ Counter-current ☐ Cross flow ☐ Cocurrent flow

Describe pH and/or other monitoring and controls

Absorbent information

Absorbent type and concentration	Sorbent injection rate	Retention time (sec)

Attach equilibrium data for absorption (If applicable).

Attach any additional information regarding auxiliary equipment, reagent (slurry mix) supply system (once through or recirculating, system capacity, etc) to thoroughly evaluate the control equipment. Indicate the flow rates for makeup, bleed and recirculation.

Operating parameters

Volume of gas handled (ACFM)	Inlet temperature (°F)	Pressure drop (in of water) and liquid flow rate. Describe the equipment.

State operating range for pH and/or absorbent concentration in scrubber liquid.

Describe the warning/alarm system that protects against operation when unit is not meeting design requirements.

Emissions data

Pollutant	Inlet	Outlet	Removal Efficiency (%)

Section C - Air Cleaning Device (Continued)

8. ☐ **SELECTIVE CATALYTIC REDUCTION (SCR)**

☐ **SELECTIVE NON-CATALYTIC REDUCTION (SNCR)**

☐ **NON-SELECTIVE CATALYTIC REDUCTION (NSCR)**

Equipment specifications

Manufacturer	Type	Model No

Design inlet volume (SCFM)	Design operating temperature (°F)

Is the system equipped with process controls for proper mixing/control of the reducing agent in gas stream? If yes, give details.

Attach efficiency and other pertinent information (e.g., Ammonia, urea slip).

Operating parameters

Volume of gases handled (ACFM) _____ @ _____ (°F)

Operating temperature range for the SCR/SNCR/NSCR system (°F) From To

Reducing agent used, if any.	Oxidation catalyst used, if any.

State expected range of usage rate and concentration.

Service life of catalyst	Ammonia slip (ppm)

Describe fully with a sketch giving locations of equipment, controls system, important parameters and method of operation.

Describe the warning/alarm system that protects against operation when unit is not meeting design requirements.

Emissions data

Pollutant	Inlet	Outlet	Removal Efficiency (%)

Section C - Air Cleaning Device (Continued)

9. Other Control Equipment: _____

Equipment specifications

Manufacturer	Type	Model No

Design inlet volume (SCFM)	Capacity

Describe pH monitoring and pH adjustment, if any.

Indicate the liquid flow rate and describe equipment provided to measure pressure drop and flow rate, if any.

Attach efficiency curve and/ or other efficiency information.

Attach any additional data including auxiliary equipment and operation details to thoroughly evaluate the control equipment.

Operating parameters

Volume of gas handled

_____ @ _____ °F _____ % Moisture

Describe, in detail, important parameters and method of operation.

Describe the warning/alarm system that protects against operation when unit is not meeting design requirements.

Emissions data

Pollutant	Inlet	Outlet	Removal Efficiency (%)

Section C - Air Cleaning Device (Continued)

10. Costs

Indicate cost associated with air cleaning device and its operating cost (attach documentation if necessary)

Device	Direct Cost	Indirect Cost	Total Cost	Operating Cost
N/a				

11 MISCELLANEOUS

Describe in detail the removal, handling and disposal of dust, effluent, etc. from the air cleaning device including proposed methods of controlling fugitive emissions.

N/a

Attach manufacturer's performance guarantees and/or warranties for each of the major components of the control system (or complete system).

N/a

Attach the maintenance schedule for the control equipment and any part of the process equipment that, if in disrepair, would increase air contaminant emissions.

N/a

Section D - Additional Information

Will the construction, modification, etc. of the sources covered by this application increase emissions from other sources at the facility? If so, describe and quantify.
See Narrative

If this project is subject to any one of the following, attach a demonstration to show compliance with applicable standards

a. Prevention of Significant Deterioration permit (PSD), 40 CFR Part 52? ☐ YES ☒ NO

b. New Source Review, 25 Pa. Code Chapter 127, Subchapter E? ☐ YES ☒ NO

c. New Source Performance Standards, 40 CFR Part 60? ☐ YES ☒ NO
(If Yes, which subpart) _____

d. National Emissions Standards for Hazardous Air Pollutants (NESHAPS), 40 CFR Part 61? ☐ YES ☒ NO
If Yes, which subpart) _____

e. Maximum Achievable Control Technology (MACT), 40 CFR Part 63? ☒ YES ☐ NO
(If Yes, which subpart) JJJJJJ

Attach a demonstration showing that the emissions from any new source will be the minimum attainable through the use of best available technology (BAT).

N/a

Provide emission increases and decreases in allowable (or potential) and actual emissions within the last 5 years for applicable PSD pollutant(s) if the facility is an existing major facility (for PSD purposes)

N/a

Section D - Additional Information (Continued)

Indicate emission increases and decreases in tons per year (tpy), for volatile organic compounds (VOCs) and nitrogen oxides (NOx) for NSR applicability since January 1, 1991 or other applicable dates (See other applicable date in instructions). The emissions increases include all emissions including stack, fugitive, material transfer, other emission generating activities, quantifiable emissions from the exempted source(s), etc.

Permit number (if applicable)	Date issued	Indicate ***Yes*** or ***No*** if emission increases and decreases were used previously for netting	Source I.D. or Name	**VOC**s		**NOx**	
				Emission increases in potential to emit (tpy)	Creditable emission decreases in actual emissions (tpy)	Emission increases in potential to emit (tpy)	Creditable emission decreases in actual emissions (tpy)

If the source is subject to 25 Pa. Code Chapter 127, Subchapter E, New Source Review requirements,

a. Identify Emission Reduction Credits (ERCs) for emission offsets or demonstrate ability to obtain suitable ERCs for emission offsets. N/a

b. Provide a demonstration that the lowest achievable emission rate (LAER) control techniques will be implemented (if applicable). N/a

c. Provide an analysis of alternate sites, sizes, production processes and environmental control techniques demonstrating that the benefits of the proposed source outweigh the environmental and social costs (if applicable).
N/a

Attach calculations and any additional information necessary to thoroughly evaluate compliance with all the applicable requirements of 25 Pa. Code Article III and applicable requirements of the Clean Air Act and regulations adopted there under. The Department may request additional information to evaluate the application such as a stand by plan, a plan for air pollution emergencies, air quality modeling, etc.

See Appendix E

Section E - Compliance Demonstration

Note: Complete this section if the facility is not a-Title V facility. Title V facilities must complete Addendum A.

Method of Compliance Type: Check all that apply and complete all appropriate sections below.

☐ Monitoring ☐ Testing ☐ Reporting
☐ Recordkeeping ☒ Work Practice Standard

Monitoring:

a. Monitoring device type (stack test, CEM etc.):

b. Monitoring device location:

c. Describe all parameters being monitored along with the frequency and duration of monitoring each parameter:

Testing:

a. Reference Test Method Citation:

b. Reference Test Method Description:

Recordkeeping:

Describe the parameters that will be recorded and the recording frequency:

Reporting:

a. Describe the type of information to be reported and the reporting frequency:

b. Reporting start date:

Work Practice Standard: Describe each

Limiting hours of Operation to 100 hours per year

Section F - Flue and Air Contaminant Emission

1. Estimated Maximum Emissions*

Pollutant	Maximum emission rate			Calculation/ Estimation Method
	specify units	lbs/hr	tons/yr.	
PM		4.84	0.242	
PM_{10}		4.84	0.242	
SO_x		0.52	0.026	
CO		12.10	0.605	
NO_x		58.08	2.904	
VOC		0.48	0.024	
Others: (e.g., HAPs)	-----	-----	-----	-----
See PTE Calcs				

* These emissions must be calculated based on the requested operating schedule and/or process rate e.g., operating schedule for maximum limits or restricted hours of operation and /or restricted throughput. Describe how the emission values were determined. Attach calculations.

2. Stack and Exhauster

Stack Designation/Number: S1 from SOOP 22-05029

List Source(s) or source ID exhausted to this stack: Aux Boilers A and B

% of flow exhausted to stack:

Stack height above grade (ft.): 100 ft
Grade elevation (ft.): 302 ft

Stack diameter (ft) or Outlet duct area (sq. ft.): 3 ft

Weather Cap: ☐ YES ☒ NO

Distance of discharge to nearest property line (ft.). Locate on topographic map.: 789 ft

Does stack height meet Good Engineering Practice (GEP)? Yes

If modeling (estimating) of ambient air quality impacts is needed, attach a site plan with buildings and their dimensions and other obstructions.

Location of Stack**	Latitude			Longitude		
Latitude/Longitude Point of Origin	40 Degrees	09 Minutes	17.70 Seconds	76 Degrees	43 Minutes	27.43 Seconds

Stack Exhaust

Volume _____ ACFM Temperature _____ °F Moisture _____%

Exhauster (attach fan curves) _____ in. of water _____ HP @ _____RPM.

** If the datum and collection method information and codes differ from those provided on the General Information Form - Authorization Application, provide the additional required by that form on a separate sheet.

Section G - Attachments

Number and list all attachments submitted with this application below:

- Appendix A contains the required PADEP application;
- Appendix B contains the compliance review form;
- Appendix C contains the required county and municipal notifications;
- Appendix D contains the permit redline;
- Appendix E contains the potential to emit calculations, and;
- Appendix F contains the application fee documentation.

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

Instructions for Completing a Plan Approval Application

- See the detailed instruction package available for plan approval applications.
- Use only the pages for the air cleaning devices that pertain to this project and remove the remaining pages.
- If there is more than one air cleaning device of the same type, copy the page for air cleaning devices and provide the appropriate information for each device.
- If the proposed source is connected to more than one stack and exhauster, copy the page for the stack and exhauster and provide the appropriate information for each stack and exhauster.
- Use additional sheets of paper, if the space provided is not sufficient to provide detailed information required for review and approval.
- Information may be grouped into a single attachment for each section or air cleaning device.
- Number all pages of the application (Sections A through G) accordingly.
- Attach any and all information for source and air cleaning device(s) for a thorough evaluation of the extent and nature of emissions.
- Identify, number and list all attachments made to this application (e.g., Attachment #1-Section A).
- Submit three (3) sets of the completed application with all attachments to the appropriate Regional Office.

2700-PM-AQ0007 Rev. 7/2004

Submit in Triplicate

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

PROCESSES

Application for Plan Approval to Construct, Modify or Reactivate an Air Contamination Source and/or Install an Air Cleaning Device

This application must be submitted with the General Information Form (GIF).

Before completing this form, read the instructions provided for the form.

Section A - Facility Name, Checklist And Certification

Organization Name or Registered Fictitious Name/Facility Name: Constellation Energy Generation LLC/Crane Clean Energy Center, Unit 1

DEP Client ID# (if known): _____

Type of Review required and Fees:

- ☐ Source which is not subject to NSPS, NESHAPs, MACT, NSR and PSD: ..... $_____
- ☐ Source requiring approval under NSPS or NESHAPS or both: ..... $_____
- ☐ Source requiring approval under NSR regulations: ..... $_____
- ☐ Source requiring the establishment of a MACT limitation: ..... $_____
- ☐ Source requiring approval under PSD: ..... $_____

Applicant's Checklist

Check the following list to make sure that all the required documents are included.

- ☒ **General Information Form (GIF)**
- ☒ **Processes Plan Approval Application**
- ☒ **Compliance Review Form** or provide reference of most recently submitted compliance review form for facilities submitting on a periodic basis: _____
- ☒ **Copy and Proof of County and Municipal Notifications**
- ☒ **Permit Fees**
- ☐ **Addendum A:** Source Applicable Requirements (only applicable to existing Title V facility)

Certification of Truth, Accuracy and Completeness by a Responsible Official

I, **Trevor Orth**, certify under penalty of law in 18 Pa. C. S. A. §4904, and 35 P.S. §4009(b) (2) that based on information and belief formed after reasonable inquiry, the statements and information in this application are true, accurate and complete.

(Signature): Trevor L. Orth Date: 10/30/2025

Name (Print): Trevor Orth Title: Plant Manager

OFFICIAL USE ONLY

Application No. _____ Unit ID _____ Site ID _____

DEP Client ID #: _____ APS. ID _____ AUTH. ID _____

Date Received _____ Date Assigned _____ Reviewed By _____

Date of 1st Technical Deficiency _____ Date of 2nd Technical Deficiency _____

Comments: _____

Section B - Processes Information

1. Source Information

Source Description (give type, use, raw materials, product, etc). Attach additional sheets as necessary.
Cooling Tower A and B

Manufacturer N/a - custom units	Model No.	Number of Sources
Source Designation	Maximum Capacity	Rated Capacity

Type of Material Processed

Maximum Operating Schedule

Hours/Day	Days/Week	Days/Year	Hours/Year
24	7	365	8760

Operational restrictions existing or requested, if any (e.g., bottlenecks or voluntary restrictions to limit PTE)

Capacity (specify units)

Per Hour	Per Day	Per Week	Per Year
136,108,800 gal			

Operating Schedule

Hours/Day	Days/Week	Days/Year	Hours/Year
			8760

Seasonal variations (Months) From to

If variations exist, describe them

2. Fuel

Type	Quantity Hourly	Annually	Sulfur	% Ash (Weight)	BTU Content
Oil Number _____	GPH @ 60°F	X 10^3 Gal	% by wt		Btu/Gal. & Lbs./Gal. @ 60 °F
Oil Number _____	GPH @ 60°F	X 10^3 Gal	% by wt		Btu/Gal. & Lbs./Gal. @ 60 °F
Natural Gas	SCFH	X 10^6 SCF	grain/100 SCF		Btu/SCF
Gas (other) _____	SCFH	X 10^6 SCF	grain/100 SCF		Btu/SCF
Coal _____	TPH	Tons	% by wt		Btu/lb
Other * _____					
_____					
_____					

*Note: Describe and furnish information separately for other fuels in Addendum B.

Section B - Processes Information (Continued)

3. Burner

Manufacturer	Type and Model No.	Number of Burners
Description:		
Rated Capacity	Maximum Capacity	

4. Process Storage Vessels

A. For Liquids:

Name of material stored		
Tank I.D. No.	Manufacturer	Date Installed
Maximum Pressure	Capacity (gallons/Meter^3)	
Type of relief device (pressure set vent/conservation vent/emergency vent/open vent)		
Relief valve/vent set pressure (psig)	Vapor press. of liquid at storage temp. (psia/kPa)	
Type of Roof: Describe:		
Total Throughput Per Year	Number of fills per day (fill/day): Filling Rate (gal./min.): Duration of fill hr./fill):	

B. For Solids

Type: ☐ Silo ☐ Storage Bin ☐Other, Describe	Name of Material Stored	
Silo/Storage Bin I.D. No.	Manufacturer	Date Installed
State whether the material will be stored in loose or bags in silos	Capacity (Tons)	
Turn over per year in tons	Turn over per day in tons	
Describe fugitive dust control system for loading and handling operations		
Describe material handling system		

5. Request for Confidentiality

Do you request any information on this application to be treated as "Confidential"? ☐ Yes ☒ No
If yes, include justification for confidentiality. Place such information on separate pages marked **"confidential"**.

Section B - Processes Information (Continued)

6. Miscellaneous Information

Attach flow diagram of process giving all (gaseous, liquid and solid) flow rates. Also, list all raw materials charged to process equipment, and the amounts charged (tons/hour, etc.) at rated capacity (give maximum, minimum and average charges describing fully expected variations in production rates). Indicate (on diagram) all points where contaminants are controlled (location of water sprays, collection hoods, or other pickup points, etc.). Describe collection hoods location, design, airflow and capture efficiency. Describe any restriction requested and how it will be monitored.

Describe fully the facilities provided to monitor and to record process operating conditions, which may affect the emission of air contaminants. Show that they are reasonable and adequate.

Describe each proposed modification to an existing source.
Cooling Tower B will be modified to match the process dimensions and flowrates of Cooling Tower A. As such, both boilers will have matching emissions specifications.

Identify and describe all fugitive emission points, all relief and emergency valves and any by-pass stacks.

Describe how emissions will be minimized especially during start up, shut down, process upsets and/or disruptions.
N/a - continuously operational

Anticipated Milestones:

i. Expected commencement date of construction/reconstruction/installation: _____
ii. Expected completion date of construction/reconstruction/installation: _____
iii. Anticipated date of start-up: Q2/Q3 of 2026

Section C - Air Cleaning Device

1. Precontrol Emissions*

Pollutant	Maximum Emission Rate				Calculation/ Estimation Method
	Specify Units	Pounds/Hour	Hours/Year	Tons/Year	
PM		1.92	8760	8.41	AP-42: Section 13.4
PM_{10}		1.82	8760	7.99	Particle Size Distribution
SO_x					
CO					
NO_x					
VOC					
Others: (e.g., HAPs)	-----	-----	-----	-----	-----

* These emissions must be calculated based on the requested operating schedule and/or process rate, e.g., operating schedule for maximum limits or restricted hours of operation and/or restricted throughput. Describe how the emission values were determined. Attach calculations.

2. Gas Cooling

Water quenching ☐ Yes ☐ No Water injection rate _____ GPM

Radiation and convection cooling ☐ Yes ☐ No	Air dilution ☐ Yes ☐ No If yes, _____CFM
Forced Draft ☐ Yes ☐ No	Water cooled duct work ☐ Yes ☐ No
Other	
Inlet Volume _____ACFM @ _____°F _____% Moisture	Outlet Volume _____ACFM @ _____°F _____% Moisture

Describe the system in detail.

Section C - Air Cleaning Device (Continued)

3. Settling Chambers

Manufacturer	Volume of gas handled _____ACFM @ _____°F	Gas velocity (ft/sec.)

Length of chamber (ft.)	Width of chamber (ft.)	Height of chamber (ft.)	Number of trays

Water injection ☐ Yes ☐ No	Water injection rate (GPM)

Emissions Data

Inlet	Outlet	Removal Efficiency (%)

4. Inertial and Cyclone Collectors

Manufacturer	Type	Model No.
Pressure drop (in. of water)	Inlet volume _____ACFM @ _____°F	Outlet volume _____ACFM @ _____°F

Number of individual cyclone(s)	Outlet straightening vanes used? ☐ Yes ☐ No

Length of Cyclone(s) Cylinder (ft.)	Diameter of Cyclone(s) Cylinder (ft.)	Length of Cyclone(s) cone (ft.)

Inlet Diameter (ft.) or duct area ($ft.^2$) of cyclone(s)	Outlet Diameter (ft.) or duct area ($ft.^2$) of cyclone(s)

If a multi-clone or multi-tube unit is installed, will any of the individual cyclones or cyclone tubes be blanked or blocked off?

Describe any exhaust gas recirculation loop to be employed.

Attach particle size efficiency curve

Emissions Data

Inlet	Outlet	Removal Efficiency (%)

Section C - Air Cleaning Device (Continued)

5. Fabric Collector

Equipment Specifications

Manufacturer	Model No.	☐ Pressurized Design ☐ Suction Design
Number of Compartments	Number of Filters Per Compartment	Is Baghouse Insulated? ☐ Yes ☐ No

Can each compartment be isolated for repairs and/or filter replacement? ☐ Yes ☐ No

Are temperature controls provided? (Describe in detail) ☐ Yes ☐ No

Dew point at maximum moisture _____ °F | Design inlet volume _____ SCFM

Type of Fabric

Material _____ ☐ Felted ☐ Membrane

Weight _____ oz/sq.yd ☐ Woven ☐ Others: List: _____

Thickness _____ in ☐ Felted-Woven

Fabric permeability (clean) @ ½" water-Δ P _____ CFM/sq.ft.

Filter dimensions Length _____ Diameter/Width _____

Effective area per filter _____ | Maximum operating temperature (°F) _____

Effective air to cloth ratio Minimum _____ Maximum _____

Drawing of Fabric Filter

A sketch of the fabric filter showing all access doors, catwalks, ladders and exhaust ductwork, location of each pressure and temperature indicator should be attached.

Operation and Cleaning

Volume of gases handled _____ ACFM @ _____ °F	Pressure drop across collector (in. of water). Describe the equipment to be used to monitor the pressure drop.

Type of filter cleaning

☐ Manual Cleaning ☐ Bag Collapse ☐ Reverse Air Jets

☐ Mechanical Shakers ☐ Sonic Cleaning ☐ Other: _____

☐ Pneumatic Shakers ☐ Reverse Air Flow

Describe the equipment provided if dry oil free air is required for collector operation

Cleaning Initiated By

☐ Timer Frequency if timer actuated _____

☐ Expected pressure drop range _____ in. of water ☐ Other Specify _____

Does air cleaning device employ hopper heaters, hopper vibrators or hopper level detectors? If yes, describe.

Describe the warning/alarm system that protects against operation when the unit is not meeting design requirements.

Emissions Data

Pollutant	Inlet	Outlet	Removal Efficiency (%)

Section C - Air Cleaning Device (Continued)

6. Wet Collection Equipment

Equipment Specifications

Manufacturer	Type	Model No.

Design Inlet Volume (SCFM)	Relative Particulate/Gas Velocity (ejector scrubbers only)

Describe the internal features (e.g., variable throat, gas/liquid diffusion plates, spray nozzles, liquid redistributors, bed limiters, etc.).

Describe pH monitoring and pH adjustment systems, if applicable.

Describe mist eliminator or separator (type, configuration, backflush capability, frequency).

Attach particulate size efficiency curve.

Operating Parameters

Inlet volume of gases handled _____ (ACFM) @ _____°F	Outlet volume of gases handled _____ (ACFM) @ _____ °F _____% Moisture

Liquid flow rates. Describe equipment provided to measure liquid flow rates to scrubber (e.g., quenching section, recirculating solution, makeup water, bleed flow, etc.)

Describe scrubber liquid supply system (amount of make-up and recirculating liquid, capacity of recirculating liquid system, etc.)

State pressure drop range (in water) across scrubber (e.g., venturi throat, packed bed, etc.) only. Describe the equipment provide to measure the pressure drop. Do not include duct or de-mister losses.

Describe the warning/alarm system that protects against operation when unit is not meeting design requirements.

Emissions Data

Pollutant	Inlet	Outlet	Removal Efficiency (%)

Section C - Air Cleaning Device (Continued)

7. Electrostatic Precipitator

Equipment Specifications

Manufacturer	Model No.	☐ Wet ☐ Dry ☐ Single-Stage ☐ Two-Stage

Gas distribution grids ☐ Yes ☐ No

Design Inlet Volume (SCFM) _____

Maximum operating temperature (°F) _____

Total collecting surface area _____ sq. ft. Collector plates size length _____ ft. x width _____ ft.

Number of fields _____ Number of collector plates/field _____

Spacing between collector plates _____ inches.

Maximum gas velocity _____ ft./sec. Minimum gas treatment time: _____ sec.

Total discharge electrode length _____ ft.

Number of discharge electrodes _____ Number of collecting electrode rappers _____

Rapper control ☐ Magnetic ☐ Pneumatic ☐ Other _____ Describe in detail

Operating Parameters

Inlet gas temperature (°F) _____

Outlet gas temperature (°F) _____

State pressure drop range (inches water gauge) across collector only _____

Describe the equipment

Volume of gas handled (ACFM) _____

Dust resistivity (ohm-cm). Will resistivity vary?

Power requirements

Number and size of Transformer Rectifier sets by electrical field

Field No.	No. of Sets	Each Transformer KVA	Each Rectifier KV Ave./Peak	Each Rectifier Ma DC

Current Density	Corona Power	Corona Power Density
_____ Micro amperes/ft^2.	_____ Watts/1000 ACFM	_____ Watts/ft^2.

Will a flue gas conditioning system be employed? If yes, describe it.

Does air cleaning device employ hopper heaters, hopper vibrators or hopper level detectors? If yes, describe.

Describe the warning/alarm system that protects against operation when unit is not meeting design requirements.

Emissions Data

Pollutant	Inlet	Outlet	Removal Efficiency (%)

Section C - Air Cleaning Device (Continued)

8. Adsorption Equipment

Equipment Specifications

Manufacturer	Type	Model No.

Design Inlet Volume (SCFM)	Adsorbent charge per adsorber vessel and number of adsorber vessels

Length of Mass Transfer Zone (MTZ), supplied by the manufacturer based upon laboratory data.

Adsorber diameter (ft.) and area ft^2.)	Adsorption bed depth (ft.)

Adsorbent information

Adsorbent type and physical properties.

Working capacity of adsorbent (%)	Heel percent or unrecoverable solvent weight % in the adsorbent after regeneration.

Operating Parameters

Inlet volume of gases handled _____ (ACFM) @ _____ °F

Adsorption time per adsorption bed	Breakthrough capacity: Lbs. of solvent / 100 lbs. of adsorbent = _____
Vapor pressure of solvents at the inlet temperature	Available steam in pounds to regenerate carbon adsorber (if applicable)

Percent relative saturation of each solvent at the inlet temperature

Attach any additional data including auxiliary equipment and operation details to thoroughly evaluate the control equipment.

Describe the warning/alarm system that protects against operation when unit is not meeting design requirements.

Emissions Data

Pollutant	Inlet	Outlet	Removal Efficiency (%)

Section C - Air Cleaning Device (Continued)

9. Absorption Equipment

Equipment Specifications

Manufacturer	Type	Model No.

Design Inlet Volume (SCFM)	Tower height (ft.) and inside diameter (ft.)
Packing type and size (if applicable)	Height of packing (ft.) (if applicable)
Number of trays (if applicable)	Number of bubble caps (if applicable)

Configuration

☐ Counter-current ☐ Cross flow ☐ Cocurrent flow

Describe pH and/or other monitoring and controls.

Absorbent information

Absorbent type and concentration.	Retention time (sec.)

Attach equilibrium data for absorption (if applicable)

Attach any additional information regarding auxiliary equipment, absorption solution supply system (once through or recirculating, system capacity, etc.) to thoroughly evaluate the control equipment. Indicate the flow rates for makeup, bleed and recirculation.

Operating Parameters

Volume of gas handled (ACFM)	Inlet temperature (°F)	Pressure drop (in. of water) and liquid flow rate. Describe the monitoring equipment.

State operating range for pH and/or absorbent concentration in scrubber liquid.

Describe the warning/alarm system that protects against operation when unit is not meeting design requirements.

Emissions Data

Pollutant	Inlet	Outlet	Removal Efficiency (%)

Section C - Air Cleaning Device (Continued)

10. ☐ **Selective Catalytic Reduction (SCR)**
☐ **Selective Non-Catalytic Reduction (SNCR)**
☐ **Non-Selective Catalytic Reduction (NSCR)**

Equipment Specifications

Manufacturer	Type	Model No.

Design Inlet Volume (SCFM)	Design operating temperature (°F)

Is the system equipped with process controls for proper mixing/control of the reducing agent in gas stream? If yes, give details.

Attach efficiency and other pertinent information (e.g., ammonia slip)

Operating Parameters

Volume of gases handled _____ (ACFM) @ _____ °F

Operating temperature range for the SCR/SNCR/NSCR system (°F) From _____°F To _____°F

Reducing agent used, if any	Oxidation catalyst used, if any

State expected range of usage rate and concentration.

Service life of catalyst	Ammonia slip (ppm)

Describe fully with a sketch giving locations of equipment, controls systems, important parameters and method of operation.

Describe the warning/alarm system that protects against operation when unit is not meeting design requirements.

Emissions Data

Pollutant	Inlet	Outlet	Removal Efficiency (%)

Section C - Air Cleaning Device (Continued)

11. Oxidizer/Afterburners

Equipment Specifications

Manufacturer	Type ☐ Thermal ☐ Catalytic	Model No.
Design Inlet Volume (SCFM)	Combustion chamber dimensions (length, cross-sectional area, effective chamber volume, etc.)	

Describe design features, which will ensure mixing in combustion chamber.

Describe method of preheating incoming gases (if applicable).	Describe heat exchanger system used for heat recovery (if applicable).

Catalyst used	Life of catalyst	Expected temperature rise across catalyst (°F)	Dimensions of bed (in inches). Height: _____ Diameter or Width: _____ Depth: _____

Are temperature sensing devices being provided to measure the temperature rise across the catalyst? ☐ Yes ☐ No
If yes, describe.

Describe any temperature sensing and/or recording devices (including specific location of temperature probe in a drawing or sketch.

Burner Information

Burner Manufacturer	Model No.	Fuel Used
Number and capacity of burners	Rated capacity (each)	Maximum capacity (each)

Describe the operation of the burner	Attach dimensioned diagram of afterburner

Operating Parameters

Inlet flow rate (ACFM) _____ @ _____°F	Outlet flow rate (ACFM) _____@ _____°F
State pressure drop range across catalytic bed (in. of water).	Describe the method adopted for regeneration or disposal of the used catalyst.

Describe the warning/alarm system that protects against operation when unit is not meeting design requirements.

Emissions Data

Pollutant	Inlet	Outlet	Removal Efficiency (%)

Section C - Air Cleaning Device (Continued)

12. Flares

Equipment Specifications

Manufacturer	Type ☐ Elevated flare ☐ Ground flare ☐ Other _____ Describe	Model No.
Design Volume (SCFM)	Dimensions of stack (ft.) Diameter _____ Height _____	
Residence time (sec.) and outlet temperature (°F)	Turn down ratio	Burner details

Describe the flare design (air/steam-assisted or nonassisted), essential auxiliaries including pilot flame monitor of proposed flare with a sketch.

Describe the operation of the flare's ignition system.

Describe the provisions to introduce auxiliary fuel to the flare.

Operation Parameters

Detailed composition of the waste gas	Heat content	Exit velocity
Maximum and average gas flow burned (ACFM)	Operating temperature (°F)	

Describe the warning/alarm system that protects against operation when unit is not meeting design requirements.

Emissions Data

Pollutant	Inlet	Outlet	Removal Efficiency (%)

Section C - Air Cleaning Device (Continued)

13. Other Control Equipment

Equipment Specifications

Manufacturer	Type	Model No.

Design Volume (SCFM)	Capacity

Describe pH monitoring and pH adjustment, if any.

Indicate the liquid flow rate and describe equipment provided to measure pressure drop and flow rate, if any.

Attach efficiency curve and/or other efficiency information.

Attach any additional date including auxiliary equipment and operation details to thoroughly evaluate the control equipment.

Operation Parameters

Volume of gas handled

_____ ACFM @ _____ °F _____ % Moisture

Describe fully giving important parameters and method of operation.

Describe the warning/alarm system that protects against operation when unit is not meeting design requirements.

Emissions Data

Pollutant	Inlet	Outlet	Removal Efficiency (%)

Section C - Air Cleaning Device (Continued)

14. Costs

Indicate cost associated with air cleaning device and its operating cost (attach documentation if necessary)

N/a

Device	Direct Cost	Indirect Cost	Total Cost	Annual Operating Cost

15. Miscellaneous

Describe in detail the removal, handling and disposal of dust, effluent, etc. from the air cleaning device including proposed methods of controlling fugitive emissions.

N/a

Attach manufacturer's performance guarantees and/or warranties for each of the major components of the control system (or complete system).

N/a

Attach the maintenance schedule for the control equipment and any part of the process equipment that if in disrepair would increase air contaminant emissions.

N/a

Section D - Additional Information

Will the construction, modification, etc. of the sources covered by this application increase emissions from other sources at the facility? If so, describe and quantify.

N/a

If this project is subject to any one of the following, attach a demonstration to show compliance with applicable standards.

a. Prevention of Significant Deterioration permit (PSD), 40 CFR 52? ☐ YES ☒ NO

b. New Source Review (NSR), 25 Pa. Code Chapter 127, Subchapter E? ☐ YES ☒ NO

c. New Source Performance Standards (NSPS), 40 CFR Part 60? ☐ YES ☒ NO
(If Yes, which subpart) _____

d. National Emissions Standards for Hazardous Air Pollutants (NESHAP), 40 CFR Part 61? (If Yes, which subpart) _____ ☐ YES ☒ NO

e. Maximum Achievable Control Technology (MACT) 40 CFR Part 63? ☐ YES ☒ NO
(If Yes, which part) _____

Attach a demonstration showing that the emissions from any new sources will be the minimum attainable through the use of best available technology (BAT).

N/a

Provide emission increases and decreases in allowable (or potential) and actual emissions within the last five (5) years for applicable PSD pollutant(s) if the facility is an existing major facility (PSD purposes).

N/a

Section D - Additional Information (Continued)

Indicate emission increases and decreases in tons per year (tpy), for volatile organic compounds (VOCs) and nitrogen oxides (NOx) for NSR applicability since January 1, 1991 or other applicable dates (see other applicable dates in instructions). The emissions increases include all emissions including stack, fugitive, material transfer, other emission generating activities, quantifiable emissions from exempted source(s), etc.

Permit number (if applicable)	Date issued	Indicate ***Yes*** or ***No*** if emission increases and decreases were used previously for netting	Source I. D. or Name	**VOCs**		**NOx**	
				Emission increases in potential to emit (tpy)	Creditable emission decreases in actual emissions (tpy)	Emission increases in potential to emit (tpy)	Creditable emission decreases in actual emissions (tpy)

If the source is subject to 25 Pa. Code Chapter 127, Subchapter E, New Source Review requirements,

a. Identify Emission Reduction Credits (ERCs) for emission offsets or demonstrate ability to obtain suitable ERCs for emission offsets. N/a

b. Provide a demonstration that the lowest achievable emission rate (LAER) control techniques will be employed (if applicable). N/a

c. Provide an analysis of alternate sites, sizes, production processes and environmental control techniques demonstrating that the benefits of the proposed source outweigh the environmental and social costs (if applicable). N/a

Attach calculations and any additional information necessary to thoroughly evaluate compliance with all the applicable requirements of Article III and applicable requirements of the Clean Air Act adopted thereunder The Department may request additional information to evaluate the application such as a standby plan, a plan for air pollution emergencies, air quality modeling, etc. See Appendix E

Section E - Compliance Demonstration

Note: Complete this section if source is not a Title V facility. Title V facilities must complete Addendum A.

Method of Compliance Type: Check all that apply and complete all appropriate sections below

☐ Monitoring ☐ Testing ☐ Reporting

☐ Recordkeeping ☐ Work Practice Standard

Monitoring:

a. Monitoring device type (Parameter, CEM, etc):

b. Monitoring device location:

c. Describe all parameters being monitored along with the frequency and duration of monitoring each parameter:

Testing:

a. Reference Test Method: Citation

b. Reference Test Method: Description

Recordkeeping:

Describe what parameters will be recorded and the recording frequency:

Reporting:

a. Describe what is to be reported and frequency of reporting:

b. Reporting start date: _____

Work Practice Standard:

Describe each:

Section F - Flue and Air Contaminant Emission

1. Estimated Atmospheric Emissions*

Pollutant	Maximum emission rate			Calculation/ Estimation Method
	specify units	lbs/hr	tons/yr.	
PM		1.92	8.41	
PM_{10}		1.82	7.99	
SO_x				
CO				
NO_x				
VOC				
Others: (e.g., HAPs)	-----	-----	-----	-----

* These emissions must be calculated based on the requested operating schedule and/or process rate e.g., operating schedule for maximum limits or restricted hours of operation and /or restricted throughput. Describe how the emission values were determined. Attach calculations.

2. Stack and Exhauster

Stack Designation/Number

List Source(s) or source ID exhausted to this stack:	% of flow exhausted to stack:

Stack height above grade (ft.) Grade elevation (ft.)	Stack diameter (ft) or Outlet duct area (sq. ft.)	f. Weather Cap ☐ YES ☐ NO

Distance of discharge to nearest property line (ft.). Locate on topographic map.

Does stack height meet Good Engineering Practice (GEP)?

If modeling (estimating) of ambient air quality impacts is needed, attach a site plan with buildings and their dimensions and other obstructions.

Location of stack** Latitude/Longitude Point of Origin	Latitude			Longitude		
	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds

Stack exhaust
Volume _____ ACFM Temperature _____ °F Moisture _____ %

Indicate on an attached sheet the location of sampling ports with respect to exhaust fan, breeching, etc. Give all necessary dimensions.

Exhauster (attach fan curves) _____ in. of water _____ HP @ _____RPM.

** If the data and collection method codes differ from those provided on the General Information Form-Authorization Application, provide the additional detail required by that form on a separate form.

Section G - Attachments

Number and list all attachments submitted with this application below:

- Appendix A contains the required PADEP application;
- Appendix B contains the compliance review form;
- Appendix C contains the required county and municipal notifications;
- Appendix D contains the permit redline;
- Appendix E contains the potential to emit calculations, and;
- Appendix F contains the application fee documentation.

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

INSTRUCTIONS FOR COMPLETING A PLAN APPROVAL APPLICATION

- See the detailed instruction package available for plan approval applications.
- Use only the pages for the air cleaning devices that pertain to this project and remove the remaining pages.
- If there is more than one air cleaning device of the same type, copy the page for air cleaning devices and provide the appropriate information for each device.
- If the proposed source is connected to more than one stack and exhauster, copy the page for the stack and exhauster and provide the appropriate information for each stack and exhauster.
- Use additional sheets of paper, if the space provided is not sufficient to provide detailed information required for review and approval.
- Information may be grouped into a single attachment for each section or air cleaning device.
- Number all pages of the application (Sections A through G) accordingly.
- Attach any and all information for source and air cleaning device(s) for a thorough evaluation of the extent and nature of emissions.
- Identify, number and list all attachments made to this application (e.g., Attachment #1-Section A).
- Submit three (3) sets of the completed application with all attachments to the appropriate Regional Office.

2700-PM-AQ0021 Rev. 6/2004

Submit in Triplicate

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

COMBUSTION UNIT

Application for Plan Approval to Construct, Modify or Reactivate an Air Contamination Source and/or Install an Air Cleaning Device

This application and the General Information Form (GIF) must be included in the submittal

Before completing this form, read the instructions provided with this form.

Section A - Facility Name, Checklist And Certification

Organization Name or Registered Fictitious Name/Facility Name: Constellation Energy Generation LLC/Crane Clean Energy Center, Unit 1

DEP Client ID# (If Known): _____

Type of Review required and Fees:

Source which is not subject to NSPS, NESHAPs, MACT, NSR and PSD: ..... $_____
Source requiring approval under NSPS or NESHAPS or both: ..... $_____
Source requiring approval under NSR: ..... $_____
Source requiring the establishment of a MACT limitation: ..... $_____
Source requiring approval under PSD: ..... $_____

Applicant's Checklist

Check the following list to make sure that all the required documents are included.

General Information Form (GIF)

Combustion Unit Plan Approval Application

Compliance Review Form or provide reference of most recently submitted compliance review form for facilities submitting on a periodic basis: _____

Proof of County and Municipal Notifications

Permit Fees

Addendum A: Source Applicable Requirements (only applicable to existing Title V facility)

Certification of Truth, Accuracy and Completeness by a Responsible Official

I, **Trevor Orth** , certify under penalty of law in 18 Pa. C. S. A. §4904, and 35 P.S. §4009(b) (2) that based on information and belief formed after reasonable inquiry, the statements and information in this application are true, accurate and complete.

(Signature): Trevor L. Orth Date: 10/30/2025

Name (Print): Trevor Orth Title: Plant Manager

OFFICIAL USE ONLY

Application No. _____ Unit ID _____ Site ID _____
DEP Client ID #: _____ APS. ID _____ AUTH. ID _____
Date Received _____ Date Assigned _____ Reviewed By _____
Date of 1st Technical Deficiency _____ Date of 2nd Technical Deficiency _____
Comments: _____

Section B - Combustion Unit Information

1. Combustion Units: ☐ Coal ☒ Oil ☐ Natural Gas Other: _____

Description: Station Blackout Fuel Oil Generator - Y4

Manufacturer	Model No.	Number of units
Fairbanks Morse	38TD8 1/8	1

Maximum heat input (Btu/hr)	Rated heat input (Btu/hr)	Typical heat input (Btu/hr)	Furnace Volume

Grate Area (if applicable)	Method of firing

Indicate how combustion air is supplied to boiler

Indicate the Steam Usage:

Mark and describe soot Cleaning Method:

i. Air Blown
ii. Steam Blown
iii. Brushed and Vacuumed
iv. Other _____
v. Frequency of Cleaning _____

Maximum Operating schedule

Hours/Day	Days/Week	Days/Year	Hours/Year
			100

Operational restrictions taken or requested, if any (e.g., bottlenecks or voluntary restrictions to limit potential to emit)

Capacity (specify units)

Per hour	Per day	Per week	Per year
230 gal			2300 gal

Typical Operating schedule

Hours/Day	Days/Week	Days/Year	Hours/Year
			100

Seasonal variations (Months): If variations exist, describe them.

Operating using primary fuel: _____ From _____ to _____
Operating using secondary fuel: _____ Form _____ to _____
Non-operating: From _____ to _____

2. Specify the primary, secondary and startup fuel. Furnish the details in item 3.

Section B - Combustion Unit Information (Continued)

3. Fuel

Type	Quantity Hourly	Annually	Sulfur	% Ash (Weight)	BTU Content
Oil Number 2	230 GPH @ 60°F	2.3 X 10^3 Gal	0.0015% by wt		137 MMBtu/Gal. & Lbs./Gal. @ 60 °F
Oil Number	GPH @ 60°F	X 10^3 Gal	% by wt		Btu/Gal. & Lbs./Gal. @ 60 °F
Oil Number	GPH @ 60°F	X 10^3 Gal	% by wt		Btu/Gal. & Lbs./Gal. @ 60 °F
Natural Gas	SCFH	X 10^6 Gal	gr/100 SCF		Btu/SCF
Gas (other)	SCFH	X 10^6 Gal	gr/100 SCF		Btu/SCF
Coal					
Other*					

***** Note: Describe and furnish information separately for other fuels in Addendum B.

4. Burner

Manufacturer	Model Number	Type of Atomization (Steam, air, press, mech., rotary cup)

Number of Burners	Maximum fuel firing rate (all burners)	Normal fuel firing rate

If oil, temperature and viscosity.

Maximum theoretical air requirement

Percent excess air 100% rating

Turndown ratio

Combustion modulation control (on/off, low-high fire, full automatic, manual). Describe.

Main burner flame ignition method (electric spark, auto gas pilot, hand-held torch, other). Describe.

5. Nitrogen Oxides (NO_x) control Options

Mark and describe the NO_x control options adopted

Low excess air (LEA)	Flue gas recirculation	Other. Limited Hours of Operation
Over fire air (OFA)	Burner out of service	
Low-NO_x burner	Reburning	
Low NO_x burners with over fire air	Flue gas treatment (SCR / SNCR)	

Section B - Combustion Unit Information (Continued)

6. Miscellaneous Information

Describe fly ash reinjection operation

N/a

Describe, in detail, the equipment provided to monitor and to record the source(s) operating conditions, which may affect emissions of air contaminants. Show that they are reasonable and adequate.

Describe each proposed modification to an existing source.

N/a - Source is being reactivated without modification.

Describe how emissions will be minimized especially during start up, shut down, combustion upsets and/or disruptions. Provide emission estimates for start up, shut down and upset conditions. Provide duration of start up and shut down.

Operation will be limited to 100 hours per year.

Describe in detail with a schematic diagram of the control options adopted for SO_2 (if applicable).

N/a

Anticipated milestones:

Expected commencement date of construction/reconstruction: _____
Expected completion date of construction/reconstruction: _____
Anticipated date(s) of start-up: Q2/Q3 of 2026

Section C - Air Cleaning Device

1. Precontrol Emissions*

Emission Rate

Pollutant	Maximum Emission Rate				Calculation/ Estimation Method
	Specify Units	Pounds/Hour	Hours/Year	Tons/Year	
PM		0.01	100	0.00	
PM_{10}		0.01	100	0.00	
SOx		0.01	100	0.00	
CO		30.15	100	1.51	
NO_x		139.97	100	7.00	
VOC		11.11	100	0.555	
Others: (e.g., HAPs)	-----	-----	-----		-----
See PTE Calcs					

* These emissions must be calculated based on the requested operating schedule and/or process rate, e.g., operating schedule for maximum limits or restricted hours of operation and/or restricted throughput. Describe how the emission values were determined. Attach calculations. See Appendix C

2. Gas Conditioning

Water quenching ☐ YES ☐ NO Water injection rate _____GPM

Radiation and convection cooling ☐ YES ☐ NO

Air dilution ☐ YES ☐ NO

If YES, _____ CFM

Forced draft ☐ YES ☐ NO

Water cooled duct work ☐ YES ☐ NO

Other _____

Inlet volume

_____ ACFM@ _____ °F

Outlet volume

_____ ACFM@ _____ °F _____ % Moisture

Describe the system in detail.

Section C - Air Cleaning Device (Continued)

3. Inertial and Cyclone Collectors

Manufacturer	Type	Model No.

Pressure Drop (in. of water)	Inlet Volume	Outlet Volume
	_____ ACFM @ _____ °F	_____ ACFM @ _____°F _____% Moisture

Number of Individual Cyclone(s)	Outlet Straightening Vanes Used? ☐ Yes ☐ No

Length of Cyclone(s) Cylinder (ft)	Diameter of Cyclone(s) Cylinder	Length of cyclone(s) cone (ft)

Inlet Diameter (ft) or Duct Area (ft^2) of Cyclone(s)	Outlet Diameter (ft) or Duct area (ft^2) of cyclone(s)

If a multi-clone or multi-tube unit is installed, will any of the individual cyclones or cyclone tubes be blanked or blocked off?

Describe any exhaust gas recirculation loop to be employed.

Attach particle size efficiency curve

Emission data

Inlet	Outlet	Removal Efficiency (%)

Section C - Air Cleaning Device (Continued)

4. Fabric Collector

Equipment Specifications

Manufacturer	Model No. ☐ Pressurized Design ☐ Suction Design	
Number of Compartments	Number of Filters Per Compartment	Is Baghouse Insulated? ☐ Yes ☐ No

Can each compartment be isolated for repairs and/or filter replacement? ☐ Yes ☐ No

Are temperature controls provided? (Describe in detail) ☐ Yes ☐ No

Dew point at maximum moisture _____ °F | Design inlet volume _____ SCFM

Type of Fabric

Material _____ ☐ Felted ☐ Membrane

Weight _____ oz/sq.yd ☐ Woven ☐ Others: List: _____

Thickness _____ in ☐ Felted-Woven

Fabric permeability (clean) @ ½" water-Δ P _____ CFM/sq.ft.

Filter dimensions _____ Diameter/Width _____

Effective area per filter _____ | Maximum operating temperature (°F) _____

Effective air to cloth ratio Minimum _____ Maximum _____

Drawing of Fabric Filter

A sketch of the fabric filter showing all access doors, catwalks, ladders and exhaust ductwork, location of each pressure and temperature indicator should be attached.

Operation and Cleaning

Volume of gases handled _____ ACFM _____ °F	Pressure drop across collector (in. of water). Describe the equipment to be used to monitor the pressure drop.

Type of filter cleaning

☐ Manual Cleaning ☐ Bag Collapse ☐ Reverse Air Jets

☐ Mechanical Shakers ☐ Sonic Cleaning ☐ Other: _____

☐ Pneumatic Shakers ☐ Reverse Air Flow

If compressed air is required for collector operation, describe the equipment with the compressor to provide dry air free from oil.

Cleaning Initiated By

☐ Timer Frequency if timer actuated _____

☐ Expected pressure drop range _____ in. of water ☐ Other Specify _____

Does air cleaning device employ hopper heaters, hopper vibrators or hopper level detectors? If yes, describe.

Describe the warning/alarm system that protects against operation when the unit is not meeting design requirements.

Emissions Data

Pollutant	Inlet	Outlet	Removal Efficiency (%)

Section C - Air Cleaning Device (Continued)

5. Wet Collection Equipment: _____

Equipment Specifications

Manufacturer	Type	Model No.

Design Inlet Volume (SCFM)	Relative Particulate/Gas Velocity (ejector scrubbers only)

Describe the internal features (e.g., variable throat, gas/liquid diffusion plates, spray nozzles, liquid redistributors, bed limiters, etc.).

Describe pH monitoring and pH adjustment systems, if applicable.

Describe mist eliminator or separator (type, configuration, backflush capability, frequency).

Attach particulate size efficiency curve.

Operating Parameters

Inlet volume of gases handled _____ (ACFM) @_____°F	Outlet volume of gases handled _____ (ACFM) @_____ °F _____% Moisture

Liquid flow rates. Describe equipment provided to measure liquid flow rates to scrubber (e.g., quenching section, recirculating solution, makeup water, bleed flow, etc.)

Describe scrubber liquid supply system (amount of make-up and recirculating liquid, capacity of recirculating liquid system, etc).

State pressure drop range (in water) across scrubber (e.g., venturi throat, packed bed, etc.) only. Describe the equipment provide to measure the pressure drop. Do not include duct or de-mister losses.

Describe the warning/alarm system that protects against operation when unit is not meeting design requirements.

Emissions Data

Pollutant	Inlet	Outlet	Removal Efficiency (%)

Section C - Air Cleaning Device (Continued)

6. Electrostatic Precipitator

Equipment specifications

Manufacturer	Model No.	☐ Wet ☐ Dry ☐ Single-Stage ☐ Two-Stage

Gas distribution grids ☐ YES ☐ NO	Design inlet volume (SCFM) _____ Maximum operating temperature (°F) _____

Total collecting surface area _____ sq. ft. Collector plates size length _____ ft. x width _____ ft.

Number of fields _____ Number of collector plates/field _____. Spacing between collector plates _____inches.

Maximum gas velocity _____ ft/sec. Minimum gas treatment time: _____ sec.

Total discharge electrode length _____ ft.

Number of discharge electrodes _____ Number collecting electrode rappers _____

Rapper control ☐ Magnetic ☐ Pneumatic ☐ Other _____

Describe in detail

Operating parameters

Inlet gas temperature (°F) _____ Outlet gas temperature (°F) _____	State pressure drop range (water gauge) across collector only. Describe the equipment.
Volume of gas handled (ACFM) _____	Dust resistivity (ohm-cm). Will resistivity vary?

Power requirements

Number and size of Transformer Rectifier sets by electrical field

Field No.	No. of Sets	Each Transformer KVA	Each Rectifier	
			KV Ave./Peak	MaDC

Current density	Corona power	Corona power density
_____ Micro amperes/ft^2	_____ Watts/1000 ACFM	_____ Watts/ft^2

Will a flue gas conditioning system be employed? If yes, describe it.

Does air cleaning device employ hopper heaters, hopper vibrators or hopper level detectors? If yes, describe.

Describe the warning/alarm system that protects against operation when unit is not meeting design requirements.

Emissions data

Pollutant	Inlet	Outlet	Removal Efficiency (%)

Section C - Air Cleaning Device (Continued)

7. Absorption Equipment: _____

Equipment specifications

Manufacturer	Type	Model No

Design inlet volume (SCFM)	Tower height (ft) and inside diameter (ft)
Packing type and size (if applicable)	Height of packing (ft) (if applicable)
Number of trays (if applicable)	Number of bubble caps (if applicable)

Configuration: ☐ Counter-current ☐ Cross flow ☐ Cocurrent flow

Describe pH and/or other monitoring and controls

Absorbent information

Absorbent type and concentration	Sorbent injection rate	Retention time (sec)

Attach equilibrium data for absorption (If applicable).

Attach any additional information regarding auxiliary equipment, reagent (slurry mix) supply system (once through or recirculating, system capacity, etc) to thoroughly evaluate the control equipment. Indicate the flow rates for makeup, bleed and recirculation.

Operating parameters

Volume of gas handled (ACFM)	Inlet temperature (°F)	Pressure drop (in of water) and liquid flow rate. Describe the equipment.

State operating range for pH and/or absorbent concentration in scrubber liquid.

Describe the warning/alarm system that protects against operation when unit is not meeting design requirements.

Emissions data

Pollutant	Inlet	Outlet	Removal Efficiency (%)

Section C - Air Cleaning Device (Continued)

8. ☐ **SELECTIVE CATALYTIC REDUCTION (SCR)**

☐ **SELECTIVE NON-CATALYTIC REDUCTION (SNCR)**

☐ **NON-SELECTIVE CATALYTIC REDUCTION (NSCR)**

Equipment specifications

Manufacturer	Type	Model No

Design inlet volume (SCFM)	Design operating temperature (°F)

Is the system equipped with process controls for proper mixing/control of the reducing agent in gas stream? If yes, give details.

Attach efficiency and other pertinent information (e.g., Ammonia, urea slip).

Operating parameters

Volume of gases handled (ACFM) _____ @ _____ (°F)

Operating temperature range for the SCR/SNCR/NSCR system (°F) From To

Reducing agent used, if any.	Oxidation catalyst used, if any.

State expected range of usage rate and concentration.

Service life of catalyst	Ammonia slip (ppm)

Describe fully with a sketch giving locations of equipment, controls system, important parameters and method of operation.

Describe the warning/alarm system that protects against operation when unit is not meeting design requirements.

Emissions data

Pollutant	Inlet	Outlet	Removal Efficiency (%)

Section C - Air Cleaning Device (Continued)

9. Other Control Equipment: _____

Equipment specifications

Manufacturer	Type	Model No

Design inlet volume (SCFM)	Capacity

Describe pH monitoring and pH adjustment, if any.

Indicate the liquid flow rate and describe equipment provided to measure pressure drop and flow rate, if any.

Attach efficiency curve and/ or other efficiency information.

Attach any additional data including auxiliary equipment and operation details to thoroughly evaluate the control equipment.

Operating parameters

Volume of gas handled

_____ @ _____ °F _____ % Moisture

Describe, in detail, important parameters and method of operation.

Describe the warning/alarm system that protects against operation when unit is not meeting design requirements.

Emissions data

Pollutant	Inlet	Outlet	Removal Efficiency (%)

Section C - Air Cleaning Device (Continued)

10. Costs

Indicate cost associated with air cleaning device and its operating cost (attach documentation if necessary)

Device	Direct Cost	Indirect Cost	Total Cost	Operating Cost
N/a				

11 MISCELLANEOUS

Describe in detail the removal, handling and disposal of dust, effluent, etc. from the air cleaning device including proposed methods of controlling fugitive emissions.

N/a

Attach manufacturer's performance guarantees and/or warranties for each of the major components of the control system (or complete system).

N/a

Attach the maintenance schedule for the control equipment and any part of the process equipment that, if in disrepair, would increase air contaminant emissions.

N/a

Section D - Additional Information

Will the construction, modification, etc. of the sources covered by this application increase emissions from other sources at the facility? If so, describe and quantify.
See Narrative

If this project is subject to any one of the following, attach a demonstration to show compliance with applicable standards

a. Prevention of Significant Deterioration permit (PSD), 40 CFR Part 52? ☐ YES ☒ NO

b. New Source Review, 25 Pa. Code Chapter 127, Subchapter E? ☐ YES ☒ NO

c. New Source Performance Standards, 40 CFR Part 60? ☐ YES ☐ NO
(If Yes, which subpart) _____

d. National Emissions Standards for Hazardous Air Pollutants (NESHAPS), 40 CFR Part 61? ☒ YES ☐ NO
If Yes, which subpart) 40 CFR 63 subpart ZZZZ

e. Maximum Achievable Control Technology (MACT), 40 CFR Part 63? ☐ YES ☐ NO
(If Yes, which subpart) _____

Attach a demonstration showing that the emissions from any new source will be the minimum attainable through the use of best available technology (BAT).

N/a

Provide emission increases and decreases in allowable (or potential) and actual emissions within the last 5 years for applicable PSD pollutant(s) if the facility is an existing major facility (for PSD purposes)

N/a

Section D - Additional Information (Continued)

Indicate emission increases and decreases in tons per year (tpy), for volatile organic compounds (VOCs) and nitrogen oxides (NOx) for NSR applicability since January 1, 1991 or other applicable dates (See other applicable date in instructions). The emissions increases include all emissions including stack, fugitive, material transfer, other emission generating activities, quantifiable emissions from the exempted source(s), etc.

Permit number (if applicable)	Date issued	Indicate ***Yes*** or ***No*** if emission increases and decreases were used previously for netting	Source I.D. or Name	**VOC**s		**NOx**	
				Emission increases in potential to emit (tpy)	Creditable emission decreases in actual emissions (tpy)	Emission increases in potential to emit (tpy)	Creditable emission decreases in actual emissions (tpy)

If the source is subject to 25 Pa. Code Chapter 127, Subchapter E, New Source Review requirements,

a. Identify Emission Reduction Credits (ERCs) for emission offsets or demonstrate ability to obtain suitable ERCs for emission offsets.

b. Provide a demonstration that the lowest achievable emission rate (LAER) control techniques will be implemented (if applicable).

c. Provide an analysis of alternate sites, sizes, production processes and environmental control techniques demonstrating that the benefits of the proposed source outweigh the environmental and social costs (if applicable).

Attach calculations and any additional information necessary to thoroughly evaluate compliance with all the applicable requirements of 25 Pa. Code Article III and applicable requirements of the Clean Air Act and regulations adopted there under. The Department may request additional information to evaluate the application such as a stand by plan, a plan for air pollution emergencies, air quality modeling, etc.

Section E - Compliance Demonstration

Note: Complete this section if the facility is not a-Title V facility. Title V facilities must complete Addendum A.

Method of Compliance Type: Check all that apply and complete all appropriate sections below.

☐ Monitoring ☐ Testing ☐ Reporting
☐ Recordkeeping ☒ Work Practice Standard

Monitoring:

a. Monitoring device type (stack test, CEM etc.):

b. Monitoring device location:

c. Describe all parameters being monitored along with the frequency and duration of monitoring each parameter:

Testing:

a. Reference Test Method Citation:

b. Reference Test Method Description:

Recordkeeping:

Describe the parameters that will be recorded and the recording frequency:

Reporting:

a. Describe the type of information to be reported and the reporting frequency:

b. Reporting start date:

Work Practice Standard: Describe each

Limiting hours of Operation to 100 hours per year

Section F - Flue and Air Contaminant Emission

1. Estimated Maximum Emissions*

Pollutant	Maximum emission rate			Calculation/ Estimation Method
	specify units	lbs/hr	tons/yr.	
PM		0.00	0.00	
PM_{10}		0.00	0.00	
SO_x		0.01	0.00	
CO		30.15	1.51	
NO_x		139.97	7.00	
VOC		11.11	0.555	
Others: (e.g., HAPs)	-----	-----	-----	-----
See PTE Calcs				

* These emissions must be calculated based on the requested operating schedule and/or process rate e.g., operating schedule for maximum limits or restricted hours of operation and /or restricted throughput. Describe how the emission values were determined. Attach calculations.

2. Stack and Exhauster

Stack Designation/Number S4 from SOOP 22-05029

List Source(s) or source ID exhausted to this stack:	% of flow exhausted to stack:
Y4	

Stack height above grade (ft.) 28 ft Grade elevation (ft.) 302 ft	Stack diameter (ft) or Outlet duct area (sq. ft.) 1 ft	Weather Cap ☐ YES ☒ NO

Distance of discharge to nearest property line (ft.). Locate on topographic map.

590.98

Does stack height meet Good Engineering Practice (GEP)?

Yes

If modeling (estimating) of ambient air quality impacts is needed, attach a site plan with buildings and their dimensions and other obstructions.

Location of Stack** Latitude/Longitude Point of Origin	Latitude			Longitude		
	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
	40	9	13.89	76	43	31.70

Stack Exhaust

Volume _____ ACFM Temperature _____ °F Moisture _____%

Exhauster (attach fan curves) _____ in. of water _____ HP @ _____RPM.

** If the datum and collection method information and codes differ from those provided on the General Information Form - Authorization Application, provide the additional required by that form on a separate sheet.

Section G - Attachments

Number and list all attachments submitted with this application below:

- Appendix A contains the required PADEP application;
- Appendix B contains the compliance review form;
- Appendix C contains the required county and municipal notifications;
- Appendix D contains the permit redline;
- Appendix E contains the potential to emit calculations, and;
- Appendix F contains the application fee documentation.

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

INSTRUCTIONS FOR COMPLETING A PLAN APPROVAL APPLICATION

- See the detailed instruction package available for plan approval applications.
- Use only the pages for the air cleaning devices that pertain to this project and remove the remaining pages.
- If there is more than one air cleaning device of the same type, copy the page for air cleaning devices and provide the appropriate information for each device.
- If the proposed source is connected to more than one stack and exhauster, copy the page for the stack and exhauster and provide the appropriate information for each stack and exhauster.
- Use additional sheets of paper, if the space provided is not sufficient to provide detailed information required for review and approval.
- Information may be grouped into a single attachment for each section or air cleaning device.
- Number all pages of the application (Sections A through G) accordingly.
- Attach any and all information for source and air cleaning device(s) for a thorough evaluation of the extent and nature of emissions.
- Identify, number and list all attachments made to this application (e.g., Attachment #1-Section A).
- Submit three (3) sets of the completed application with all attachments to the appropriate Regional Office.

2700-PM-AQ0021 Rev. 6/2004

Submit in Triplicate

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

COMBUSTION UNIT

Application for Plan Approval to Construct, Modify or Reactivate an Air Contamination Source and/or Install an Air Cleaning Device

This application and the General Information Form (GIF) must be included in the submittal

Before completing this form, read the instructions provided with this form.

Section A - Facility Name, Checklist And Certification

Organization Name or Registered Fictitious Name/Facility Name: Constellation Energy Generation LLC/Crane Clean Energy Center, Unit 1

DEP Client ID# (If Known): _____

Type of Review required and Fees:

Source which is not subject to NSPS, NESHAPs, MACT, NSR and PSD: ..... $_____
Source requiring approval under NSPS or NESHAPS or both: ..... $_____
Source requiring approval under NSR: ..... $_____
Source requiring the establishment of a MACT limitation: ..... $_____
Source requiring approval under PSD: ..... $_____

Applicant's Checklist

Check the following list to make sure that all the required documents are included.

General Information Form (GIF)

Combustion Unit Plan Approval Application

Compliance Review Form or provide reference of most recently submitted compliance review form for facilities submitting on a periodic basis: _____

Proof of County and Municipal Notifications

Permit Fees

Addendum A: Source Applicable Requirements (only applicable to existing Title V facility)

Certification of Truth, Accuracy and Completeness by a Responsible Official

I, **Trevor Orth**, certify under penalty of law in 18 Pa. C. S. A. §4904, and 35 P.S. §4009(b) (2) that based on information and belief formed after reasonable inquiry, the statements and information in this application are true, accurate and complete.

(Signature): Trevor R. Orth Date: 10/30/2025

Name (Print): Trevor Orth Title: Plant Manager

OFFICIAL USE ONLY

Application No. _____ Unit ID _____ Site ID _____
DEP Client ID #: _____ APS. ID _____ AUTH. ID _____
Date Received _____ Date Assigned _____ Reviewed By _____
Date of 1st Technical Deficiency _____ Date of 2nd Technical Deficiency _____
Comments: _____

Section B - Combustion Unit Information

1. Combustion Units: ☐ Coal ☒ Oil ☐ Natural Gas Other: _____

Description: Emergency Diesel Generator 1 and 2 - FX1A and FX1B

Manufacturer	Model No.	Number of units	
Cummins		2	
Maximum heat input (Btu/hr)	Rated heat input (Btu/hr)	Typical heat input (Btu/hr)	Furnace Volume
755 HP			
Grate Area (if applicable)		Method of firing	

Indicate how combustion air is supplied to boiler

Indicate the Steam Usage:

Mark and describe soot Cleaning Method:

i. Air Blown
ii. Steam Blown
iii. Brushed and Vacuumed
iv. Other _____
v. Frequency of Cleaning _____

Maximum Operating schedule

Hours/Day	Days/Week	Days/Year	Hours/Year
			100 per unit

Operational restrictions taken or requested, if any (e.g., bottlenecks or voluntary restrictions to limit potential to emit)

Capacity (specify units)

Per hour	Per day	Per week	Per year
35 gal per unit			3500 gal per unit

Typical Operating schedule

Hours/Day	Days/Week	Days/Year	Hours/Year
			100 per unit

Seasonal variations (Months): If variations exist, describe them.

Operating using primary fuel: _____ From _____ to _____
Operating using secondary fuel: _____ Form _____ to _____
Non-operating: From _____ to _____

2. Specify the primary, secondary and startup fuel. Furnish the details in item 3.
This source will only run on Diesel Fuel.

Section B - Combustion Unit Information (Continued)

3. Fuel

Type	Quantity Hourly	Annually	Sulfur	% Ash (Weight)	BTU Content
Oil Number 2	35 GPH @ 60°F	3.5 X 10^3 Gal	0.0015% by wt		137 MMBtu/Gal. & Lbs./Gal. @ 60 °F
Oil Number	GPH @ 60°F	X 10^3 Gal	% by wt		Btu/Gal. & Lbs./Gal. @ 60 °F
Oil Number	GPH @ 60°F	X 10^3 Gal	% by wt		Btu/Gal. & Lbs./Gal. @ 60 °F
Natural Gas	SCFH	X 10^6 Gal	gr/100 SCF		Btu/SCF
Gas (other)	SCFH	X 10^6 Gal	gr/100 SCF		Btu/SCF
Coal					
Other*					

***** Note: Describe and furnish information separately for other fuels in Addendum B.

4. Burner

Manufacturer	Model Number	Type of Atomization (Steam, air, press, mech., rotary cup)

Number of Burners	Maximum fuel firing rate (all burners)	Normal fuel firing rate

If oil, temperature and viscosity.

Maximum theoretical air requirement

Percent excess air 100% rating

Turndown ratio

Combustion modulation control (on/off, low-high fire, full automatic, manual). Describe.

Main burner flame ignition method (electric spark, auto gas pilot, hand-held torch, other). Describe.

5. Nitrogen Oxides (NO_x) control Options

Mark and describe the NO_x control options adopted

Low excess air (LEA)	Flue gas recirculation	Other._____
Over fire air (OFA)	Burner out of service	
Low-NO_x burner	Reburning	
Low NO_x burners with over fire air	Flue gas treatment (SCR / SNCR)	

Section B - Combustion Unit Information (Continued)

6. Miscellaneous Information

Describe fly ash reinjection operation
N/a

Describe, in detail, the equipment provided to monitor and to record the source(s) operating conditions, which may affect emissions of air contaminants. Show that they are reasonable and adequate.

Describe each proposed modification to an existing source.

N/a - These sources were deactivated and are now being reactivated without modification.

Describe how emissions will be minimized especially during start up, shut down, combustion upsets and/or disruptions. Provide emission estimates for start up, shut down and upset conditions. Provide duration of start up and shut down.

These sources will be limited to 100 hours of operation each.

Describe in detail with a schematic diagram of the control options adopted for SO_2 (if applicable).
N/a

Anticipated milestones:

Expected commencement date of construction/reconstruction: _____
Expected completion date of construction/reconstruction: _____
Anticipated date(s) of start-up: Q2/Q3 of 2026

Section C - Air Cleaning Device

1. Precontrol Emissions*

Emission Rate

Pollutant	Maximum Emission Rate				Calculation/ Estimation Method
	Specify Units	Pounds/Hour	Hours/Year	Tons/Year	
PM		0.25	100	0.01	
PM_{10}		0.25	100	0.01	
SOx		0.01	100	0.00	
CO		4.34	100	0.22	
NO_x		6.95	100	0.35	
VOC		0.99	100	0.05	
Others: (e.g., HAPs)	-----	-----	-----		-----
See PTE Calcs					

* These emissions must be calculated based on the requested operating schedule and/or process rate, e.g., operating schedule for maximum limits or restricted hours of operation and/or restricted throughput. Describe how the emission values were determined. Attach calculations. See Appendix C

2. Gas Conditioning

Water quenching ☐ YES ☐ NO Water injection rate _____GPM

Radiation and convection cooling ☐ YES ☐ NO

Air dilution ☐ YES ☐ NO
If YES, _____ CFM

Forced draft ☐ YES ☐ NO

Water cooled duct work ☐ YES ☐ NO

Other _____

Inlet volume
_____ ACFM@ _____ °F

Outlet volume
_____ ACFM@ _____ °F _____ % Moisture

Describe the system in detail.

Section C - Air Cleaning Device (Continued)

3. Inertial and Cyclone Collectors

Manufacturer	Type	Model No.

Pressure Drop (in. of water)	Inlet Volume	Outlet Volume
	_____ ACFM @ _____ °F	_____ ACFM @ _____°F _____% Moisture

Number of Individual Cyclone(s)	Outlet Straightening Vanes Used? ☐ Yes ☐ No

Length of Cyclone(s) Cylinder (ft)	Diameter of Cyclone(s) Cylinder	Length of cyclone(s) cone (ft)

Inlet Diameter (ft) or Duct Area (ft^2) of Cyclone(s)	Outlet Diameter (ft) or Duct area (ft^2) of cyclone(s)

If a multi-clone or multi-tube unit is installed, will any of the individual cyclones or cyclone tubes be blanked or blocked off?

Describe any exhaust gas recirculation loop to be employed.

Attach particle size efficiency curve

Emission data

Inlet	Outlet	Removal Efficiency (%)

Section C - Air Cleaning Device (Continued)

4. Fabric Collector

Equipment Specifications

Manufacturer	Model No. ☐ Pressurized Design ☐ Suction Design	
Number of Compartments	Number of Filters Per Compartment	Is Baghouse Insulated? ☐ Yes ☐ No

Can each compartment be isolated for repairs and/or filter replacement? ☐ Yes ☐ No

Are temperature controls provided? (Describe in detail) ☐ Yes ☐ No

Dew point at maximum moisture _____ °F | Design inlet volume _____ SCFM

Type of Fabric

Material _____ ☐ Felted ☐ Membrane

Weight _____ oz/sq.yd ☐ Woven ☐ Others: List: _____

Thickness _____ in ☐ Felted-Woven

Fabric permeability (clean) @ ½" water-Δ P _____ CFM/sq.ft.

Filter dimensions _____ Diameter/Width _____

Effective area per filter _____ | Maximum operating temperature (°F) _____

Effective air to cloth ratio Minimum _____ Maximum _____

Drawing of Fabric Filter

A sketch of the fabric filter showing all access doors, catwalks, ladders and exhaust ductwork, location of each pressure and temperature indicator should be attached.

Operation and Cleaning

Volume of gases handled _____ ACFM _____ °F	Pressure drop across collector (in. of water). Describe the equipment to be used to monitor the pressure drop.

Type of filter cleaning

☐ Manual Cleaning ☐ Bag Collapse ☐ Reverse Air Jets

☐ Mechanical Shakers ☐ Sonic Cleaning ☐ Other: _____

☐ Pneumatic Shakers ☐ Reverse Air Flow

If compressed air is required for collector operation, describe the equipment with the compressor to provide dry air free from oil.

Cleaning Initiated By

☐ Timer Frequency if timer actuated _____

☐ Expected pressure drop range _____ in. of water ☐ Other Specify _____

Does air cleaning device employ hopper heaters, hopper vibrators or hopper level detectors? If yes, describe.

Describe the warning/alarm system that protects against operation when the unit is not meeting design requirements.

Emissions Data

Pollutant	Inlet	Outlet	Removal Efficiency (%)

Section C - Air Cleaning Device (Continued)

5. Wet Collection Equipment: _____

Equipment Specifications

Manufacturer	Type	Model No.

Design Inlet Volume (SCFM)	Relative Particulate/Gas Velocity (ejector scrubbers only)

Describe the internal features (e.g., variable throat, gas/liquid diffusion plates, spray nozzles, liquid redistributors, bed limiters, etc.).

Describe pH monitoring and pH adjustment systems, if applicable.

Describe mist eliminator or separator (type, configuration, backflush capability, frequency).

Attach particulate size efficiency curve.

Operating Parameters

Inlet volume of gases handled _____ (ACFM) @_____°F	Outlet volume of gases handled _____ (ACFM) @_____ °F _____% Moisture

Liquid flow rates. Describe equipment provided to measure liquid flow rates to scrubber (e.g., quenching section, recirculating solution, makeup water, bleed flow, etc.)

Describe scrubber liquid supply system (amount of make-up and recirculating liquid, capacity of recirculating liquid system, etc).

State pressure drop range (in water) across scrubber (e.g., venturi throat, packed bed, etc.) only. Describe the equipment provide to measure the pressure drop. Do not include duct or de-mister losses.

Describe the warning/alarm system that protects against operation when unit is not meeting design requirements.

Emissions Data

Pollutant	Inlet	Outlet	Removal Efficiency (%)

Section C - Air Cleaning Device (Continued)

6. Electrostatic Precipitator

Equipment specifications

Manufacturer	Model No.	☐ Wet ☐ Dry ☐ Single-Stage ☐ Two-Stage

Gas distribution grids ☐ YES ☐ NO

Design inlet volume (SCFM) _____

Maximum operating temperature (°F) _____

Total collecting surface area _____ sq. ft. Collector plates size length _____ ft. x width _____ ft.

Number of fields _____ Number of collector plates/field _____. Spacing between collector plates _____inches.

Maximum gas velocity _____ ft/sec. Minimum gas treatment time: _____ sec.

Total discharge electrode length _____ ft.

Number of discharge electrodes _____ Number collecting electrode rappers _____

Rapper control ☐ Magnetic ☐ Pneumatic ☐ Other _____

Describe in detail

Operating parameters

Inlet gas temperature (°F) _____ Outlet gas temperature (°F) _____	State pressure drop range (water gauge) across collector only. Describe the equipment.
Volume of gas handled (ACFM) _____	Dust resistivity (ohm-cm). Will resistivity vary?

Power requirements

Number and size of Transformer Rectifier sets by electrical field

Field No.	No. of Sets	Each Transformer KVA	Each Rectifier	
			KV Ave./Peak	MaDC

Current density	Corona power	Corona power density
_____ Micro amperes/ft^2	_____ Watts/1000 ACFM	_____ Watts/ft^2

Will a flue gas conditioning system be employed? If yes, describe it.

Does air cleaning device employ hopper heaters, hopper vibrators or hopper level detectors? If yes, describe.

Describe the warning/alarm system that protects against operation when unit is not meeting design requirements.

Emissions data

Pollutant	Inlet	Outlet	Removal Efficiency (%)

Section C - Air Cleaning Device (Continued)

7. Absorption Equipment: _____

Equipment specifications

Manufacturer	Type	Model No

Design inlet volume (SCFM)	Tower height (ft) and inside diameter (ft)
Packing type and size (if applicable)	Height of packing (ft) (if applicable)
Number of trays (if applicable)	Number of bubble caps (if applicable)

Configuration: ☐ Counter-current ☐ Cross flow ☐ Cocurrent flow

Describe pH and/or other monitoring and controls

Absorbent information

Absorbent type and concentration	Sorbent injection rate	Retention time (sec)

Attach equilibrium data for absorption (If applicable).

Attach any additional information regarding auxiliary equipment, reagent (slurry mix) supply system (once through or recirculating, system capacity, etc) to thoroughly evaluate the control equipment. Indicate the flow rates for makeup, bleed and recirculation.

Operating parameters

Volume of gas handled (ACFM)	Inlet temperature (°F)	Pressure drop (in of water) and liquid flow rate. Describe the equipment.

State operating range for pH and/or absorbent concentration in scrubber liquid.

Describe the warning/alarm system that protects against operation when unit is not meeting design requirements.

Emissions data

Pollutant	Inlet	Outlet	Removal Efficiency (%)

Section C - Air Cleaning Device (Continued)

8. ☐ **SELECTIVE CATALYTIC REDUCTION (SCR)**

☐ **SELECTIVE NON-CATALYTIC REDUCTION (SNCR)**

☐ **NON-SELECTIVE CATALYTIC REDUCTION (NSCR)**

Equipment specifications

Manufacturer	Type	Model No

Design inlet volume (SCFM)	Design operating temperature (°F)

Is the system equipped with process controls for proper mixing/control of the reducing agent in gas stream? If yes, give details.

Attach efficiency and other pertinent information (e.g., Ammonia, urea slip).

Operating parameters

Volume of gases handled (ACFM) _____ @ _____ (°F)

Operating temperature range for the SCR/SNCR/NSCR system (°F) From To

Reducing agent used, if any.	Oxidation catalyst used, if any.

State expected range of usage rate and concentration.

Service life of catalyst	Ammonia slip (ppm)

Describe fully with a sketch giving locations of equipment, controls system, important parameters and method of operation.

Describe the warning/alarm system that protects against operation when unit is not meeting design requirements.

Emissions data

Pollutant	Inlet	Outlet	Removal Efficiency (%)

Section C - Air Cleaning Device (Continued)

9. Other Control Equipment: _____

Equipment specifications

Manufacturer	Type	Model No

Design inlet volume (SCFM)	Capacity

Describe pH monitoring and pH adjustment, if any.

Indicate the liquid flow rate and describe equipment provided to measure pressure drop and flow rate, if any.

Attach efficiency curve and/ or other efficiency information.

Attach any additional data including auxiliary equipment and operation details to thoroughly evaluate the control equipment.

Operating parameters

Volume of gas handled

_____ @ _____ °F _____ % Moisture

Describe, in detail, important parameters and method of operation.

Describe the warning/alarm system that protects against operation when unit is not meeting design requirements.

Emissions data

Pollutant	Inlet	Outlet	Removal Efficiency (%)

Section C - Air Cleaning Device (Continued)

10. Costs

Indicate cost associated with air cleaning device and its operating cost (attach documentation if necessary)

Device	Direct Cost	Indirect Cost	Total Cost	Operating Cost
N/a				

11 MISCELLANEOUS

Describe in detail the removal, handling and disposal of dust, effluent, etc. from the air cleaning device including proposed methods of controlling fugitive emissions.

N/a

Attach manufacturer's performance guarantees and/or warranties for each of the major components of the control system (or complete system).

N/a

Attach the maintenance schedule for the control equipment and any part of the process equipment that, if in disrepair, would increase air contaminant emissions.

N/a

Section D - Additional Information

Will the construction, modification, etc. of the sources covered by this application increase emissions from other sources at the facility? If so, describe and quantify.
See Narrative

If this project is subject to any one of the following, attach a demonstration to show compliance with applicable standards

a. Prevention of Significant Deterioration permit (PSD), 40 CFR Part 52? ☐ YES ☒ NO

b. New Source Review, 25 Pa. Code Chapter 127, Subchapter E? ☐ YES ☒ NO

c. New Source Performance Standards, 40 CFR Part 60? ☒ YES ☐ NO
(If Yes, which subpart) Subpart IIII

d. National Emissions Standards for Hazardous Air Pollutants (NESHAPS), 40 CFR Part 61? ☐ YES ☒ NO
If Yes, which subpart) _____

e. Maximum Achievable Control Technology (MACT), 40 CFR Part 63? ☐ YES ☒ NO
(If Yes, which subpart) _____

Attach a demonstration showing that the emissions from any new source will be the minimum attainable through the use of best available technology (BAT).

N/a

Provide emission increases and decreases in allowable (or potential) and actual emissions within the last 5 years for applicable PSD pollutant(s) if the facility is an existing major facility (for PSD purposes)

N/a

Section D - Additional Information (Continued)

Indicate emission increases and decreases in tons per year (tpy), for volatile organic compounds (VOCs) and nitrogen oxides (NOx) for NSR applicability since January 1, 1991 or other applicable dates (See other applicable date in instructions). The emissions increases include all emissions including stack, fugitive, material transfer, other emission generating activities, quantifiable emissions from the exempted source(s), etc.

Permit number (if applicable)	Date issued	Indicate ***Yes*** or ***No*** if emission increases and decreases were used previously for netting	Source I.D. or Name	**VOC**s		**NOx**	
				Emission increases in potential to emit (tpy)	Creditable emission decreases in actual emissions (tpy)	Emission increases in potential to emit (tpy)	Creditable emission decreases in actual emissions (tpy)

If the source is subject to 25 Pa. Code Chapter 127, Subchapter E, New Source Review requirements,

a. Identify Emission Reduction Credits (ERCs) for emission offsets or demonstrate ability to obtain suitable ERCs for emission offsets.

b. Provide a demonstration that the lowest achievable emission rate (LAER) control techniques will be implemented (if applicable).

c. Provide an analysis of alternate sites, sizes, production processes and environmental control techniques demonstrating that the benefits of the proposed source outweigh the environmental and social costs (if applicable).

Attach calculations and any additional information necessary to thoroughly evaluate compliance with all the applicable requirements of 25 Pa. Code Article III and applicable requirements of the Clean Air Act and regulations adopted there under. The Department may request additional information to evaluate the application such as a stand by plan, a plan for air pollution emergencies, air quality modeling, etc.

Section E - Compliance Demonstration

Note: Complete this section if the facility is not a-Title V facility. Title V facilities must complete Addendum A.

Method of Compliance Type: Check all that apply and complete all appropriate sections below.

☐ Monitoring ☐ Testing ☐ Reporting
☐ Recordkeeping ☒ Work Practice Standard

Monitoring:

a. Monitoring device type (stack test, CEM etc.):

b. Monitoring device location:

c. Describe all parameters being monitored along with the frequency and duration of monitoring each parameter:

Testing:

a. Reference Test Method Citation:

b. Reference Test Method Description:

Recordkeeping:

Describe the parameters that will be recorded and the recording frequency:

Reporting:

a. Describe the type of information to be reported and the reporting frequency:

b. Reporting start date:

Work Practice Standard: Describe each

Limiting hours of Operation to 100 hours per year

Section F - Flue and Air Contaminant Emission

1. Estimated Maximum Emissions*

Pollutant	Maximum emission rate			Calculation/ Estimation Method
	specify units	lbs/hr	tons/yr.	
PM		0.25	0.01	
PM_{10}		0.25	0.01	
SO_x		0.01	0.00	
CO		4.34	0.22	
NO_x		6.95	0.35	
VOC		0.99	0.05	
Others: (e.g., HAPs)	-----	-----	-----	-----
See PTE Calcs				

* These emissions must be calculated based on the requested operating schedule and/or process rate e.g., operating schedule for maximum limits or restricted hours of operation and /or restricted throughput. Describe how the emission values were determined. Attach calculations. See Appendix E for PTE calcs. The emissions rates above were calculated per each generator.

2. Stack and Exhauster

Stack Designation/Number S16 from SOOP 22-05029

List Source(s) or source ID exhausted to this stack:	% of flow exhausted to stack:
F1XA and FX1B to S16	

Stack height above grade (ft.) 35 ft Grade elevation (ft.) 302 ft	Stack diameter (ft) or Outlet duct area (sq. ft.) 0.7 ft	Weather Cap ☐ YES ☐ NO

Distance of discharge to nearest property line (ft.). Locate on topographic map.

Does stack height meet Good Engineering Practice (GEP)?

Yes

If modeling (estimating) of ambient air quality impacts is needed, attach a site plan with buildings and their dimensions and other obstructions.

Location of Stack** Latitude/Longitude Point of Origin	Latitude			Longitude		
	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds

Stack Exhaust

Volume 3625 ACFM Temperature 901 °F Moisture 5 %

Exhauster (attach fan curves) _____ in. of water _____ HP @ _____ RPM.

** If the datum and collection method information and codes differ from those provided on the General Information Form - Authorization Application, provide the additional required by that form on a separate sheet.

Section G - Attachments

Number and list all attachments submitted with this application below:

- Appendix A contains the required PADEP application;
- Appendix B contains the compliance review form;
- Appendix C contains the required county and municipal notifications;
- Appendix D contains the permit redline;
- Appendix E contains the potential to emit calculations, and;
- Appendix F contains the application fee documentation.

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

INSTRUCTIONS FOR COMPLETING A PLAN APPROVAL APPLICATION

- See the detailed instruction package available for plan approval applications.
- Use only the pages for the air cleaning devices that pertain to this project and remove the remaining pages.
- If there is more than one air cleaning device of the same type, copy the page for air cleaning devices and provide the appropriate information for each device.
- If the proposed source is connected to more than one stack and exhauster, copy the page for the stack and exhauster and provide the appropriate information for each stack and exhauster.
- Use additional sheets of paper, if the space provided is not sufficient to provide detailed information required for review and approval.
- Information may be grouped into a single attachment for each section or air cleaning device.
- Number all pages of the application (Sections A through G) accordingly.
- Attach any and all information for source and air cleaning device(s) for a thorough evaluation of the extent and nature of emissions.
- Identify, number and list all attachments made to this application (e.g., Attachment #1-Section A).
- Submit three (3) sets of the completed application with all attachments to the appropriate Regional Office.

2700-PM-AQ0021 Rev. 6/2004

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

Submit in Triplicate

COMBUSTION UNIT

Application for Plan Approval to Construct, Modify or Reactivate an Air Contamination Source and/or Install an Air Cleaning Device

This application and the General Information Form (GIF) must be included in the submittal

Before completing this form, read the instructions provided with this form.

Section A - Facility Name, Checklist And Certification

Organization Name or Registered Fictitious Name/Facility Name: Constellation Energy Generation LLC/Crane Clean Energy Center, Unit 1

DEP Client ID# (If Known): _____

Type of Review required and Fees:

Source which is not subject to NSPS, NESHAPs, MACT, NSR and PSD: ..... $_____
Source requiring approval under NSPS or NESHAPS or both: ..... $_____
Source requiring approval under NSR: ..... $_____
Source requiring the establishment of a MACT limitation: ..... $_____
Source requiring approval under PSD: ..... $_____

Applicant's Checklist

Check the following list to make sure that all the required documents are included.

General Information Form (GIF)

Combustion Unit Plan Approval Application

Compliance Review Form or provide reference of most recently submitted compliance review form for facilities submitting on a periodic basis: _____

Proof of County and Municipal Notifications

Permit Fees

Addendum A: Source Applicable Requirements (only applicable to existing Title V facility)

Certification of Truth, Accuracy and Completeness by a Responsible Official

I, **Trevor Orth**, certify under penalty of law in 18 Pa. C. S. A. §4904, and 35 P.S. §4009(b) (2) that based on information and belief formed after reasonable inquiry, the statements and information in this application are true, accurate and complete.

(Signature): Trevor L. Orth Date: 10/30/2025

Name (Print): Trevor Orth Title: Plant Manager

OFFICIAL USE ONLY

Application No. _____ Unit ID _____ Site ID _____
DEP Client ID #: _____ APS. ID _____ AUTH. ID _____
Date Received _____ Date Assigned _____ Reviewed By _____
Date of 1st Technical Deficiency _____ Date of 2nd Technical Deficiency _____
Comments: _____

Section B - Combustion Unit Information

1. Combustion Units: ☐ Coal ☒ Oil ☐ Natural Gas Other: _____

Description: Fire Pump Diesel 1 and 3 – FSP1 and FSP3

Manufacturer	Model No.	Number of units
Cummins		2

Maximum heat input (Btu/hr)	Rated heat input (Btu/hr)	Typical heat input (Btu/hr)	Furnace Volume

Grate Area (if applicable)	Method of firing

Indicate how combustion air is supplied to boiler

Indicate the Steam Usage:

Mark and describe soot Cleaning Method:

i. Air Blown
ii. Steam Blown
iii. Brushed and Vacuumed
iv. Other _____
v. Frequency of Cleaning _____

Maximum Operating schedule

Hours/Day	Days/Week	Days/Year	Hours/Year
			100 per unit

Operational restrictions taken or requested, if any (e.g., bottlenecks or voluntary restrictions to limit potential to emit)

Capacity (specify units)

Per hour	Per day	Per week	Per year
19 gal per unit			1900 gal per unit

Typical Operating schedule

Hours/Day	Days/Week	Days/Year	Hours/Year
			100 per unit

Seasonal variations (Months): If variations exist, describe them.

Operating using primary fuel: _____ From _____ to _____
Operating using secondary fuel: _____ Form _____ to _____
Non-operating: From _____ to _____

2. Specify the primary, secondary and startup fuel. Furnish the details in item 3.
This source will only run on Diesel Fuel.

Section B - Combustion Unit Information (Continued)

3. Fuel

Type	Quantity Hourly	Annually	Sulfur	% Ash (Weight)	BTU Content
Oil Number 2	19 GPH @ 60°F	1.9 X 10^3 Gal	0.0015% by wt		137 MMBtu/Gal. & Lbs./Gal. @ 60 °F
Oil Number	GPH @ 60°F	X 10^3 Gal	% by wt		Btu/Gal. & Lbs./Gal. @ 60 °F
Oil Number	GPH @ 60°F	X 10^3 Gal	% by wt		Btu/Gal. & Lbs./Gal. @ 60 °F
Natural Gas	SCFH	X 10^6 Gal	gr/100 SCF		Btu/SCF
Gas (other)	SCFH	X 10^6 Gal	gr/100 SCF		Btu/SCF
Coal					
Other*					

***** Note: Describe and furnish information separately for other fuels in Addendum B.

4. Burner

Manufacturer	Model Number	Type of Atomization (Steam, air, press, mech., rotary cup)

Number of Burners	Maximum fuel firing rate (all burners)	Normal fuel firing rate

If oil, temperature and viscosity.

Maximum theoretical air requirement

Percent excess air 100% rating

Turndown ratio

Combustion modulation control (on/off, low-high fire, full automatic, manual). Describe.

Main burner flame ignition method (electric spark, auto gas pilot, hand-held torch, other). Describe.

5. Nitrogen Oxides (NO_x) control Options

Mark and describe the NO_x control options adopted

Low excess air (LEA)	Flue gas recirculation	Other.Operational Limits
Over fire air (OFA)	Burner out of service	
Low-NO_x burner	Reburning	
Low NO_x burners with over fire air	Flue gas treatment (SCR / SNCR)	

Section B - Combustion Unit Information (Continued)

6. Miscellaneous Information

Describe fly ash reinjection operation
N/a

Describe, in detail, the equipment provided to monitor and to record the source(s) operating conditions, which may affect emissions of air contaminants. Show that they are reasonable and adequate.

These generators will be limited to 100 hours per year of operation each.

Describe each proposed modification to an existing source.

N/a - These sources were previously permitted. They were deactivated and are now being reactivated without modification.

Describe how emissions will be minimized especially during start up, shut down, combustion upsets and/or disruptions. Provide emission estimates for start up, shut down and upset conditions. Provide duration of start up and shut down.

Describe in detail with a schematic diagram of the control options adopted for SO_2 (if applicable).
N/a

Anticipated milestones:

Expected commencement date of construction/reconstruction: _____
Expected completion date of construction/reconstruction: _____
Anticipated date(s) of start-up: Q2/Q3 of 2026

Section C - Air Cleaning Device

1. Precontrol Emissions*

Emission Rate

Pollutant	Maximum Emission Rate				Calculation/ Estimation Method
	Specify Units	Pounds/Hour	Hours/Year	Tons/Year	
PM		0.00	100	0.00	
PM_{10}		0.00	100	0.00	
SOx		0.00	100	0.00	
CO		2.49	100	0.12	
NO_x		11.56	100	0.58	
VOC		0.92	100	0.05	
Others: (e.g., HAPs)	-----	-----	-----		-----
See PTE Calcs					

* These emissions must be calculated based on the requested operating schedule and/or process rate, e.g., operating schedule for maximum limits or restricted hours of operation and/or restricted throughput. Describe how the emission values were determined. Attach calculations. See Appendix E. The emission rates above were calculated per each generator.

2. Gas Conditioning

Water quenching ☐ YES ☐ NO Water injection rate _____GPM

Radiation and convection cooling ☐ YES ☐ NO	Air dilution ☐ YES ☐ NO If YES, _____ CFM
Forced draft ☐ YES ☐ NO	Water cooled duct work ☐ YES ☐ NO

Other _____

Inlet volume _____ ACFM@ _____ °F	Outlet volume _____ ACFM@ _____ °F _____ % Moisture

Describe the system in detail.

Section C - Air Cleaning Device (Continued)

3. Inertial and Cyclone Collectors

Manufacturer	Type	Model No.

Pressure Drop (in. of water)	Inlet Volume	Outlet Volume
	_____ ACFM @ _____ °F	_____ ACFM @ _____°F _____% Moisture

Number of Individual Cyclone(s)	Outlet Straightening Vanes Used? ☐ Yes ☐ No

Length of Cyclone(s) Cylinder (ft)	Diameter of Cyclone(s) Cylinder	Length of cyclone(s) cone (ft)

Inlet Diameter (ft) or Duct Area (ft^2) of Cyclone(s)	Outlet Diameter (ft) or Duct area (ft^2) of cyclone(s)

If a multi-clone or multi-tube unit is installed, will any of the individual cyclones or cyclone tubes be blanked or blocked off?

Describe any exhaust gas recirculation loop to be employed.

Attach particle size efficiency curve

Emission data

Inlet	Outlet	Removal Efficiency (%)

Section C - Air Cleaning Device (Continued)

4. Fabric Collector

Equipment Specifications

Manufacturer	Model No. ☐ Pressurized Design ☐ Suction Design	
Number of Compartments	Number of Filters Per Compartment	Is Baghouse Insulated? ☐ Yes ☐ No

Can each compartment be isolated for repairs and/or filter replacement? ☐ Yes ☐ No

Are temperature controls provided? (Describe in detail) ☐ Yes ☐ No

Dew point at maximum moisture _____ °F | Design inlet volume _____ SCFM

Type of Fabric

Material _____ ☐ Felted ☐ Membrane

Weight _____ oz/sq.yd ☐ Woven ☐ Others: List: _____

Thickness _____ in ☐ Felted-Woven

Fabric permeability (clean) @ ½" water-Δ P _____ CFM/sq.ft.

Filter dimensions _____ Diameter/Width _____

Effective area per filter _____ | Maximum operating temperature (°F) _____

Effective air to cloth ratio Minimum _____ Maximum _____

Drawing of Fabric Filter

A sketch of the fabric filter showing all access doors, catwalks, ladders and exhaust ductwork, location of each pressure and temperature indicator should be attached.

Operation and Cleaning

Volume of gases handled _____ ACFM _____ °F	Pressure drop across collector (in. of water). Describe the equipment to be used to monitor the pressure drop.

Type of filter cleaning

☐ Manual Cleaning ☐ Bag Collapse ☐ Reverse Air Jets

☐ Mechanical Shakers ☐ Sonic Cleaning ☐ Other: _____

☐ Pneumatic Shakers ☐ Reverse Air Flow

If compressed air is required for collector operation, describe the equipment with the compressor to provide dry air free from oil.

Cleaning Initiated By

☐ Timer Frequency if timer actuated _____

☐ Expected pressure drop range _____ in. of water ☐ Other Specify _____

Does air cleaning device employ hopper heaters, hopper vibrators or hopper level detectors? If yes, describe.

Describe the warning/alarm system that protects against operation when the unit is not meeting design requirements.

Emissions Data

Pollutant	Inlet	Outlet	Removal Efficiency (%)

Section C - Air Cleaning Device (Continued)

5. Wet Collection Equipment: _____

Equipment Specifications

Manufacturer	Type	Model No.

Design Inlet Volume (SCFM)	Relative Particulate/Gas Velocity (ejector scrubbers only)

Describe the internal features (e.g., variable throat, gas/liquid diffusion plates, spray nozzles, liquid redistributors, bed limiters, etc.).

Describe pH monitoring and pH adjustment systems, if applicable.

Describe mist eliminator or separator (type, configuration, backflush capability, frequency).

Attach particulate size efficiency curve.

Operating Parameters

Inlet volume of gases handled _____ (ACFM) @_____°F	Outlet volume of gases handled _____ (ACFM) @_____ °F _____% Moisture

Liquid flow rates. Describe equipment provided to measure liquid flow rates to scrubber (e.g., quenching section, recirculating solution, makeup water, bleed flow, etc.)

Describe scrubber liquid supply system (amount of make-up and recirculating liquid, capacity of recirculating liquid system, etc).

State pressure drop range (in water) across scrubber (e.g., venturi throat, packed bed, etc.) only. Describe the equipment provide to measure the pressure drop. Do not include duct or de-mister losses.

Describe the warning/alarm system that protects against operation when unit is not meeting design requirements.

Emissions Data

Pollutant	Inlet	Outlet	Removal Efficiency (%)

Section C - Air Cleaning Device (Continued)

6. Electrostatic Precipitator

Equipment specifications

Manufacturer	Model No.	☐ Wet ☐ Dry ☐ Single-Stage ☐ Two-Stage

Gas distribution grids ☐ YES ☐ NO

Design inlet volume (SCFM) _____

Maximum operating temperature (°F) _____

Total collecting surface area _____ sq. ft. Collector plates size length _____ ft. x width _____ ft.

Number of fields _____ Number of collector plates/field _____. Spacing between collector plates _____inches.

Maximum gas velocity _____ ft/sec. Minimum gas treatment time: _____ sec.

Total discharge electrode length _____ ft.

Number of discharge electrodes _____ Number collecting electrode rappers _____

Rapper control ☐ Magnetic ☐ Pneumatic ☐ Other _____

Describe in detail

Operating parameters

Inlet gas temperature (°F) _____ Outlet gas temperature (°F) _____	State pressure drop range (water gauge) across collector only. Describe the equipment.
Volume of gas handled (ACFM) _____	Dust resistivity (ohm-cm). Will resistivity vary?

Power requirements

Number and size of Transformer Rectifier sets by electrical field

Field No.	No. of Sets	Each Transformer KVA	Each Rectifier	
			KV Ave./Peak	MaDC

Current density	Corona power	Corona power density
_____ Micro amperes/ft^2	_____ Watts/1000 ACFM	_____ Watts/ft^2

Will a flue gas conditioning system be employed? If yes, describe it.

Does air cleaning device employ hopper heaters, hopper vibrators or hopper level detectors? If yes, describe.

Describe the warning/alarm system that protects against operation when unit is not meeting design requirements.

Emissions data

Pollutant	Inlet	Outlet	Removal Efficiency (%)

Section C - Air Cleaning Device (Continued)

7. Absorption Equipment: _____

Equipment specifications

Manufacturer	Type	Model No

Design inlet volume (SCFM)	Tower height (ft) and inside diameter (ft)
Packing type and size (if applicable)	Height of packing (ft) (if applicable)
Number of trays (if applicable)	Number of bubble caps (if applicable)

Configuration: ☐ Counter-current ☐ Cross flow ☐ Cocurrent flow

Describe pH and/or other monitoring and controls

Absorbent information

Absorbent type and concentration	Sorbent injection rate	Retention time (sec)

Attach equilibrium data for absorption (If applicable).

Attach any additional information regarding auxiliary equipment, reagent (slurry mix) supply system (once through or recirculating, system capacity, etc) to thoroughly evaluate the control equipment. Indicate the flow rates for makeup, bleed and recirculation.

Operating parameters

Volume of gas handled (ACFM)	Inlet temperature (°F)	Pressure drop (in of water) and liquid flow rate. Describe the equipment.

State operating range for pH and/or absorbent concentration in scrubber liquid.

Describe the warning/alarm system that protects against operation when unit is not meeting design requirements.

Emissions data

Pollutant	Inlet	Outlet	Removal Efficiency (%)

Section C - Air Cleaning Device (Continued)

8. ☐ **SELECTIVE CATALYTIC REDUCTION (SCR)**

☐ **SELECTIVE NON-CATALYTIC REDUCTION (SNCR)**

☐ **NON-SELECTIVE CATALYTIC REDUCTION (NSCR)**

Equipment specifications

Manufacturer	Type	Model No

Design inlet volume (SCFM)	Design operating temperature (°F)

Is the system equipped with process controls for proper mixing/control of the reducing agent in gas stream? If yes, give details.

Attach efficiency and other pertinent information (e.g., Ammonia, urea slip).

Operating parameters

Volume of gases handled (ACFM) _____ @ _____ (°F)

Operating temperature range for the SCR/SNCR/NSCR system (°F) From To

Reducing agent used, if any.	Oxidation catalyst used, if any.

State expected range of usage rate and concentration.

Service life of catalyst	Ammonia slip (ppm)

Describe fully with a sketch giving locations of equipment, controls system, important parameters and method of operation.

Describe the warning/alarm system that protects against operation when unit is not meeting design requirements.

Emissions data

Pollutant	Inlet	Outlet	Removal Efficiency (%)

Section C - Air Cleaning Device (Continued)

9. Other Control Equipment: _____

Equipment specifications

Manufacturer	Type	Model No

Design inlet volume (SCFM)	Capacity

Describe pH monitoring and pH adjustment, if any.

Indicate the liquid flow rate and describe equipment provided to measure pressure drop and flow rate, if any.

Attach efficiency curve and/ or other efficiency information.

Attach any additional data including auxiliary equipment and operation details to thoroughly evaluate the control equipment.

Operating parameters

Volume of gas handled

_____ @ _____ °F _____ % Moisture

Describe, in detail, important parameters and method of operation.

Describe the warning/alarm system that protects against operation when unit is not meeting design requirements.

Emissions data

Pollutant	Inlet	Outlet	Removal Efficiency (%)

Section C - Air Cleaning Device (Continued)

10. Costs

Indicate cost associated with air cleaning device and its operating cost (attach documentation if necessary)

Device	Direct Cost	Indirect Cost	Total Cost	Operating Cost
N/a				

11 MISCELLANEOUS

Describe in detail the removal, handling and disposal of dust, effluent, etc. from the air cleaning device including proposed methods of controlling fugitive emissions.

N/a

Attach manufacturer's performance guarantees and/or warranties for each of the major components of the control system (or complete system).

N/a

Attach the maintenance schedule for the control equipment and any part of the process equipment that, if in disrepair, would increase air contaminant emissions.

N/a

Section D - Additional Information

Will the construction, modification, etc. of the sources covered by this application increase emissions from other sources at the facility? If so, describe and quantify.
See Narrative

If this project is subject to any one of the following, attach a demonstration to show compliance with applicable standards

a. Prevention of Significant Deterioration permit (PSD), 40 CFR Part 52? ☐ YES ☒ NO

b. New Source Review, 25 Pa. Code Chapter 127, Subchapter E? ☐ YES ☒ NO

c. New Source Performance Standards, 40 CFR Part 60? ☐ YES ☒ NO
(If Yes, which subpart) _____

d. National Emissions Standards for Hazardous Air Pollutants (NESHAPS), 40 CFR Part 61? ☐ YES ☒ NO
If Yes, which subpart) _____

e. Maximum Achievable Control Technology (MACT), 40 CFR Part 63? ☒ YES ☐ NO
(If Yes, which subpart) Subpart ZZZZ

Attach a demonstration showing that the emissions from any new source will be the minimum attainable through the use of best available technology (BAT).

N/a

Provide emission increases and decreases in allowable (or potential) and actual emissions within the last 5 years for applicable PSD pollutant(s) if the facility is an existing major facility (for PSD purposes)

N/a

Section D - Additional Information (Continued)

Indicate emission increases and decreases in tons per year (tpy), for volatile organic compounds (VOCs) and nitrogen oxides (NOx) for NSR applicability since January 1, 1991 or other applicable dates (See other applicable date in instructions). The emissions increases include all emissions including stack, fugitive, material transfer, other emission generating activities, quantifiable emissions from the exempted source(s), etc.

Permit number (if applicable)	Date issued	Indicate ***Yes*** or ***No*** if emission increases and decreases were used previously for netting	Source I.D. or Name	**VOC**s		**NOx**	
				Emission increases in potential to emit (tpy)	Creditable emission decreases in actual emissions (tpy)	Emission increases in potential to emit (tpy)	Creditable emission decreases in actual emissions (tpy)

If the source is subject to 25 Pa. Code Chapter 127, Subchapter E, New Source Review requirements,

a. Identify Emission Reduction Credits (ERCs) for emission offsets or demonstrate ability to obtain suitable ERCs for emission offsets. N/a

b. Provide a demonstration that the lowest achievable emission rate (LAER) control techniques will be implemented (if applicable). N/a

c. Provide an analysis of alternate sites, sizes, production processes and environmental control techniques demonstrating that the benefits of the proposed source outweigh the environmental and social costs (if applicable).
N/a

Attach calculations and any additional information necessary to thoroughly evaluate compliance with all the applicable requirements of 25 Pa. Code Article III and applicable requirements of the Clean Air Act and regulations adopted there under. The Department may request additional information to evaluate the application such as a stand by plan, a plan for air pollution emergencies, air quality modeling, etc.

See Appendix E

Section E - Compliance Demonstration

Note: Complete this section if the facility is not a-Title V facility. Title V facilities must complete Addendum A.

Method of Compliance Type: Check all that apply and complete all appropriate sections below.

☐ Monitoring ☐ Testing ☐ Reporting
☐ Recordkeeping ☒ Work Practice Standard

Monitoring:

a. Monitoring device type (stack test, CEM etc.):

b. Monitoring device location:

c. Describe all parameters being monitored along with the frequency and duration of monitoring each parameter:

Testing:

a. Reference Test Method Citation:

b. Reference Test Method Description:

Recordkeeping:

Describe the parameters that will be recorded and the recording frequency:

Reporting:

a. Describe the type of information to be reported and the reporting frequency:

b. Reporting start date:

Work Practice Standard: Describe each

Limiting hours of Operation to 100 hours per year

Section F - Flue and Air Contaminant Emission

1. Estimated Maximum Emissions*

Pollutant	Maximum emission rate			Calculation/ Estimation Method
	specify units	lbs/hr	tons/yr.	
PM		0.00	0.00	
PM_{10}		0.00	0.00	
SO_x		0.00	0.00	
CO		2.49	0.12	
NO_x		11.56	0.58	
VOC		0.92	0.05	
Others: (e.g., HAPs)	-----	-----	-----	-----
See PTE Calcs				

* These emissions must be calculated based on the requested operating schedule and/or process rate e.g., operating schedule for maximum limits or restricted hours of operation and /or restricted throughput. Describe how the emission values were determined. Attach calculations.

2. Stack and Exhauster

Stack Designation/Number S14 and S15 from SOOP 22-05029

List Source(s) or source ID exhausted to this stack:	% of flow exhausted to stack:
FSP1 to S14; FSP3 to S15	

Stack height above grade (ft.) 8 ft Grade elevation (ft.) 302 ft	Stack diameter (ft) or Outlet duct area (sq. ft.) Approximately 1 ft	Weather Cap ☐ YES ☐ NO

Distance of discharge to nearest property line (ft.). Locate on topographic map.

Does stack height meet Good Engineering Practice (GEP)?
Yes

If modeling (estimating) of ambient air quality impacts is needed, attach a site plan with buildings and their dimensions and other obstructions.

Location of Stack** Latitude/Longitude Point of Origin	Latitude			Longitude		
	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds

Stack Exhaust

Volume 15 ACFM Temperature 250 °F Moisture _____%

Exhauster (attach fan curves) _____ in. of water _____ HP @ _____RPM.

** If the datum and collection method information and codes differ from those provided on the General Information Form - Authorization Application, provide the additional required by that form on a separate sheet.

Section G - Attachments

Number and list all attachments submitted with this application below:

- Appendix A contains the required PADEP application;
- Appendix B contains the compliance review form;
- Appendix C contains the required county and municipal notifications;
- Appendix D contains the permit redline;
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- Appendix F contains the application fee documentation.

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

INSTRUCTIONS FOR COMPLETING A PLAN APPROVAL APPLICATION

- See the detailed instruction package available for plan approval applications.
- Use only the pages for the air cleaning devices that pertain to this project and remove the remaining pages.
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- If the proposed source is connected to more than one stack and exhauster, copy the page for the stack and exhauster and provide the appropriate information for each stack and exhauster.
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- Information may be grouped into a single attachment for each section or air cleaning device.
- Number all pages of the application (Sections A through G) accordingly.
- Attach any and all information for source and air cleaning device(s) for a thorough evaluation of the extent and nature of emissions.
- Identify, number and list all attachments made to this application (e.g., Attachment #1-Section A).
- Submit three (3) sets of the completed application with all attachments to the appropriate Regional Office.

2700-PM-AQ0021 Rev. 6/2004

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

Submit in Triplicate

COMBUSTION UNIT

Application for Plan Approval to Construct, Modify or Reactivate an Air Contamination Source and/or Install an Air Cleaning Device

This application and the General Information Form (GIF) must be included in the submittal

Before completing this form, read the instructions provided with this form.

Section A - Facility Name, Checklist And Certification

Organization Name or Registered Fictitious Name/Facility Name: Constellation Energy Generation LLC/Crane Clean Energy Center, Unit 1

DEP Client ID# (If Known): _____

Type of Review required and Fees:

Source which is not subject to NSPS, NESHAPs, MACT, NSR and PSD: ..... $_____
Source requiring approval under NSPS or NESHAPS or both: ..... $_____
Source requiring approval under NSR: ..... $_____
Source requiring the establishment of a MACT limitation: ..... $_____
Source requiring approval under PSD: ..... $_____

Applicant's Checklist

Check the following list to make sure that all the required documents are included.

General Information Form (GIF)

Combustion Unit Plan Approval Application

Compliance Review Form or provide reference of most recently submitted compliance review form for facilities submitting on a periodic basis: _____

Proof of County and Municipal Notifications

Permit Fees

Addendum A: Source Applicable Requirements (only applicable to existing Title V facility)

Certification of Truth, Accuracy and Completeness by a Responsible Official

I, **Trevor Orth**, certify under penalty of law in 18 Pa. C. S. A. §4904, and 35 P.S. §4009(b) (2) that based on information and belief formed after reasonable inquiry, the statements and information in this application are true, accurate and complete.

(Signature): Trevor L. Orth Date: 10/30/2025

Name (Print): Trevor Orth Title: Plant Manager

OFFICIAL USE ONLY

Application No. _____ Unit ID _____ Site ID _____
DEP Client ID #: _____ APS. ID _____ AUTH. ID _____
Date Received _____ Date Assigned _____ Reviewed By _____
Date of 1st Technical Deficiency _____ Date of 2nd Technical Deficiency _____
Comments: _____

Section B - Combustion Unit Information

1. Combustion Units: ☐ Coal ☒ Oil ☐ Natural Gas Other: _____

Description: Emergency Fuel Oil Generator 1A and 1B - Y1A and Y1B

Manufacturer	Model No.	Number of units
Fairbanks Morse	38TD8 1/8	2

Maximum heat input (Btu/hr)	Rated heat input (Btu/hr)	Typical heat input (Btu/hr)	Furnace Volume

Grate Area (if applicable)	Method of firing

Indicate how combustion air is supplied to boiler

Indicate the Steam Usage:

Mark and describe soot Cleaning Method:

i. Air Blown
ii. Steam Blown
iii. Brushed and Vacuumed
iv. Other _____
v. Frequency of Cleaning _____

Maximum Operating schedule

Hours/Day	Days/Week	Days/Year	Hours/Year
			100 per unit

Operational restrictions taken or requested, if any (e.g., bottlenecks or voluntary restrictions to limit potential to emit)

Capacity (specify units)

Per hour	Per day	Per week	Per year
230 gal per unit			23000 gal per unit

Typical Operating schedule

Hours/Day	Days/Week	Days/Year	Hours/Year
			100 per unit

Seasonal variations (Months): If variations exist, describe them.

Operating using primary fuel: _____ From _____ to _____
Operating using secondary fuel: _____ Form _____ to _____
Non-operating: From _____ to _____

2. Specify the primary, secondary and startup fuel. Furnish the details in item 3.
This source will only run on Diesel Fuel.

Section B - Combustion Unit Information (Continued)

3. Fuel

Type	Quantity Hourly	Annually	Sulfur	% Ash (Weight)	BTU Content
Oil Number 2	230 GPH @ 60°F	23 X 10^3 Gal	0.0015% by wt		137 MMBtu/Gal. & Lbs./Gal. @ 60 °F
Oil Number	GPH @ 60°F	X 10^3 Gal	% by wt		Btu/Gal. & Lbs./Gal. @ 60 °F
Oil Number	GPH @ 60°F	X 10^3 Gal	% by wt		Btu/Gal. & Lbs./Gal. @ 60 °F
Natural Gas	SCFH	X 10^6 Gal	gr/100 SCF		Btu/SCF
Gas (other)	SCFH	X 10^6 Gal	gr/100 SCF		Btu/SCF
Coal					
Other*					

***** Note: Describe and furnish information separately for other fuels in Addendum B.

4. Burner

Manufacturer	Model Number	Type of Atomization (Steam, air, press, mech., rotary cup)

Number of Burners	Maximum fuel firing rate (all burners)	Normal fuel firing rate

If oil, temperature and viscosity.

Maximum theoretical air requirement

Percent excess air 100% rating

Turndown ratio

Combustion modulation control (on/off, low-high fire, full automatic, manual). Describe.

Main burner flame ignition method (electric spark, auto gas pilot, hand-held torch, other). Describe.

5. Nitrogen Oxides (NO_x) control Options

Mark and describe the NO_x control options adopted

Low excess air (LEA)	Flue gas recirculation	Other.Limiting hours of operation
Over fire air (OFA)	Burner out of service	
Low-NO_x burner	Reburning	
Low NO_x burners with over fire air	Flue gas treatment (SCR / SNCR)	

Section B - Combustion Unit Information (Continued)

6. Miscellaneous Information

Describe fly ash reinjection operation
N/a

Describe, in detail, the equipment provided to monitor and to record the source(s) operating conditions, which may affect emissions of air contaminants. Show that they are reasonable and adequate.

Describe each proposed modification to an existing source.

N/a - These sources were deactivated and are now being reactivated without modification.

Describe how emissions will be minimized especially during start up, shut down, combustion upsets and/or disruptions. Provide emission estimates for start up, shut down and upset conditions. Provide duration of start up and shut down.

These sources will be limited to 100 hours of operation each.

Describe in detail with a schematic diagram of the control options adopted for SO_2 (if applicable).
N/a

Anticipated milestones:

Expected commencement date of construction/reconstruction: _____
Expected completion date of construction/reconstruction: _____
Anticipated date(s) of start-up: Q2/Q3 of 2026

Section C - Air Cleaning Device

1. Precontrol Emissions*

Emission Rate

Pollutant	Maximum Emission Rate				Calculation/ Estimation Method
	Specify Units	Pounds/Hour	Hours/Year	Tons/Year	
PM		0.00	100	0.00	
PM_{10}		0.00	100	0.00	
SOx		0.00	100	0.001	
CO		26.98	100	1.35	
NO_x		101.57	100	5.08	
VOC		2.86	100	0.143	
Others: (e.g., HAPs)	-----	-----	-----		-----
See PTE Calcs					

* These emissions must be calculated based on the requested operating schedule and/or process rate, e.g., operating schedule for maximum limits or restricted hours of operation and/or restricted throughput. Describe how the emission values were determined. Attach calculations. See Appendix E- The emission rates above were calculated per each generator.

2. Gas Conditioning

Water quenching ☐ YES ☐ NO Water injection rate _____GPM

Radiation and convection cooling ☐ YES ☐ NO

Air dilution ☐ YES ☐ NO

If YES, _____ CFM

Forced draft ☐ YES ☐ NO

Water cooled duct work ☐ YES ☐ NO

Other _____

Inlet volume

_____ ACFM@ _____ °F

Outlet volume

_____ ACFM@ _____ °F _____ % Moisture

Describe the system in detail.

Section C - Air Cleaning Device (Continued)

3. Inertial and Cyclone Collectors

Manufacturer	Type	Model No.

Pressure Drop (in. of water)	Inlet Volume	Outlet Volume
	_____ ACFM @ _____ °F	_____ ACFM @ _____°F _____% Moisture

Number of Individual Cyclone(s)	Outlet Straightening Vanes Used? ☐ Yes ☐ No

Length of Cyclone(s) Cylinder (ft)	Diameter of Cyclone(s) Cylinder	Length of cyclone(s) cone (ft)

Inlet Diameter (ft) or Duct Area (ft^2) of Cyclone(s)	Outlet Diameter (ft) or Duct area (ft^2) of cyclone(s)

If a multi-clone or multi-tube unit is installed, will any of the individual cyclones or cyclone tubes be blanked or blocked off?

Describe any exhaust gas recirculation loop to be employed.

Attach particle size efficiency curve

Emission data

Inlet	Outlet	Removal Efficiency (%)

Section C - Air Cleaning Device (Continued)

4. Fabric Collector

Equipment Specifications

Manufacturer	Model No. ☐ Pressurized Design ☐ Suction Design	
Number of Compartments	Number of Filters Per Compartment	Is Baghouse Insulated? ☐ Yes ☐ No

Can each compartment be isolated for repairs and/or filter replacement? ☐ Yes ☐ No

Are temperature controls provided? (Describe in detail) ☐ Yes ☐ No

Dew point at maximum moisture _____ °F | Design inlet volume _____ SCFM

Type of Fabric

Material _____ ☐ Felted ☐ Membrane

Weight _____ oz/sq.yd ☐ Woven ☐ Others: List: _____

Thickness _____ in ☐ Felted-Woven

Fabric permeability (clean) @ ½" water-Δ P _____ CFM/sq.ft.

Filter dimensions _____ Diameter/Width _____

Effective area per filter _____ | Maximum operating temperature (°F) _____

Effective air to cloth ratio Minimum _____ Maximum _____

Drawing of Fabric Filter

A sketch of the fabric filter showing all access doors, catwalks, ladders and exhaust ductwork, location of each pressure and temperature indicator should be attached.

Operation and Cleaning

Volume of gases handled _____ ACFM _____ °F	Pressure drop across collector (in. of water). Describe the equipment to be used to monitor the pressure drop.

Type of filter cleaning

☐ Manual Cleaning ☐ Bag Collapse ☐ Reverse Air Jets

☐ Mechanical Shakers ☐ Sonic Cleaning ☐ Other: _____

☐ Pneumatic Shakers ☐ Reverse Air Flow

If compressed air is required for collector operation, describe the equipment with the compressor to provide dry air free from oil.

Cleaning Initiated By

☐ Timer Frequency if timer actuated _____

☐ Expected pressure drop range _____ in. of water ☐ Other Specify _____

Does air cleaning device employ hopper heaters, hopper vibrators or hopper level detectors? If yes, describe.

Describe the warning/alarm system that protects against operation when the unit is not meeting design requirements.

Emissions Data

Pollutant	Inlet	Outlet	Removal Efficiency (%)

Section C - Air Cleaning Device (Continued)

5. Wet Collection Equipment: _____

Equipment Specifications

Manufacturer	Type	Model No.

Design Inlet Volume (SCFM)	Relative Particulate/Gas Velocity (ejector scrubbers only)

Describe the internal features (e.g., variable throat, gas/liquid diffusion plates, spray nozzles, liquid redistributors, bed limiters, etc.).

Describe pH monitoring and pH adjustment systems, if applicable.

Describe mist eliminator or separator (type, configuration, backflush capability, frequency).

Attach particulate size efficiency curve.

Operating Parameters

Inlet volume of gases handled _____ (ACFM) @_____°F	Outlet volume of gases handled _____ (ACFM) @_____ °F _____% Moisture

Liquid flow rates. Describe equipment provided to measure liquid flow rates to scrubber (e.g., quenching section, recirculating solution, makeup water, bleed flow, etc.)

Describe scrubber liquid supply system (amount of make-up and recirculating liquid, capacity of recirculating liquid system, etc).

State pressure drop range (in water) across scrubber (e.g., venturi throat, packed bed, etc.) only. Describe the equipment provide to measure the pressure drop. Do not include duct or de-mister losses.

Describe the warning/alarm system that protects against operation when unit is not meeting design requirements.

Emissions Data

Pollutant	Inlet	Outlet	Removal Efficiency (%)

Section C - Air Cleaning Device (Continued)

6. Electrostatic Precipitator

Equipment specifications

Manufacturer	Model No.	☐ Wet ☐ Dry ☐ Single-Stage ☐ Two-Stage

Gas distribution grids ☐ YES ☐ NO

Design inlet volume (SCFM) _____

Maximum operating temperature (°F) _____

Total collecting surface area _____ sq. ft. Collector plates size length _____ ft. x width _____ ft.

Number of fields _____ Number of collector plates/field _____. Spacing between collector plates _____inches.

Maximum gas velocity _____ ft/sec. Minimum gas treatment time: _____ sec.

Total discharge electrode length _____ ft.

Number of discharge electrodes _____ Number collecting electrode rappers _____

Rapper control ☐ Magnetic ☐ Pneumatic ☐ Other _____

Describe in detail

Operating parameters

Inlet gas temperature (°F) _____ Outlet gas temperature (°F) _____	State pressure drop range (water gauge) across collector only. Describe the equipment.
Volume of gas handled (ACFM) _____	Dust resistivity (ohm-cm). Will resistivity vary?

Power requirements

Number and size of Transformer Rectifier sets by electrical field

Field No.	No. of Sets	Each Transformer KVA	Each Rectifier	
			KV Ave./Peak	MaDC

Current density	Corona power	Corona power density
_____ Micro amperes/ft^2	_____ Watts/1000 ACFM	_____ Watts/ft^2

Will a flue gas conditioning system be employed? If yes, describe it.

Does air cleaning device employ hopper heaters, hopper vibrators or hopper level detectors? If yes, describe.

Describe the warning/alarm system that protects against operation when unit is not meeting design requirements.

Emissions data

Pollutant	Inlet	Outlet	Removal Efficiency (%)

Section C - Air Cleaning Device (Continued)

7. Absorption Equipment: _____

Equipment specifications

Manufacturer	Type	Model No

Design inlet volume (SCFM)	Tower height (ft) and inside diameter (ft)
Packing type and size (if applicable)	Height of packing (ft) (if applicable)
Number of trays (if applicable)	Number of bubble caps (if applicable)

Configuration: ☐ Counter-current ☐ Cross flow ☐ Cocurrent flow

Describe pH and/or other monitoring and controls

Absorbent information

Absorbent type and concentration	Sorbent injection rate	Retention time (sec)

Attach equilibrium data for absorption (If applicable).

Attach any additional information regarding auxiliary equipment, reagent (slurry mix) supply system (once through or recirculating, system capacity, etc) to thoroughly evaluate the control equipment. Indicate the flow rates for makeup, bleed and recirculation.

Operating parameters

Volume of gas handled (ACFM)	Inlet temperature (°F)	Pressure drop (in of water) and liquid flow rate. Describe the equipment.

State operating range for pH and/or absorbent concentration in scrubber liquid.

Describe the warning/alarm system that protects against operation when unit is not meeting design requirements.

Emissions data

Pollutant	Inlet	Outlet	Removal Efficiency (%)

Section C - Air Cleaning Device (Continued)

8. ☐ **SELECTIVE CATALYTIC REDUCTION (SCR)**

☐ **SELECTIVE NON-CATALYTIC REDUCTION (SNCR)**

☐ **NON-SELECTIVE CATALYTIC REDUCTION (NSCR)**

Equipment specifications

Manufacturer	Type	Model No

Design inlet volume (SCFM)	Design operating temperature (°F)

Is the system equipped with process controls for proper mixing/control of the reducing agent in gas stream? If yes, give details.

Attach efficiency and other pertinent information (e.g., Ammonia, urea slip).

Operating parameters

Volume of gases handled (ACFM) _____ @ _____ (°F)

Operating temperature range for the SCR/SNCR/NSCR system (°F) From To

Reducing agent used, if any.	Oxidation catalyst used, if any.

State expected range of usage rate and concentration.

Service life of catalyst	Ammonia slip (ppm)

Describe fully with a sketch giving locations of equipment, controls system, important parameters and method of operation.

Describe the warning/alarm system that protects against operation when unit is not meeting design requirements.

Emissions data

Pollutant	Inlet	Outlet	Removal Efficiency (%)

Section C - Air Cleaning Device (Continued)

9. Other Control Equipment: _____

Equipment specifications

Manufacturer	Type	Model No

Design inlet volume (SCFM)	Capacity

Describe pH monitoring and pH adjustment, if any.

Indicate the liquid flow rate and describe equipment provided to measure pressure drop and flow rate, if any.

Attach efficiency curve and/ or other efficiency information.

Attach any additional data including auxiliary equipment and operation details to thoroughly evaluate the control equipment.

Operating parameters

Volume of gas handled

_____ @ _____ °F _____ % Moisture

Describe, in detail, important parameters and method of operation.

Describe the warning/alarm system that protects against operation when unit is not meeting design requirements.

Emissions data

Pollutant	Inlet	Outlet	Removal Efficiency (%)

Section C - Air Cleaning Device (Continued)

10. Costs

Indicate cost associated with air cleaning device and its operating cost (attach documentation if necessary)

Device	Direct Cost	Indirect Cost	Total Cost	Operating Cost
N/a				

11 MISCELLANEOUS

Describe in detail the removal, handling and disposal of dust, effluent, etc. from the air cleaning device including proposed methods of controlling fugitive emissions.

N/a

Attach manufacturer's performance guarantees and/or warranties for each of the major components of the control system (or complete system).

N/a

Attach the maintenance schedule for the control equipment and any part of the process equipment that, if in disrepair, would increase air contaminant emissions.

N/a

Section D - Additional Information

Will the construction, modification, etc. of the sources covered by this application increase emissions from other sources at the facility? If so, describe and quantify.
See Narrative

If this project is subject to any one of the following, attach a demonstration to show compliance with applicable standards

a. Prevention of Significant Deterioration permit (PSD), 40 CFR Part 52? ☐ YES ☒ NO

b. New Source Review, 25 Pa. Code Chapter 127, Subchapter E? ☐ YES ☒ NO

c. New Source Performance Standards, 40 CFR Part 60? ☐ YES ☒ NO
(If Yes, which subpart) _____

d. National Emissions Standards for Hazardous Air Pollutants (NESHAPS), 40 CFR Part 61? ☐ YES ☒ NO
If Yes, which subpart) _____

e. Maximum Achievable Control Technology (MACT), 40 CFR Part 63? ☒ YES ☐ NO
(If Yes, which subpart) Subpart ZZZZ

Attach a demonstration showing that the emissions from any new source will be the minimum attainable through the use of best available technology (BAT).

N/a

Provide emission increases and decreases in allowable (or potential) and actual emissions within the last 5 years for applicable PSD pollutant(s) if the facility is an existing major facility (for PSD purposes)

N/a

Section D - Additional Information (Continued)

Indicate emission increases and decreases in tons per year (tpy), for volatile organic compounds (VOCs) and nitrogen oxides (NOx) for NSR applicability since January 1, 1991 or other applicable dates (See other applicable date in instructions). The emissions increases include all emissions including stack, fugitive, material transfer, other emission generating activities, quantifiable emissions from the exempted source(s), etc.

Permit number (if applicable)	Date issued	Indicate ***Yes*** or ***No*** if emission increases and decreases were used previously for netting	Source I.D. or Name	**VOC**s		**NOx**	
				Emission increases in potential to emit (tpy)	Creditable emission decreases in actual emissions (tpy)	Emission increases in potential to emit (tpy)	Creditable emission decreases in actual emissions (tpy)

If the source is subject to 25 Pa. Code Chapter 127, Subchapter E, New Source Review requirements,

a. Identify Emission Reduction Credits (ERCs) for emission offsets or demonstrate ability to obtain suitable ERCs for emission offsets.

b. Provide a demonstration that the lowest achievable emission rate (LAER) control techniques will be implemented (if applicable).

c. Provide an analysis of alternate sites, sizes, production processes and environmental control techniques demonstrating that the benefits of the proposed source outweigh the environmental and social costs (if applicable).

Attach calculations and any additional information necessary to thoroughly evaluate compliance with all the applicable requirements of 25 Pa. Code Article III and applicable requirements of the Clean Air Act and regulations adopted there under. The Department may request additional information to evaluate the application such as a stand by plan, a plan for air pollution emergencies, air quality modeling, etc.

Section E - Compliance Demonstration

Note: Complete this section if the facility is not a-Title V facility. Title V facilities must complete Addendum A.

Method of Compliance Type: Check all that apply and complete all appropriate sections below.

☐ Monitoring ☐ Testing ☐ Reporting
☐ Recordkeeping ☒ Work Practice Standard

Monitoring:

a. Monitoring device type (stack test, CEM etc.):

b. Monitoring device location:

c. Describe all parameters being monitored along with the frequency and duration of monitoring each parameter:

Testing:

a. Reference Test Method Citation:

b. Reference Test Method Description:

Recordkeeping:

Describe the parameters that will be recorded and the recording frequency:

Reporting:

a. Describe the type of information to be reported and the reporting frequency:

b. Reporting start date:

Work Practice Standard: Describe each

Limiting hours of Operation to 100 hours per year

Section F - Flue and Air Contaminant Emission

1. Estimated Maximum Emissions*

Pollutant	Maximum emission rate			Calculation/ Estimation Method
	specify units	lbs/hr	tons/yr.	
PM		0.00	0.00	
PM_{10}		0.00	0.00	
SO_x		0.00	0.001	
CO		26.98	1.35	
NO_x		101.57	5.08	
VOC		2.86	0.143	
Others: (e.g., HAPs)	-----	-----	-----	-----
See PTE Calcs				

* These emissions must be calculated based on the requested operating schedule and/or process rate e.g., operating schedule for maximum limits or restricted hours of operation and /or restricted throughput. Describe how the emission values were determined. Attach calculations.

2. Stack and Exhauster

Stack Designation/Number S2 and S3 from SOOP 22-05029

List Source(s) or source ID exhausted to this stack:	% of flow exhausted to stack:
Y1A to S2; Y1B to S3	

Stack height above grade (ft.) 330 Grade elevation (ft.) 302	Stack diameter (ft) or Outlet duct area (sq. ft.) 1ft	Weather Cap ☐ YES ☒ NO

Distance of discharge to nearest property line (ft.). Locate on topographic map.

590.98

Does stack height meet Good Engineering Practice (GEP)?

yes

If modeling (estimating) of ambient air quality impacts is needed, attach a site plan with buildings and their dimensions and other obstructions. Location listed below is for S2; S3 will be in a similar area with the same stack dimensions.

Location of Stack** Latitude/Longitude Point of Origin	Latitude			Longitude		
	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
	40	9	13.52	76	43	31.69

Stack Exhaust

Volume 1750 ACFM Temperature 350 °F Moisture 3 %

Exhauster (attach fan curves) _____ in. of water _____ HP @ _____RPM.

** If the datum and collection method information and codes differ from those provided on the General Information Form - Authorization Application, provide the additional required by that form on a separate sheet.

Section G - Attachments

Number and list all attachments submitted with this application below:

- Appendix A contains the required PADEP application;
- Appendix B contains the compliance review form;
- Appendix C contains the required county and municipal notifications;
- Appendix D contains the permit redline;
- Appendix E contains the potential to emit calculations, and;
- Appendix F contains the application fee documentation.

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

INSTRUCTIONS FOR COMPLETING A PLAN APPROVAL APPLICATION

- See the detailed instruction package available for plan approval applications.
- Use only the pages for the air cleaning devices that pertain to this project and remove the remaining pages.
- If there is more than one air cleaning device of the same type, copy the page for air cleaning devices and provide the appropriate information for each device.
- If the proposed source is connected to more than one stack and exhauster, copy the page for the stack and exhauster and provide the appropriate information for each stack and exhauster.
- Use additional sheets of paper, if the space provided is not sufficient to provide detailed information required for review and approval.
- Information may be grouped into a single attachment for each section or air cleaning device.
- Number all pages of the application (Sections A through G) accordingly.
- Attach any and all information for source and air cleaning device(s) for a thorough evaluation of the extent and nature of emissions.
- Identify, number and list all attachments made to this application (e.g., Attachment #1-Section A).
- Submit three (3) sets of the completed application with all attachments to the appropriate Regional Office.

2700-PM-AQ0021 Rev. 6/2004

Submit in Triplicate

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

COMBUSTION UNIT

Application for Plan Approval to Construct, Modify or Reactivate an Air Contamination Source and/or Install an Air Cleaning Device

This application and the General Information Form (GIF) must be included in the submittal

Before completing this form, read the instructions provided with this form.

Section A - Facility Name, Checklist And Certification

Organization Name or Registered Fictitious Name/Facility Name: Constellation Energy Generation LLC/Crane Clean Energy Center, Unit 1

DEP Client ID# (If Known): _____

Type of Review required and Fees:

Source which is not subject to NSPS, NESHAPs, MACT, NSR and PSD: ..... $_____
Source requiring approval under NSPS or NESHAPS or both: ..... $_____
Source requiring approval under NSR: ..... $_____
Source requiring the establishment of a MACT limitation: ..... $_____
Source requiring approval under PSD: ..... $_____

Applicant's Checklist

Check the following list to make sure that all the required documents are included.

General Information Form (GIF)

Combustion Unit Plan Approval Application

Compliance Review Form or provide reference of most recently submitted compliance review form for facilities submitting on a periodic basis: _____

Proof of County and Municipal Notifications

Permit Fees

Addendum A: Source Applicable Requirements (only applicable to existing Title V facility)

Certification of Truth, Accuracy and Completeness by a Responsible Official

I, **Trevor Orth**, certify under penalty of law in 18 Pa. C. S. A. §4904, and 35 P.S. §4009(b) (2) that based on information and belief formed after reasonable inquiry, the statements and information in this application are true, accurate and complete.

(Signature): Trevor L. Orth Date: 10/30/2025

Name (Print): Trevor Orth Title: Plant Manager

OFFICIAL USE ONLY

Application No. _____ Unit ID _____ Site ID _____
DEP Client ID #: _____ APS. ID _____ AUTH. ID _____
Date Received _____ Date Assigned _____ Reviewed By _____
Date of 1st Technical Deficiency _____ Date of 2nd Technical Deficiency _____
Comments: _____

Section B - Combustion Unit Information

1. Combustion Units: ☐ Coal ☒ Oil ☐ Natural Gas Other: _____

Description: Security Unit Power Generator – Y2

Manufacturer	Model No.	Number of units
John Deer Kohler		1

Maximum heat input (Btu/hr)	Rated heat input (Btu/hr)	Typical heat input (Btu/hr)	Furnace Volume
755 HP			

Grate Area (if applicable)	Method of firing

Indicate how combustion air is supplied to boiler

Indicate the Steam Usage:

Mark and describe soot Cleaning Method:

i. Air Blown
ii. Steam Blown
iii. Brushed and Vacuumed
iv. Other _____
v. Frequency of Cleaning _____

Maximum Operating schedule

Hours/Day	Days/Week	Days/Year	Hours/Year
			100

Operational restrictions taken or requested, if any (e.g., bottlenecks or voluntary restrictions to limit potential to emit)

Capacity (specify units)

Per hour	Per day	Per week	Per year
11 gal			

Typical Operating schedule

Hours/Day	Days/Week	Days/Year	Hours/Year
			100 hours

Seasonal variations (Months): If variations exist, describe them.

Operating using primary fuel: _____ From _____ to _____
Operating using secondary fuel: _____ Form _____ to _____
Non-operating: From _____ to _____

2. Specify the primary, secondary and startup fuel. Furnish the details in item 3.

Section B - Combustion Unit Information (Continued)

3. Fuel

Type	Quantity Hourly	Annually	Sulfur	% Ash (Weight)	BTU Content
Oil Number 2	11 GPH @ 60°F	1.1 X 10^3 Gal	0.0015% by wt		137 MMBtu/Gal. & Lbs./Gal. @ 60 °F
Oil Number	GPH @ 60°F	X 10^3 Gal	% by wt		Btu/Gal. & Lbs./Gal. @ 60 °F
Oil Number	GPH @ 60°F	X 10^3 Gal	% by wt		Btu/Gal. & Lbs./Gal. @ 60 °F
Natural Gas	SCFH	X 10^6 Gal	gr/100 SCF		Btu/SCF
Gas (other)	SCFH	X 10^6 Gal	gr/100 SCF		Btu/SCF
Coal					
Other*					

***** Note: Describe and furnish information separately for other fuels in Addendum B.

4. Burner

Manufacturer	Model Number	Type of Atomization (Steam, air, press, mech., rotary cup)

Number of Burners	Maximum fuel firing rate (all burners)	Normal fuel firing rate

If oil, temperature and viscosity.

Maximum theoretical air requirement

Percent excess air 100% rating

Turndown ratio

Combustion modulation control (on/off, low-high fire, full automatic, manual). Describe.

Main burner flame ignition method (electric spark, auto gas pilot, hand-held torch, other). Describe.

5. Nitrogen Oxides (NO_x) control Options

Mark and describe the NO_x control options adopted

Low excess air (LEA)	Flue gas recirculation	Other. Hours of Operation
Over fire air (OFA)	Burner out of service	
Low-NO_x burner	Reburning	
Low NO_x burners with over fire air	Flue gas treatment (SCR / SNCR)	

Section B - Combustion Unit Information (Continued)

6. Miscellaneous Information

Describe fly ash reinjection operation
N/a

Describe, in detail, the equipment provided to monitor and to record the source(s) operating conditions, which may affect emissions of air contaminants. Show that they are reasonable and adequate.

Describe each proposed modification to an existing source.

N/a - These sources were deactivated and are now being reactivated without modification.

Describe how emissions will be minimized especially during start up, shut down, combustion upsets and/or disruptions. Provide emission estimates for start up, shut down and upset conditions. Provide duration of start up and shut down.

These sources will be limited to 100 hours of operation each.

Describe in detail with a schematic diagram of the control options adopted for SO_2 (if applicable).
N/a

Anticipated milestones:

Expected commencement date of construction/reconstruction: _____
Expected completion date of construction/reconstruction: _____
Anticipated date(s) of start-up: Q2/Q3 of 2026

Section C - Air Cleaning Device

1. Precontrol Emissions*

Emission Rate

Pollutant	Maximum Emission Rate				Calculation/ Estimation Method
	Specify Units	Pounds/Hour	Hours/Year	Tons/Year	
PM		0.25	100	0.01	
PM_{10}		0.25	100	0.01	
SOx		0.01	100	0.00	
CO		4.34	100	0.22	
NO_x		6.95	100	0.35	
VOC		0.99	100	0.05	
Others: (e.g., HAPs)	-----	-----	-----		-----
See PTE Calcs					

* These emissions must be calculated based on the requested operating schedule and/or process rate, e.g., operating schedule for maximum limits or restricted hours of operation and/or restricted throughput. Describe how the emission values were determined. Attach calculations. See Appendix E.

2. Gas Conditioning

Water quenching ☐ YES ☐ NO Water injection rate _____GPM

Radiation and convection cooling ☐ YES ☐ NO

Air dilution ☐ YES ☐ NO
If YES, _____ CFM

Forced draft ☐ YES ☐ NO

Water cooled duct work ☐ YES ☐ NO

Other _____

Inlet volume
_____ ACFM@ _____ °F

Outlet volume
_____ ACFM@ _____ °F _____ % Moisture

Describe the system in detail.

Section C - Air Cleaning Device (Continued)

3. Inertial and Cyclone Collectors

Manufacturer	Type	Model No.

Pressure Drop (in. of water)	Inlet Volume	Outlet Volume
	_____ ACFM @ _____ °F	_____ ACFM @ _____°F _____% Moisture

Number of Individual Cyclone(s)	Outlet Straightening Vanes Used? ☐ Yes ☐ No

Length of Cyclone(s) Cylinder (ft)	Diameter of Cyclone(s) Cylinder	Length of cyclone(s) cone (ft)

Inlet Diameter (ft) or Duct Area (ft^2) of Cyclone(s)	Outlet Diameter (ft) or Duct area (ft^2) of cyclone(s)

If a multi-clone or multi-tube unit is installed, will any of the individual cyclones or cyclone tubes be blanked or blocked off?

Describe any exhaust gas recirculation loop to be employed.

Attach particle size efficiency curve

Emission data

Inlet	Outlet	Removal Efficiency (%)

Section C - Air Cleaning Device (Continued)

4. Fabric Collector

Equipment Specifications

Manufacturer	Model No. ☐ Pressurized Design ☐ Suction Design	
Number of Compartments	Number of Filters Per Compartment	Is Baghouse Insulated? ☐ Yes ☐ No

Can each compartment be isolated for repairs and/or filter replacement? ☐ Yes ☐ No

Are temperature controls provided? (Describe in detail) ☐ Yes ☐ No

Dew point at maximum moisture _____ °F | Design inlet volume _____ SCFM

Type of Fabric

Material _____ ☐ Felted ☐ Membrane

Weight _____ oz/sq.yd ☐ Woven ☐ Others: List: _____

Thickness _____ in ☐ Felted-Woven

Fabric permeability (clean) @ ½" water-Δ P _____ CFM/sq.ft.

Filter dimensions _____ Diameter/Width _____

Effective area per filter _____ | Maximum operating temperature (°F) _____

Effective air to cloth ratio Minimum _____ Maximum _____

Drawing of Fabric Filter

A sketch of the fabric filter showing all access doors, catwalks, ladders and exhaust ductwork, location of each pressure and temperature indicator should be attached.

Operation and Cleaning

Volume of gases handled _____ ACFM _____ °F	Pressure drop across collector (in. of water). Describe the equipment to be used to monitor the pressure drop.

Type of filter cleaning

☐ Manual Cleaning ☐ Bag Collapse ☐ Reverse Air Jets

☐ Mechanical Shakers ☐ Sonic Cleaning ☐ Other: _____

☐ Pneumatic Shakers ☐ Reverse Air Flow

If compressed air is required for collector operation, describe the equipment with the compressor to provide dry air free from oil.

Cleaning Initiated By

☐ Timer Frequency if timer actuated _____

☐ Expected pressure drop range _____ in. of water ☐ Other Specify _____

Does air cleaning device employ hopper heaters, hopper vibrators or hopper level detectors? If yes, describe.

Describe the warning/alarm system that protects against operation when the unit is not meeting design requirements.

Emissions Data

Pollutant	Inlet	Outlet	Removal Efficiency (%)

Section C - Air Cleaning Device (Continued)

5. Wet Collection Equipment: _____

Equipment Specifications

Manufacturer	Type	Model No.

Design Inlet Volume (SCFM)	Relative Particulate/Gas Velocity (ejector scrubbers only)

Describe the internal features (e.g., variable throat, gas/liquid diffusion plates, spray nozzles, liquid redistributors, bed limiters, etc.).

Describe pH monitoring and pH adjustment systems, if applicable.

Describe mist eliminator or separator (type, configuration, backflush capability, frequency).

Attach particulate size efficiency curve.

Operating Parameters

Inlet volume of gases handled _____ (ACFM) @_____°F	Outlet volume of gases handled _____ (ACFM) @_____ °F _____% Moisture

Liquid flow rates. Describe equipment provided to measure liquid flow rates to scrubber (e.g., quenching section, recirculating solution, makeup water, bleed flow, etc.)

Describe scrubber liquid supply system (amount of make-up and recirculating liquid, capacity of recirculating liquid system, etc).

State pressure drop range (in water) across scrubber (e.g., venturi throat, packed bed, etc.) only. Describe the equipment provide to measure the pressure drop. Do not include duct or de-mister losses.

Describe the warning/alarm system that protects against operation when unit is not meeting design requirements.

Emissions Data

Pollutant	Inlet	Outlet	Removal Efficiency (%)

Section C - Air Cleaning Device (Continued)

6. Electrostatic Precipitator

Equipment specifications

Manufacturer	Model No.	☐ Wet ☐ Dry ☐ Single-Stage ☐ Two-Stage

Gas distribution grids ☐ YES ☐ NO

Design inlet volume (SCFM) _____

Maximum operating temperature (°F) _____

Total collecting surface area _____ sq. ft. Collector plates size length _____ ft. x width _____ ft.

Number of fields _____ Number of collector plates/field _____. Spacing between collector plates _____inches.

Maximum gas velocity _____ ft/sec. Minimum gas treatment time: _____ sec.

Total discharge electrode length _____ ft.

Number of discharge electrodes _____ Number collecting electrode rappers _____

Rapper control ☐ Magnetic ☐ Pneumatic ☐ Other _____

Describe in detail

Operating parameters

Inlet gas temperature (°F) _____ Outlet gas temperature (°F) _____	State pressure drop range (water gauge) across collector only. Describe the equipment.
Volume of gas handled (ACFM) _____	Dust resistivity (ohm-cm). Will resistivity vary?

Power requirements

Number and size of Transformer Rectifier sets by electrical field

Field No.	No. of Sets	Each Transformer KVA	Each Rectifier	
			KV Ave./Peak	MaDC

Current density	Corona power	Corona power density
_____ Micro amperes/ft^2	_____ Watts/1000 ACFM	_____ Watts/ft^2

Will a flue gas conditioning system be employed? If yes, describe it.

Does air cleaning device employ hopper heaters, hopper vibrators or hopper level detectors? If yes, describe.

Describe the warning/alarm system that protects against operation when unit is not meeting design requirements.

Emissions data

Pollutant	Inlet	Outlet	Removal Efficiency (%)

Section C - Air Cleaning Device (Continued)

7. Absorption Equipment: _____

Equipment specifications

Manufacturer	Type	Model No

Design inlet volume (SCFM)	Tower height (ft) and inside diameter (ft)
Packing type and size (if applicable)	Height of packing (ft) (if applicable)
Number of trays (if applicable)	Number of bubble caps (if applicable)

Configuration: ☐ Counter-current ☐ Cross flow ☐ Cocurrent flow

Describe pH and/or other monitoring and controls

Absorbent information

Absorbent type and concentration	Sorbent injection rate	Retention time (sec)

Attach equilibrium data for absorption (If applicable).

Attach any additional information regarding auxiliary equipment, reagent (slurry mix) supply system (once through or recirculating, system capacity, etc) to thoroughly evaluate the control equipment. Indicate the flow rates for makeup, bleed and recirculation.

Operating parameters

Volume of gas handled (ACFM)	Inlet temperature (°F)	Pressure drop (in of water) and liquid flow rate. Describe the equipment.

State operating range for pH and/or absorbent concentration in scrubber liquid.

Describe the warning/alarm system that protects against operation when unit is not meeting design requirements.

Emissions data

Pollutant	Inlet	Outlet	Removal Efficiency (%)

Section C - Air Cleaning Device (Continued)

8. ☐ **SELECTIVE CATALYTIC REDUCTION (SCR)**

☐ **SELECTIVE NON-CATALYTIC REDUCTION (SNCR)**

☐ **NON-SELECTIVE CATALYTIC REDUCTION (NSCR)**

Equipment specifications

Manufacturer	Type	Model No

Design inlet volume (SCFM)	Design operating temperature (°F)

Is the system equipped with process controls for proper mixing/control of the reducing agent in gas stream? If yes, give details.

Attach efficiency and other pertinent information (e.g., Ammonia, urea slip).

Operating parameters

Volume of gases handled (ACFM) _____ @ _____ (°F)

Operating temperature range for the SCR/SNCR/NSCR system (°F) From To

Reducing agent used, if any.	Oxidation catalyst used, if any.

State expected range of usage rate and concentration.

Service life of catalyst	Ammonia slip (ppm)

Describe fully with a sketch giving locations of equipment, controls system, important parameters and method of operation.

Describe the warning/alarm system that protects against operation when unit is not meeting design requirements.

Emissions data

Pollutant	Inlet	Outlet	Removal Efficiency (%)

Section C - Air Cleaning Device (Continued)

9. Other Control Equipment: _____

Equipment specifications

Manufacturer	Type	Model No

Design inlet volume (SCFM)	Capacity

Describe pH monitoring and pH adjustment, if any.

Indicate the liquid flow rate and describe equipment provided to measure pressure drop and flow rate, if any.

Attach efficiency curve and/ or other efficiency information.

Attach any additional data including auxiliary equipment and operation details to thoroughly evaluate the control equipment.

Operating parameters

Volume of gas handled

_____ @ _____ °F _____ % Moisture

Describe, in detail, important parameters and method of operation.

Describe the warning/alarm system that protects against operation when unit is not meeting design requirements.

Emissions data

Pollutant	Inlet	Outlet	Removal Efficiency (%)

Section C - Air Cleaning Device (Continued)

10. Costs

Indicate cost associated with air cleaning device and its operating cost (attach documentation if necessary)

Device	Direct Cost	Indirect Cost	Total Cost	Operating Cost
N/a				

11 MISCELLANEOUS

Describe in detail the removal, handling and disposal of dust, effluent, etc. from the air cleaning device including proposed methods of controlling fugitive emissions.

N/a

Attach manufacturer's performance guarantees and/or warranties for each of the major components of the control system (or complete system).

N/a

Attach the maintenance schedule for the control equipment and any part of the process equipment that, if in disrepair, would increase air contaminant emissions.

N/a

Section D - Additional Information

Will the construction, modification, etc. of the sources covered by this application increase emissions from other sources at the facility? If so, describe and quantify.
See Narrative

If this project is subject to any one of the following, attach a demonstration to show compliance with applicable standards

a. Prevention of Significant Deterioration permit (PSD), 40 CFR Part 52? ☐ YES ☒ NO

b. New Source Review, 25 Pa. Code Chapter 127, Subchapter E? ☐ YES ☒ NO

c. New Source Performance Standards, 40 CFR Part 60? ☐ YES ☒ NO
(If Yes, which subpart) _____

d. National Emissions Standards for Hazardous Air Pollutants (NESHAPS), 40 CFR Part 61? ☐ YES ☒ NO
If Yes, which subpart) _____

e. Maximum Achievable Control Technology (MACT), 40 CFR Part 63? ☒ YES ☐ NO
(If Yes, which subpart) Subpart ZZZZ

Attach a demonstration showing that the emissions from any new source will be the minimum attainable through the use of best available technology (BAT).

N/a

Provide emission increases and decreases in allowable (or potential) and actual emissions within the last 5 years for applicable PSD pollutant(s) if the facility is an existing major facility (for PSD purposes)

N/a

Section D - Additional Information (Continued)

Indicate emission increases and decreases in tons per year (tpy), for volatile organic compounds (VOCs) and nitrogen oxides (NOx) for NSR applicability since January 1, 1991 or other applicable dates (See other applicable date in instructions). The emissions increases include all emissions including stack, fugitive, material transfer, other emission generating activities, quantifiable emissions from the exempted source(s), etc.

Permit number (if applicable)	Date issued	Indicate ***Yes*** or ***No*** if emission increases and decreases were used previously for netting	Source I.D. or Name	**VOC**s		**NOx**	
				Emission increases in potential to emit (tpy)	Creditable emission decreases in actual emissions (tpy)	Emission increases in potential to emit (tpy)	Creditable emission decreases in actual emissions (tpy)

If the source is subject to 25 Pa. Code Chapter 127, Subchapter E, New Source Review requirements,

a. Identify Emission Reduction Credits (ERCs) for emission offsets or demonstrate ability to obtain suitable ERCs for emission offsets.

b. Provide a demonstration that the lowest achievable emission rate (LAER) control techniques will be implemented (if applicable).

c. Provide an analysis of alternate sites, sizes, production processes and environmental control techniques demonstrating that the benefits of the proposed source outweigh the environmental and social costs (if applicable).

Attach calculations and any additional information necessary to thoroughly evaluate compliance with all the applicable requirements of 25 Pa. Code Article III and applicable requirements of the Clean Air Act and regulations adopted there under. The Department may request additional information to evaluate the application such as a stand by plan, a plan for air pollution emergencies, air quality modeling, etc.

Section E - Compliance Demonstration

Note: Complete this section if the facility is not a-Title V facility. Title V facilities must complete Addendum A.

Method of Compliance Type: Check all that apply and complete all appropriate sections below.

☐ Monitoring ☐ Testing ☐ Reporting
☐ Recordkeeping ☒ Work Practice Standard

Monitoring:

a. Monitoring device type (stack test, CEM etc.):

b. Monitoring device location:

c. Describe all parameters being monitored along with the frequency and duration of monitoring each parameter:

Testing:

a. Reference Test Method Citation:

b. Reference Test Method Description:

Recordkeeping:

Describe the parameters that will be recorded and the recording frequency:

Reporting:

a. Describe the type of information to be reported and the reporting frequency:

b. Reporting start date:

Work Practice Standard: Describe each

Limiting hours of Operation to 100 hours per year

Section F - Flue and Air Contaminant Emission

1. Estimated Maximum Emissions*

Pollutant	Maximum emission rate			Calculation/ Estimation Method
	specify units	lbs/hr	tons/yr.	
PM		0.25	0.01	
PM_{10}		0.25	0.01	
SO_x		0.01	0.00	
CO		4.34	0.22	
NO_x		6.95	0.35	
VOC		0.99	0.05	
Others: (e.g., HAPs)	-----	-----	-----	-----
See PTE Calcs				

* These emissions must be calculated based on the requested operating schedule and/or process rate e.g., operating schedule for maximum limits or restricted hours of operation and /or restricted throughput. Describe how the emission values were determined. Attach calculations. See Appendix E for PTE calcs. The emissions rates above were calculated per each generator.

2. Stack and Exhauster

Stack Designation/Number S11 from SOOP 22-05029

List Source(s) or source ID exhausted to this stack:	% of flow exhausted to stack:
Y2 to S11	

Stack height above grade (ft.) Grade elevation (ft.)	Stack diameter (ft) or Outlet duct area (sq. ft.)	Weather Cap ☐ YES ☐ NO

Distance of discharge to nearest property line (ft.). Locate on topographic map.

Does stack height meet Good Engineering Practice (GEP)?

Yes

If modeling (estimating) of ambient air quality impacts is needed, attach a site plan with buildings and their dimensions and other obstructions.

Location of Stack** Latitude/Longitude Point of Origin	Latitude			Longitude		
	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
	40	9	12.21	-76	43	33.25

Stack Exhaust

Volume 164 ACFM Temperature 300 °F Moisture 3 %

Exhauster (attach fan curves) _____ in. of water _____ HP @ _____ RPM.

** If the datum and collection method information and codes differ from those provided on the General Information Form - Authorization Application, provide the additional required by that form on a separate sheet.

Section G - Attachments

Number and list all attachments submitted with this application below:

- Appendix A contains the required PADEP application;
- Appendix B contains the compliance review form;
- Appendix C contains the required county and municipal notifications;
- Appendix D contains the permit redline;
- Appendix E contains the potential to emit calculations, and;
- Appendix F contains the application fee documentation.

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
CENTER FOR ENVIRONMENTAL EXCELLENCE

GENERAL INFORMATION FORM – AUTHORIZATION APPLICATION

Before completing this General Information Form (GIF), read the step-by-step instructions provided in this application package. This form is used by the Department of Environmental Protection (DEP) to inform our programs regarding what other DEP permits or authorizations may be needed for the proposed project or activity. This version of the General Information Form (GIF) must be completed and returned with any program-specific application being submitted to the DEP.

Related ID#s (If Known)				DEP USE ONLY
Client ID#		**APS ID#**		Date Received & General Notes
Site ID#		**Auth ID#**		
Facility ID#	510219			

CLIENT INFORMATION

DEP Client ID#	Client Type/Code	Dun & Bradstreet ID#
		196748938

Legal Organization Name or Registered Fictitious Name	Employer ID# (EIN)	Is the EIN a SSN?
Constellation Energy Generation, LLC		☐ Yes ☐ No

State of Incorporation or Registration of Fictious Name	
Maryland	☐ Corporation ☒ LLC ☐ Partnership ☐ LLP ☐ LP ☐ Sole Proprietorship ☐ Association/Organization ☐ Estate/Trust ☐ Other

Individual Last Name	First Name	MI	Suffix
Orth	Trevor		

Additional Individual Last Name	First Name	MI	Suffix

Mailing Address Line 1	Mailing Address Line 2
PO Box 480, Route 441 S	

Address Last Line – City	State	ZIP+4	Country
Middletown	PA	17057-0480	USA

Client Contact Last Name	First Name	MI	Suffix
Orth	Trevor		

Client Contact Title	Phone	Ext	Cell Phone
Plant Manager			

Email Address	FAX
Trevor.Orth@constellation.com	

SITE INFORMATION

DEP Site ID#	Site Name
510219	Crane Clean Energy Center

EPA ID#	Estimated Number of Employees to be Present at Site

Description of Site This site was originally permitted as a nuclear power generation facility. The facility removed some of their generators and is now requesting that these units be brought back on site for power generation.

Tax Parcel ID(s): 23-3064219-31

County Name(s)	Municipality(ies)	City	Boro	Twp	State
Dauphin	Londonderry	☐	☐	☒	
		☐	☐	☐	
		☐	☐	☐	

☐	☐	☐	

Site Location Line 1
PO Box 480, Route 441 S

Site Location Line 2

Site Location Last Line – City
Middletown

State PA **ZIP+4** 17057-0480

Detailed Written Directions to Site
Heading South on I-83. Take the exit onto PA-230 from State Route 3032. Continue on PA-230 E/W Harrisburg Pike to PA-441 S in Londonderry. Site entrance is on the right.

Site Contact Last Name Spriggle **First Name** Andrew **MI** **Suffix**

Site Contact Title
Senior Environmental Specialist

Site Contact Firm
Constellation Energy Generation, LLC

Mailing Address Line 1
PO Box 480, Route 441 S

Mailing Address Line 2

Mailing Address Last Line – City
Middletown

State PA **ZIP+4** 17057-0480

Phone **Ext** **FAX**

Email Address
Andrew.Spriggle@constellation.com

NAICS Codes (Two- & Three-Digit Codes – List All That Apply)

6-Digit Code (Optional)
221113

Client to Site Relationship
owner

FACILITY INFORMATION

Modification of Existing Facility	**Yes**	**No**
1. Will this project modify an existing facility, system, or activity?	☐	☐
2. Will this project involve an addition to an existing facility, system, or activity?	☒	☐

If "Yes", check all relevant facility types and provide DEP facility identification numbers below.

	Facility Type	DEP Fac ID#		Facility Type	DEP Fac ID#
☐	Air Emission Plant		☐	Industrial Minerals Mining Operation	
☐	Beneficial Use (water)		☐	Laboratory Location	
☐	Blasting Operation		☐	Land Recycling Cleanup Location	
☐	Captive Hazardous Waste Operation		☐	Mine Drainage Treatment / Land Recycling Project Location	
☐	Coal Ash Beneficial Use Operation		☐	Municipal Waste Operation	
☐	Coal Mining Operation		☐	Oil & Gas Encroachment Location	
☐	Coal Pillar Location		☐	Oil & Gas Location	
☐	Commercial Hazardous Waste Operation		☐	Oil & Gas Water Poll Control Facility	
☐	Dam Location		☐	Public Water Supply System	
☐	Deep Mine Safety Operation -Anthracite		☐	Radiation Facility	
☐	Deep Mine Safety Operation -Bituminous		☐	Residual Waste Operation	
☐	Deep Mine Safety Operation -Ind Minerals		☐	Storage Tank Location	
☐	Encroachment Location (water, wetland)		☐	Water Pollution Control Facility	
☐	Erosion & Sediment Control Facility		☐	Water Resource	
☐	Explosive Storage Location		☒	Other:	510219

Latitude/Longitude Point of Origin	Latitude			Longitude		
	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
	40	9	13.10	76	43	25.58

Horizontal Accuracy Measure	Feet		--or--	Meters
Horizontal Reference Datum Code	☐	North American Datum of 1927		
	☒	North American Datum of 1983		
	☐	World Geodetic System of 1984		
Horizontal Collection Method Code				
Reference Point Code				
Altitude	Feet 302		--or--	Meters
Altitude Datum Name	☐	The National Geodetic Vertical Datum of 1929		
	☒	The North American Vertical Datum of 1988 (NAVD88)		
Altitude (Vertical) Location Datum Collection Method Code				
Geometric Type Code				
Data Collection Date				
Source Map Scale Number		Inch(es)	=	Feet
--or--		Centimeter(s)	=	Meters

PROJECT INFORMATION

Project Name

Generator Reactivation Project

Project Description

This project is for the reactivation of multiple power generating sources that were removed from services in 2022.

Project Consultant Last Name	First Name	MI	Suffix
Dempsey	Kieran		

Project Consultant Title	Consulting Firm
Environmental Engineering Consultant	Trinity Consultants

Mailing Address Line 1	Mailing Address Line 2
211 Welsh Pool Road, Suite 238	

Address Last Line – City	State	ZIP+4
Exton	PA	19341

Phone	Ext	FAX	Email Address
(215) 450-8561			kieran.dempsey@trinityconsultants.com

Time Schedules	Project Milestone (Optional)
Q2/Q3 of 2026	Start up for these sources

1. Is the project located in or within a 0.5-**mile radius of an Environmental Justice community as defined by DEP?** ☒ Yes ☐ No

   To determine if the project is located in or within a 0.5-mile radius of an environmental justice community, please use the online PennEnviroScreen tool. To see specific EJ areas, select the appropriate year of your submittal from the themes box on the right.

2. Have you informed the surrounding community prior to submitting the application to the Department? ☒ Yes ☐ No

   Method of notification: Municipal Notification Letters

3. **Have you addressed community concerns that were identified?** ☐ Yes ☐ No ☒ N/A

   If no, please briefly describe the community concerns that have been expressed and not addressed.

4. **Is your project funded by state or federal grants?** ☐ Yes ☒ No

   Note: If "Yes", specify what aspect of the project is related to the grant and provide the grant source, contact person and grant expiration date.

   Aspect of Project Related to Grant

   Grant Source: _____

   Grant Contact Person: _____

   Grant Expiration Date: _____

5. **Is this application for an authorization on Appendix A of the Land Use Policy? (For referenced list, see Appendix A of the Land Use Policy attached to GIF instructions)** ☐ Yes ☒ No

   Note: If "No" to Question 5, the application is not subject to the Land Use Policy.

   If "Yes" to Question 5, the application is subject to this policy and the Applicant should answer the additional questions in the **Land Use Information** section.

LAND USE INFORMATION

Note: Applicants should submit copies of local land use approvals or other evidence of compliance with local comprehensive plans and zoning ordinances.

1. **Is there an adopted county or multi-county comprehensive plan?** ☐ Yes ☒ No
2. **Is there a county stormwater management plan?** ☐ Yes ☒ No
3. **Is there an adopted municipal or multi-municipal comprehensive plan?** ☐ Yes ☒ No
4. **Is there an adopted county-wide zoning ordinance, municipal zoning ordinance or joint municipal zoning ordinance?** ☐ Yes ☒ No

   Note: If the Applicant answers "No" to either Questions 1, 3 or 4, the provisions of the PA MPC are not applicable and the Applicant does not need to respond to questions 5 and 6 below.

   If the Applicant answers "Yes" to questions 1, 3 and 4, the Applicant should respond to questions 5 and 6 below.

5. **Does the proposed project meet the provisions of the zoning ordinance or does the proposed project have zoning approval?** If zoning approval has been received, attach documentation. ☐ Yes ☒ No
6. **Have you attached Municipal and County Land Use Letters for the project?** ☐ Yes ☒ No

COORDINATION INFORMATION

Note: The PA Historical and Museum Commission must be notified of proposed projects in accordance with DEP Technical Guidance Document 012-0700-001 at PHMC's online portal, PA-SHARE.

If the activity will be a mining project (i.e., mining of coal or industrial minerals, coal refuse disposal and/or the operation of a coal or industrial minerals preparation/processing facility), respond to questions 1.0 through 2.5 below.

If the activity will not be a mining project, skip questions 1.0 through 2.5 and begin with question 3.0.

1.0	**Is this a coal mining project?** If "Yes", respond to 1.1-1.6. If "No", skip to Question 2.0.	☐	Yes	☒	No
1.1	**Will this coal mining project involve coal preparation/ processing activities in which the total amount of coal prepared/processed will be equal to or greater than 200 tons/day?**	☐	Yes	☐	No
1.2	**Will this coal mining project involve coal preparation/ processing activities in which the total amount of coal prepared/processed will be greater than 50,000 tons/year?**	☐	Yes	☐	No
1.3	**Will this coal mining project involve coal preparation/ processing activities in which thermal coal dryers or pneumatic coal cleaners will be used?**	☐	Yes	☐	No
1.4	**For this coal mining project, will sewage treatment facilities be constructed and treated waste water discharged to surface waters?**	☐	Yes	☐	No
1.5	**Will this coal mining project involve the construction of a permanent impoundment meeting one or more of the following criteria: (1) a contributory drainage area exceeding 100 acres; (2) a depth of water measured by the upstream toe of the dam at maximum storage elevation exceeding 15 feet; (3) an impounding capacity at maximum storage elevation exceeding 50 acre-feet?**	☐	Yes	☐	No
1.6	**Will this coal mining project involve underground coal mining to be conducted within 500 feet of an oil or gas well?**	☐	Yes	☐	No
2.0	**Is this a non-coal (industrial minerals) mining project?** If "Yes", respond to 2.1-2.6. If "No", skip to Question 3.0.	☐	Yes	☒	No
2.1	**Will this non-coal (industrial minerals) mining project involve the crushing and screening of non-coal minerals other than sand and gravel?**	☐	Yes	☐	No
2.2	**Will this non-coal (industrial minerals) mining project involve the crushing and/or screening of sand and gravel with the exception of wet sand and gravel operations (screening only) and dry sand and gravel operations with a capacity of less than 150 tons/hour of unconsolidated materials?**	☐	Yes	☐	No
2.3	**Will this non-coal (industrial minerals) mining project involve the construction, operation and/or modification of a portable non-metallic (i.e., non-coal) minerals processing plant under the authority of the General Permit for Portable Non-metallic Mineral Processing Plants (i.e., BAQ-PGPA/GP-3)?**	☐	Yes	☐	No
2.4	**For this non-coal (industrial minerals) mining project, will sewage treatment facilities be constructed and treated waste water discharged to surface waters?**	☐	Yes	☐	No

2.5	**Will this non-coal (industrial minerals) mining project involve the construction of a permanent impoundment meeting one or more of the following criteria: (1) a contributory drainage area exceeding 100 acres; (2) a depth of water measured by the upstream toe of the dam at maximum storage elevation exceeding 15 feet; (3) an impounding capacity at maximum storage elevation exceeding 50 acre-feet?**	☐ Yes	☐ No
3.0	**Will your project, activity, or authorization have anything to do with a well related to oil or gas production, have construction within 200 feet of, affect an oil or gas well, involve the waste from such a well, or string power lines above an oil or gas well?** If "Yes", respond to 3.1-3.3. If "No", skip to Question 4.0.	☐ Yes	☒ No
3.1	**Does the oil- or gas-related project involve any of the following: placement of fill, excavation within or placement of a structure, located in, along, across or projecting into a watercourse, floodway or body of water (including wetlands)?**	☐ Yes	☐ No
3.2	**Will the oil- or gas-related project involve discharge of industrial wastewater or stormwater to a dry swale, surface water, ground water or an existing sanitary sewer system or storm water system?** If "Yes", discuss in *Project Description*.	☐ Yes	☐ No
3.3	**Will the oil- or gas-related project involve the construction and operation of industrial waste treatment facilities?**	☐ Yes	☐ No
4.0	**Will the project involve a construction activity that results in earth disturbance?** If "Yes", specify the total disturbed acreage.	☐ Yes	☒ No
	4.0.1 Total Disturbed Acreage		
	4.0.2 Will the project discharge or drain to a special protection water (EV or HQ) or an EV wetland?	☐ Yes	☐ No
	4.0.3 Will the project involve a construction activity that results in earth disturbance in the area of the earth disturbance that are contaminated at levels exceeding residential or non-residential medium-specific concentrations (MSCs) in 25 Pa. Code Chapter 250 at residential or non-residential construction sites, respectively?	☐ Yes	☐ No
5.0	**Does the project involve any of the following: water obstruction and/or encroachment, wetland impacts, or floodplain project by the Commonwealth/political subdivision or public utility?** If "Yes", respond to 5.1-5.7. If "No", skip to Question 6.0.	☐ Yes	☒ No
5.1	**Water Obstruction and Encroachment Projects – Does the project involve any of the following: placement of fill, excavation within or placement of a structure, located in, along, across or projecting into a watercourse, floodway or body of water?**	☐ Yes	☐ No
5.2	**Wetland Impacts – Does the project involve any of the following: placement of fill, excavation within or placement of a structure, located in, along, across or projecting into a wetland?**	☐ Yes	☐ No

5.3	**Floodplain Projects by the Commonwealth, a Political Subdivision of the Commonwealth or a Public Utility – Does the project involve any of the following: placement of fill, excavation within or placement of a structure, located in, along, across or projecting into a floodplain?**	☐	Yes	☐	No
5.4	**Is your project an interstate transmission natural gas pipeline?**	☐	Yes	☐	No
5.5	**Does your project consist of linear construction activities which result in earth disturbance in two or more DEP regions AND three or more counties?**	☐	Yes	☐	No
5.6	**Does your project utilize Floodplain Restoration as a best management practice for Post Construction Stormwater Management?**	☐	Yes	☐	No
5.7	**Does your project utilize Class V Gravity / Injection Wells as a best management practice for Post Construction Stormwater Management?**	☐	Yes	☐	No
6.0	**Will the project involve discharge of construction related stormwater to a dry swale, surface water, ground water or separate storm water system?**	☐	Yes	☒	No
6.1	**Will the project involve discharge of industrial waste stormwater or wastewater from an industrial activity or sewage to a dry swale, surface water, ground water or an existing sanitary sewer system or separate storm water system?**	☐	Yes	☐	No
7.0	**Will the project involve the construction and operation of industrial waste treatment facilities?**	☐	Yes	☒	No
8.0	**Will the project involve construction of sewage treatment facilities, sanitary sewers, or sewage pumping stations?** If "Yes", indicate estimated proposed flow (gal/day). Also, discuss the sanitary sewer pipe sizes and the number of pumping stations/treatment facilities/name of downstream sewage facilities in the *Project Description*, where applicable.	☐	Yes	☒	No
	8.0.1 Estimated Proposed Flow (gal/day)				
9.0	**Will the project involve the subdivision of land, or the generation of 800 gpd or more of sewage on an existing parcel of land or the generation of an additional 400 gpd of sewage on an already-developed parcel, or the generation of 800 gpd or more of industrial wastewater that would be discharged to an existing sanitary sewer system?**	☐	Yes	☒	No
	9.0.1 Was Act 537 sewage facilities planning submitted and approved by DEP? If "Yes" attach the approval letter. Approval required prior to 105/NPDES approval.	☐	Yes	☐	No
10.0	**Is this project for the beneficial use of biosolids for land application within Pennsylvania?** If "Yes" indicate how much (i.e. gallons or dry tons per year).	☐	Yes	☒	No
	10.0.1 Gallons Per Year (residential septage)				
	10.0.2 Dry Tons Per Year (biosolids)				

11.0	**Does the project involve construction, modification or removal of a dam?** If "Yes", identify the dam.	☐ Yes	☒ No
	11.0.1 Dam Name		
12.0	**Will the project interfere with the flow from, or otherwise impact, a dam?** If "Yes", identify the dam.	☐ Yes	☒ No
	12.0.1 Dam Name		
13.0	**Will the project involve operations (excluding during the construction period) that produce air emissions (i.e., NOX, VOC, etc.)?**	☒ Yes	☐ No
	13.0.1 If "Yes", is the operation subject to the agricultural exemption in 35 P.S. § 4004.1?	☐ Yes	☒ No
	13.0.2 If the answer to 13.0.1 is "No", identify each type of emission followed by the estimated amount of that emission.		
	Enter all types & amounts of emissions; separate each set with semicolons. See Appendix E for PTE calculations		
14.0	**Does the project include the construction or modification of a drinking water supply to serve 15 or more connections or 25 or more people, at least 60 days out of the year?** If "Yes," check all proposed sub-facilities.	☐ Yes	☒ No
	14.0.1 Number of Persons Served		
	14.0.2 Number of Employee/Guests		
	14.0.3 Number of Connections		
	14.0.4 Sub-Fac: Distribution System	☐ Yes	☐ No
	14.0.5 Sub-Fac: Water Treatment Plant	☐ Yes	☐ No
	14.0.6 Sub-Fac: Source	☐ Yes	☐ No
	14.0.7 Sub-Fac: Pump Station	☐ Yes	☐ No
	14.0.8 Sub-Fac: Transmission Main	☐ Yes	☐ No
	14.0.9 Sub-Fac: Storage Facility	☐ Yes	☐ No
15.0	**Will your project include infiltration of storm water or waste water to ground water within one-half mile of a public water supply well, spring or infiltration gallery?**	☐ Yes	☒ No
16.0	**Is your project to be served by an existing public water supply?** If "Yes", indicate name of supplier and attach letter from supplier stating that it will serve the project.	☐ Yes	☒ No
	16.0.1 Supplier's Name		
	16.0.2 Letter of Approval from Supplier is Attached	☐ Yes	☐ No
17.0	**Will this project be served by on-lot drinking water wells?**	☐ Yes	☒ No
18.0	**Will this project involve a new or increased drinking water withdrawal from a river, stream, spring, lake, well or other water bod(ies)?** If "Yes," reference Safe Drinking Water Program.	☐ Yes	☒ No
	18.0.1 Source Name		

19.0	**Will the construction or operation of this project involve treatment, storage, reuse, or disposal of waste?** If "Yes," indicate what type (i.e., hazardous, municipal (including infectious & chemotherapeutic), residual) and the amount to be treated, stored, re-used or disposed. **19.0.1 Type & Amount**	☐	Yes	☒	No
20.0	**Will your project involve the removal of coal, minerals, contaminated media, or solid waste as part of any earth disturbance activities?**	☐	Yes	☒	No
21.0	**Does your project involve installation of a field constructed underground storage tank?** If "Yes," list each Substance & its Capacity. **Note:** Applicant may need a Storage Tank Site Specific Installation Permit. **21.0.1 Enter all substances & capacity of each; separate each set with semicolons.**	☐	Yes	☒	No
22.0	**Does your project involve installation of an aboveground storage tank greater than 21,000 gallons capacity at an existing facility?** If "Yes," list each Substance & its Capacity. **Note:** Applicant may need a Storage Tank Site Specific Installation Permit. **22.0.1 Enter all substances & capacity of each; separate each set with semicolons.**	☐	Yes	☒	No
23.0	**Does your project involve installation of a tank greater than 1,100 gallons which will contain a highly hazardous substance as defined in DEP's Regulated Substances List, 2570-BK-DEP2724?** If "Yes," list each Substance & its Capacity. **Note:** Applicant may need a Storage Tank Site Specific Installation Permit. **23.0.1 Enter all substances & capacity of each; separate each set with semicolons.**	☐	Yes	☒	No
24.0	**Does your project involve installation of a storage tank at a new facility with a total AST capacity greater than 21,000 gallons?** If "Yes", list each Substance & its Capacity. **Note:** Applicant may need a Storage Tank Site Specific Installation Permit. **24.0.1 Enter all substances & capacity of each; separate each set with semicolons.**	☐	Yes	☒	No
	NOTE: If the project includes the installation of a regulated storage tank system, including diesel emergency generator systems, the project may require the use of a Department Certified Tank Handler. For a full list of regulated storage tanks and substances, please go to www.dep.pa.gov search term storage tanks				
25.0	**Will the intended activity involve the use of a radiation source?**	☐	Yes	☒	No

CERTIFICATION

I certify that I have the authority to submit this application on behalf of the applicant named herein and that the information provided in this application is true and correct to the best of my knowledge and information.

For applicants supplying an EIN number: I am applying for a permit or authorization from the Pennsylvania Department of Environmental Protection (DEP). As part of this application, I will provide DEP with an accurate EIN number for the applicant entity. By filing this application with DEP, I hereby authorize DEP to confirm the accuracy of the EIN number provided with the Pennsylvania Department of Revenue. As applicant, I further consent to the Department of Revenue discussing the same with DEP prior to issuance of the Commonwealth permit or authorization.

Type or Print Name Trevor Orth

Signature	Title	Date
Trevor K. Orth	Plant Manager	10/30/2025

APPENDIX B. COMPLIANCE REVIEW FORM

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

AIR POLLUTION CONTROL ACT COMPLIANCE REVIEW FORM

Fully and accurately provide the following information, as specified. Attach additional sheets as necessary.

Type of Compliance Review Form Submittal (check all that apply)

☒ Original Filing
☐ Amended Filing

Date of Last Compliance Review Form Filing: _____/_____/_____

Type of Submittal

☐ New Plan Approval ☐ New Operating Permit ☒ Renewal of Operating Permit
☐ Extension of Plan Approval ☐ Change of Ownership ☐ Periodic Submission (@ 6 mos)
☐ Other: _____

SECTION A. GENERAL APPLICATION INFORMATION

Name of Applicant/Permittee/("applicant")
(non-corporations-attach documentation of legal name)
Constellation Energy Generation LLC/ Crane Clean Energy Center, Unit 1

Address PO Box 480, Route 441 S
Middletown, PA 17057-0480

Telephone **Taxpayer ID#** 23-3064219-31

Permit, Plan Approval or Application ID# State-Only Operating Permit No. 22-05029

Identify the form of management under which the applicant conducts its business (check appropriate box)

☐ Individual ☐ Syndicate ☐ Government Agency
☐ Municipality ☐ Municipal Authority ☐ Joint Venture
☐ Proprietorship ☐ Fictitious Name ☐ Association
☐ Public Corporation ☐ Partnership ☐ Other Type of Business, specify below:
☒ Private Corporation ☐ Limited Partnership

Describe below the type(s) of business activities performed.
Nuclear Power Generation (shutdown)

SECTION B. GENERAL INFORMATION REGARDING "APPLICANT"

If applicant is a corporation or a division or other unit of a corporation, provide the names, principal places of business, state of incorporation, and taxpayer ID numbers of all domestic and foreign parent corporations (including the ultimate parent corporation), and all domestic and foreign subsidiary corporations of the ultimate parent corporation with operations in Pennsylvania. Please include all corporate divisions or units, (whether incorporated or unincorporated) and privately held corporations. (A diagram of corporate relationships may be provided to illustrate corporate relationships.) Attach additional sheets as necessary.

Unit Name	Principal Places of Business	State of Incorporation	Taxpayer ID	Relationship to Applicant

SECTION C. SPECIFIC INFORMATION REGARDING APPLICANT AND ITS "RELATED PARTIES"

Pennsylvania Facilities. List the name and location (mailing address, municipality, county), telephone number, and relationship to applicant (parent, subsidiary or general partner) of applicant and all Related Parties' places of business, and facilities in Pennsylvania. Attach additional sheets as necessary.

Unit Name	Street Address	County and Municipality	Telephone No.	Relationship to Applicant

Provide the names and business addresses of all general partners of the applicant and parent and subsidiary corporations, if any.

Name	Business Address

List the names and business address of persons with overall management responsibility for the process being permitted (i.e. plant manager).

Name	Business Address

Plan Approvals or Operating Permits. List all plan approvals or operating permits issued by the Department or an approved local air pollution control agency under the APCA to the applicant or related parties that are currently in effect or have been in effect at any time 5 years prior to the date on which this form is notarized. This list shall include the plan approval and operating permit numbers, locations, issuance and expiration dates. Attach additional sheets as necessary.

Air Contamination Source	Plan Approval/ Operating Permit#	Location	Issuance Date	Expiration Date
Three Mile Island Operating Permit	22-05029	Middletown, PA	October 13, 2017	October 31, 2022

Compliance Background. (Note: Copies of specific documents, if applicable, must be made available to the Department upon its request.) List all documented conduct of violations or enforcement actions identified by the Department pursuant to the APCA, regulations, terms and conditions of an operating permit or plan approval or order by applicant or any related party, using the following format grouped by source and location in reverse chronological order. Attach additional sheets as necessary. See the definition of "documented conduct" for further clarification. Unless specifically directed by the Department, deviations which have been previously reported to the Department in writing, relating to monitoring and reporting, need not be reported.

Date	Location	Plan Approval/ Operating Permit#	Nature of Documented Conduct	Type of Department Action	Status: Litigation Existing/Continuing or Corrected/Date	Dollar Amount Penalty
						$
						$
						$
						$
						$
						$
						$
						$
						$
						$

List all incidents of deviations of the APCA, regulations, terms and conditions of an operating permit or plan approval or order by applicant or any related party, using the following format grouped by source and location in reverse chronological order. This list must include items both currently known and unknown to the Department. Attach additional sheets as necessary. See the definition of "deviations" for further clarification.

Date	Location	Plan Approval/ Operating Permit#	Nature of Deviation	Incident Status: Litigation Existing/Continuing Or Corrected/Date

<u>CONTINUING OBLIGATION</u>. Applicant is under a continuing obligation to update this form using the Compliance Review Supplemental Form if any additional deviations occur between the date of submission and Department action on the application.

VERIFICATION STATEMENT
Subject to the penalties of Title 18 Pa.C.S. Section 4904 and 35 P.S. Section 4009(b)(2), I verify under penalty of law that I am authorized to make this verification on behalf of the Applicant/Permittee. I further verify that the information contained in this Compliance Review Form is true and complete to the best of my belief formed after reasonable inquiry. I further verify that reasonable procedures are in place to ensure that "documented conduct" and "deviations" as defined in 25 Pa Code Section 121.1 are identified and included in the information set forth in this Compliance Review Form.
Trevor R. Orth — Signature; 10/30/2025 — Date
Trevor Orth — Name (Print or Type)
Plant Manager — Title

APPENDIX C. COUNTY AND MUNICIPAL NOTIFICATIONS

Trinity Consultants
211 Welsh Pool Rd, Ste 238, Exton, PA 19341 / P 610.280.3902 / **trinityconsultants.com**

October 21, 2025

Board of Supervisors
Londonderry Township
783 S. Geyers Church Road
Middletown, PA 17057

RE: PADEP State Only Operating Permit Renewal
Constellation Energy Generation LLC – Crane Clean Energy Center
Operating Permit No.: 22-05029

Dear Supervisor:

Pursuant to 25 Pa. Code § 127.413, Constellation Energy Generation LLC hereby notifies the Londonderry Township Board of Supervisors of its submittal of a State Only Operating Permit renewal to the Pennsylvania Department of Environmental Protection (PADEP) for their Crane Clean Energy Center (formerly Three Mile Island Nuclear Station) located in Londonderry Township, Dauphin County, Pennsylvania.

Pennsylvania Code Title 25 (Environmental Protection – Air Resources) Section 127.413 requires county notification including a 30-day comment period regarding the permit application, which begins upon receipt of this formal notification. During this 30-day period PADEP will accept comments, which may be sent to:

Air Quality – Environmental Program Manager
Pennsylvania Department of Environmental Protection
Southcentral Regional Office
909 Elmerton Ave
Harrisburg, PA 17110
Phone: (717) 705-4700

Written comments should include the name, address, and telephone number of the person(s) submitting the comments along with the reference number of the proposed permit.

If you have any questions regarding this application or require any additional information, please feel free to contact me via e-mail at Kieran.Dempsey@trinityconsultants.com.

Sincerely,

Kieran Dempsey
Consultant
TRINITY CONSULTANTS

Hello, your package has been delivered.

Delivery Date: Wednesday, 10/22/2025
Delivery Time: 9:56 AM
Left At: FRONT DOOR

TRINITY PHILADELPHIA

Tracking Number:	1Z865F4FPG98125523
Ship To:	BOARD OF SUPERVISORS 783 S. GEYERS CHURCH ROAD MIDDLETOWN, PA170574424 US
Number of Packages:	1
UPS Service:	UPS Next Day Air®
Package Weight:	0.1 LBS
Reference Number:	253902.0078

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Trinity Consultants
211 Welsh Pool Rd, Ste 238, Exton, PA 19341 / P 610.280.3902 / **trinityconsultants.com**

October 21, 2025

Board of Commissioners
Dauphin County
2 S. Second Street, 4th Floor
Harrisburg, PA 17101

RE: PADEP State Only Operating Permit Renewal
Constellation Energy Generation LLC – Crane Clean Energy Center
Operating Permit No.: 22-05029

Dear Commissioners:

Pursuant to 25 Pa. Code § 127.413, Constellation Energy Generation LLC hereby notifies the Dauphin County Board of Commissioners of its submittal of a State Only Operating Permit renewal to the Pennsylvania Department of Environmental Protection (PADEP) for their Crane Clean Energy Center (formerly Three Mile Island Nuclear Station) located in Londonderry Township, Dauphin County, Pennsylvania.

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Southcentral Regional Office
909 Elmerton Ave
Harrisburg, PA 17110
Phone: (717) 705-4700

Written comments should include the name, address, and telephone number of the person(s) submitting the comments along with the reference number of the proposed permit.

If you have any questions regarding this application or require any additional information, please feel free to contact me via e-mail at Kieran.Dempsey@trinityconsultants.com.

Sincerely,

Kieran Dempsey
Consultant
TRINITY CONSULTANTS

Hello, your package has been delivered.

Delivery Date: Wednesday, 10/22/2025
Delivery Time: 11:15 AM
Signed by: BALISNOMO

TRINITY PHILADELPHIA

Tracking Number:	1Z865F4FNT96470936
Ship To:	BOARD OF COMMISSIONERS 2 S. SECOND STREET 4TH FLOOR HARRISBURG, PA 171012047 US
Number of Packages:	1
UPS Service:	UPS Next Day Air®
Package Weight:	0.1 LBS
Reference Number:	253902.0078

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APPENDIX D. PERMIT REDLINE

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
AIR QUALITY PROGRAM

STATE ONLY OPERATING PERMIT

Issue Date:	October 13, 2017	Effective Date:	September 27, 2018
Revision Date:	September 27, 2018	Expiration Date:	October 31, 2022
Revision Type:	Modification		

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 unless otherwise designated.

State Only Permit No: 22-05029
Synthetic Minor
Federal Tax Id - Plant Code: 23-3064219-31

Owner Information

Name: ~~EXELON GENERATION CO LLC~~
Mailing Address: PO BOX 480
ROUTE 441 S
MIDDLETOWN, PA 17057-0480

Please update the name of the site owner to the following:
"Constellation Energy Generation, LLC"

Plant Information

Plant: ~~EXELON GENERATION CO LLC/THREE MILE ISLAND NUCLEAR STA~~
Location: 22 Dauphin County 22920 Londonderry
SIC Code: 4911 Trans. & Utilities - Electric Services

Please update the name of the facility to the following:
"Constellation Energy Generation, LLC/Crane Clean Energy Center"

Responsible Official

Name: ~~THOMAS P HAAF~~
Title: ~~PLANT MGR~~
Phone: ~~(717) 948 - 8881~~

Please update the Responsible Official to the following:
"Name: Trevor Orth
Title: Plant Manager
Phone: (267) 533-5559"

Permit Contact Person

Name: ~~SCOTT R COGLEY~~
Title: ~~SR. ENVIRONMENTAL CHEMIST~~
Phone: ~~(717) 948 - 8881~~

Please update the Permit Contact to the following:
"Name: Andrew Spriggle
Title: Senior Environmental Specialist
Email: andrew.spriggle@constellation.com"

[Signature] _____
WILLIAM R. WEAVER, SOUTHCENTRAL REGION AIR PROGRAM MANAGER

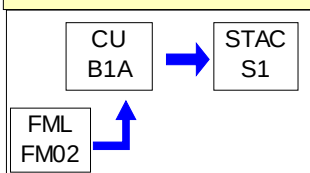
SECTION A. Table of Contents

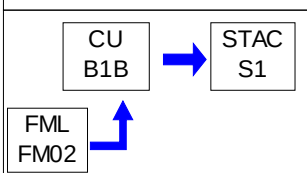
SECTION A. Table of Contents

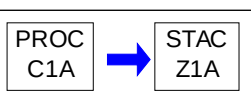
SECTION A. Site Inventory List

Source ID	Source Name	Capacity/Throughput		Fuel/Material
B1A	AUXILIARY BOILER A	168.000	MMBTU/HR	
		2,420.000	Gal/HR	#2 OIL
B1B	AUXILIARY BOILER B	168.000	MMBTU/HR	
		2,420.000	Gal/HR	#2 OIL
C1A	COOLING TOWER A			
C1B	COOLING TOWER B			
FSP1	FIRE PUMP DIESEL	19.000	Gal/HR	#2 OIL
FSP3	FIRE PUMP DIESEL	19.000	Gal/HR	#2 OIL
FX1A	CUMMINS EMERGENCY DIESEL GENERATOR 1, 755 HP, 2015 (FX-Y-1A)	35.000	Gal/HR	#2 Oil
FX1B	CUMMINS EMERGENCY DIESEL GENERATOR 2, 755 HP, 2015 (FX-Y-1B)	35.000	Gal/HR	#2 Oil
Y1A	EMERGENCY DIESEL GENERATOR 1A	230.000	Gal/HR	#2 OIL
Y1B	EMERGENCY DIESEL GENERATOR 1B	230.000	Gal/HR	#2 OIL
Y2	SECURITY UNINT. POWER GEN.	11.000	Gal/HR	#2 OIL
Y4	STATION BLACKOUT DIESEL GEN.	230.000	Gal/HR	#2 OIL
FM02	#2 OIL			
S1	STACK, AUX.BOILERS 1A/1B			
S11	STACK, SECURITY GEN.			
S14	STACK, FIRE PUMP			
S15	STACK, FIRE PUMP			
S16	STACK (FX-Y-1A & FX-Y-1B)			
S2	STACK, EMERGENCY DI. GEN.			
S3	STACK, EMERGENCY DI. GEN.			
S4	STACK, STN. BLACKOUT GEN.			
Z1A	COOLING TOWER A - FUGITIVE EMISSIONS			
Z1B	COOLING TOWER B - FUGITIVE EMISSIONS			

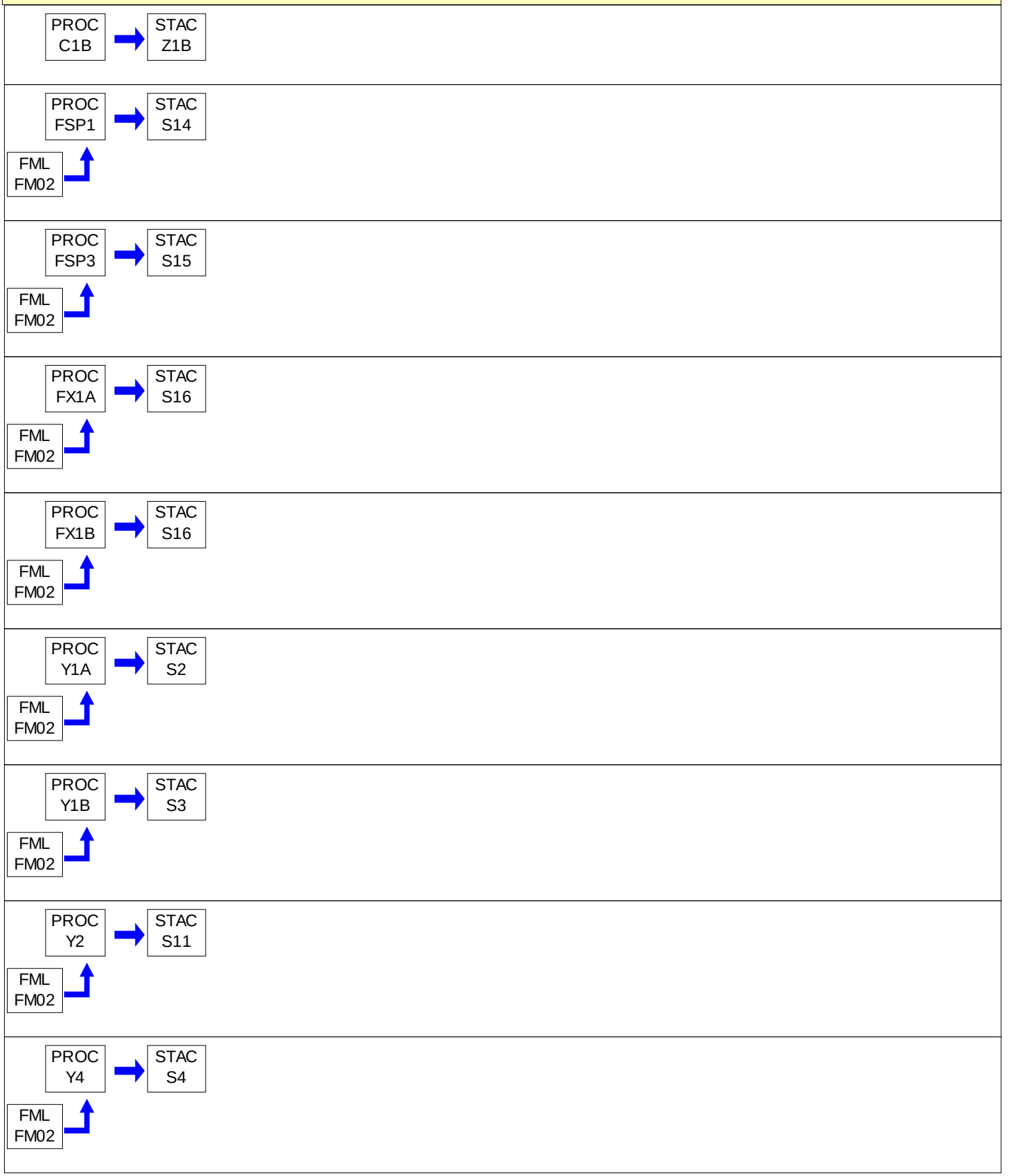
PERMIT MAPS







PERMIT MAPS


PROC C1B
STAC Z1B
PROC FSP1
STAC S14
FML FM02
PROC FSP3
STAC S15
FML FM02
PROC FX1A
STAC S16
FML FM02
PROC FX1B
STAC S16
FML FM02
PROC Y1A
STAC S2
FML FM02
PROC Y1B
STAC S3
FML FM02
PROC Y2
STAC S11
FML FM02
PROC Y4
STAC S4
FML FM02

SECTION B. General State Only Requirements

#001 [25 Pa. Code § 121.1]

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 in 25 Pa. Code § 121.1.

#002 [25 Pa. Code § 127.446]

Operating Permit Duration.

(a) 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.

(b) The terms and conditions of the expired permit shall automatically continue pending issuance of a new operating 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.

#003 [25 Pa. Code §§ 127.412, 127.413, 127.414, 127.446 & 127.703(b)&(c)]

Permit Renewal.

(a) The permittee shall submit a timely and complete application for renewal of the operating permit to the appropriate Regional Air Program Manager. The application for renewal of the operating permit shall be submitted at least six (6) months and not more than 18 months before the expiration date of this permit.

(b) The application for permit renewal shall include the current permit number, a description of any permit revisions that occurred during the permit term, and any applicable requirements that were promulgated and not incorporated into the permit during the permit term. 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.

(c) The permittee shall submit with the renewal application a fee for the processing of the application and an additional annual administrative fee as specified in 25 Pa. Code § 127.703(b) and (c). The fees shall be made payable to "The Commonwealth of Pennsylvania - Clean Air Fund" and shall be for the amount specified in the following schedule specified in 25 Pa. Code § 127.703(b) and (c).

(1) Three hundred dollars for applications filed during the 2000-2004 calendar years.

(2) Three hundred seventy-five dollars for applications filed for the calendar years beginning in 2005.

(d) 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.

(e) The application for renewal of the operating permit shall also include submission of supplemental compliance review forms in accordance with the requirements of 25 Pa. Code § 127.412(b) and § 127.412(j).

(f) 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 as necessary to address any requirements that become applicable to the source after the permittee submits a complete application, but prior to the date the Department takes action on the permit application.

#004 [25 Pa. Code § 127.703]

Operating Permit Fees under Subchapter I.

(a) The permittee shall pay fees according to the following schedule specified in 25 Pa. Code § 127.703(b):

(1) Three hundred dollars for applications filed during the 2000-2004 calendar years.

(2) Three hundred seventy-five dollars for applications filed for the calendar years beginning in 2005.

This fee schedule shall apply to the processing of an application for an operating permit as well as the extension,

SECTION B. General State Only Requirements

modification, revision, renewal, and re-issuance of each operating permit or part thereof.

(b) The permittee shall pay an annual operating permit administrative fee according to the fee schedule established in 25 Pa. Code § 127.703(c).

(1) Two hundred fifty dollars for applications filed during the 1995-1999 calendar years.

(2) Three hundred dollars for applications filed during the 2000-2004 calendar years.

(3) Three hundred seventy-five dollars for applications filed during the years beginning in 2005.

(c) The applicable fees shall be made payable to "The Commonwealth of Pennsylvania - Clean Air Fund".

#005 [25 Pa. Code §§ 127.450 (a)(4) and 127.464]

Transfer of Operating Permits.

(a) This operating permit may not be transferred to another person, except in cases of transfer-of-ownership that are documented and approved by the Department.

(b) In accordance with 25 Pa. Code § 127.450(a)(4), a change in ownership of the source shall be treated as an administrative amendment if the Department determines that no other change in the permit is required and 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 a compliance review form has been submitted to, and the permit transfer has been approved by, the Department.

(c) This operating permit is valid only for those specific sources and the specific source locations described in this permit.

#006 [25 Pa. Code § 127.441 and 35 P.S. § 4008]

Inspection and Entry.

(a) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Department or authorized representatives of the Department to perform the following:

(1) Enter at reasonable times upon the permittee's premises where a 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, at reasonable times, any records that are kept under the conditions of this permit;

(3) Inspect at reasonable times, any 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, any 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 or regulations adopted thereunder including denying the Department access to a source at this facility. Refusal of entry or access may constitute grounds for permit revocation and assessment of criminal and/or civil penalties.

(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.

#007 [25 Pa. Code §§ 127.441 & 127.444]

Compliance Requirements.

(a) The permittee shall comply with the conditions of this operating permit. Noncompliance with this permit constitutes

SECTION B. General State Only Requirements

a violation of the Clean Air Act and the Air Pollution Control Act and is grounds for one 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 for the source is 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 State-Only permit. Nothing in this sub-condition shall be construed to create an independent affirmative duty upon the permittee to obtain a predetermination from the Department for physical configuration or engineering design detail changes made by the permittee.

#008 [25 Pa. Code § 127.441]

Need to Halt or Reduce Activity Not a Defense.

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

#009 [25 Pa. Code §§ 127.442(a) & 127.461]

Duty to Provide Information.

(a) The permittee shall submit reports to the Department containing information the Department may prescribe relative to the operation and maintenance of each source at the facility.

(b) The permittee shall furnish to the Department, in writing, information that the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Department copies of records that the permittee is required to maintain in accordance with this permit.

#010 [25 Pa. Code § 127.461]

Revising an Operating Permit for Cause.

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

(1) The permittee constructs or operates the source subject to the operating permit so that it is in violation of the Air Pollution Control Act, the Clean Air Act, the regulations thereunder, a plan approval, a permit or in a manner that causes air pollution.

(2) 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.

(3) The permittee has failed to submit a report required by the operating permit or an applicable regulation.

(4) The EPA determines that the permit is not in compliance with the Clean Air Act or the regulations thereunder.

#011 [25 Pa. Code §§ 127.450 & 127.462]

Operating Permit Modifications

(a) The permittee is authorized to make administrative amendments, minor operating permit modifications and

SECTION B. General State Only Requirements

significant operating permit modifications, under this permit, as outlined below:

(b) Administrative Amendments. The permittee shall make administrative operating permit amendments (as defined in 25 Pa. Code § 127.450(a)), according to procedures specified in § 127.450 unless precluded by the Clean Air Act or its regulations.

(c) Minor Operating Permit Modifications. The permittee shall make minor operating permit modifications (as defined 25 Pa. Code § 121.1) in accordance with 25 Pa. Code § 127.462.

(d) Permit modifications which do not qualify as minor permit modifications under 25 Pa. Code § 127.541 will be treated as a significant operating permit revision subject to the public notification procedures in §§ 127.424 and 127.425.

#012 [25 Pa. Code § 127.441]

Severability Clause.

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

#013 [25 Pa. Code § 127.449]

De Minimis Emission Increases.

(a) This permit authorizes de minimis emission increases in accordance with 25 Pa. Code § 127.449 so long as the permittee provides the Department with seven (7) days prior written notice before commencing any de minimis emissions increase. 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.

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

(c) Except as provided below in (d), the permittee is authorized 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, the regulations thereunder 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, the regulations thereunder or 25 Pa. Code Article III.

(6) Other sources and classes of sources determined to be of minor significance by the Department.

(d) In accordance with § 127.14, the permittee is authorized to install the following minor sources without the need for a plan approval or permit modification:

SECTION B. General State Only Requirements

(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 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.

(e) 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 (c)(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 this permit, the Air Pollution Control Act, the Clean Air Act, or the regulations promulgated under either of the acts.

(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, installation of minor sources made pursuant to this permit condition and Plan Approval Exemptions under 25 Pa. Code § 127.14 (relating to exemptions), the permittee is prohibited from making 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.

#014 [25 Pa. Code § 127.3]

Operational Flexibility.

The permittee is authorized to make changes within the facility in accordance with the regulatory provisions outlined in 25 Pa. Code § 127.3 (relating to operational flexibility) to implement the operational flexibility requirements provisions authorized under Section 6.1(i) of the Air Pollution Control Act and the operational flexibility terms and conditions of this permit. The provisions in 25 Pa. Code Chapter 127 which implement the operational flexibility requirements include the following:

(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)

SECTION B. General State Only Requirements

(6) Section 127.462 (relating to minor operating permit modifications)

(7) Subchapter H (relating to general plan approvals and general operating permits)

#015 [25 Pa. Code § 127.11]

Reactivation

(a) The permittee may not reactivate a source that has been out of operation or production for at least one year unless the reactivation is conducted in accordance with a plan approval granted by the Department or in accordance with reactivation and maintenance plans developed and approved by the Department in accordance with 25 Pa. Code § 127.11a(a).

(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).

#016 [25 Pa. Code § 127.36]

Health Risk-based Emission Standards and Operating Practice Requirements.

(a) When needed to protect public health, welfare and the environment from emissions of hazardous air pollutants from new and existing sources, the permittee shall comply with the health risk-based emission standards or operating practice requirements imposed by the Department, except as precluded by §§ 6.6(d)(2) and (3) of the Air Pollution Control Act [35 P.S. § 4006.6(d)(2) and (3)].

(b) A person challenging a performance or emission standard established by the Department has the burden to demonstrate that performance or emission standard does not meet the requirements of Section 112 of the Clean Air Act.

#017 [25 Pa. Code § 121.9]

Circumvention.

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 25 Pa. Code Article III, except that with prior approval of the Department, the device or technique may be used for control of malodors.

#018 [25 Pa. Code §§ 127.402(d) & 127.442]

Reporting Requirements.

(a) The permittee shall comply with the applicable reporting requirements of the Clean Air Act, the regulations thereunder, the Air Pollution Control Act and 25 Pa. Code Article III including Chapters 127, 135 and 139.

(b) The permittee shall submit reports to the Department containing information the Department may prescribe relative to the operation and maintenance of any air contamination source.

(c) 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 in the permit transmittal letter, or otherwise notified)

(d) Any records or information including applications, forms, or reports submitted pursuant to this permit condition shall contain a certification by a responsible official as to truth, accuracy and completeness. The certifications submitted under this permit shall require a responsible official of the facility to certify that based on information and belief formed after reasonable inquiry, the statements and information in the documents are true, accurate and complete.

(e) Any records, reports or information submitted to the Department shall be available to the public except for such

SECTION B. General State Only Requirements

records, reports or information which meet the confidentiality requirements of § 4013.2 of the Air Pollution Control Act and §§ 112(d) and 114(c) of the Clean Air Act. The permittee may not request a claim of confidentiality for any emissions data generated for the facility.

#019 [25 Pa. Code §§ 127.441(c) & 135.5]

Sampling, Testing and Monitoring Procedures.

(a) The permittee shall comply with the monitoring, recordkeeping or reporting requirements of 25 Pa. Code Chapter 139 and the other applicable requirements of 25 Pa. Code Article III and additional requirements related to monitoring, reporting and recordkeeping required by the Clean Air Act and the regulations thereunder including the Compliance Assurance Monitoring requirements of 40 CFR Part 64, where applicable.

(b) Unless alternative methodology is required by the Clean Air Act and regulations adopted thereunder, sampling, testing and monitoring required by or used by the permittee to demonstrate compliance with any applicable regulation or permit condition shall be conducted in accordance with the requirements of 25 Pa. Code Chapter 139.

#020 [25 Pa. Code §§ 127.441(c) and 135.5]

Recordkeeping.

(a) The permittee shall maintain and make available, upon request by the Department, the following records of monitored information:

(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 any 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.

#021 [25 Pa. Code § 127.441(a)]

Property Rights.

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

#022 [25 Pa. Code § 127.447]

Alternative Operating Scenarios.

The permittee is authorized to make changes at the facility to implement alternative operating scenarios identified in this permit in accordance with 25 Pa. Code § 127.447.

SECTION C. Site Level Requirements

I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §123.1]

Prohibition of certain fugitive emissions

No person shall permit the emission into the outdoor atmosphere of any fugitive air contaminant from a source other than the following:

(a) Construction or demolition of building or structure.

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

(c) 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.

(d) Clearing of land.

(e) Stockpiling of material.

(f) Sources and classes of sources other than those identified above, for which the operator has obtained a determination from the Department, in accordance with 25 Pa. Code §123.1 (b), that fugitive emissions from the source, after appropriate control, meet the following requirements:

(1) The emissions are of minor significance with respect to causing air pollution.

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

 # 002 [25 Pa. Code §123.2]

Fugitive particulate matter

No person shall emit particulate matter into the outdoor atmosphere from a source specified in Condition #001 if the emissions are visible at the point the emissions pass outside the persons property.

 # 003 [25 Pa. Code §123.31]

Limitations

No person shall 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

No person shall 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:

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

(b) Equal to or greater than 60 percent at any time.

 # 005 [25 Pa. Code §123.42]

Exceptions

The emission limitation of 25 Pa. Code §123.41 shall not apply when:

(a) The presence of uncombined water is the only reason for failure of the emission to meet the limitation.

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

(c) The emission results from sources specified in Section C, Condition #001.

SECTION C. Site Level Requirements

 # 006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall limit facility emissions to below the following levels, based on any consecutive 12-month rolling period.

(a) 100 tons/year of SOx

(b) 100 tons/year of NOx

(c) 100 tons/year of CO

(d) 100 tons/year of PM10

(e) 100 tons/year of PM2.5

(f) 50 tons/year of VOC

(g) 25 tons/year of HAPS

(h) 10 tons/year of a HAP

II. TESTING REQUIREMENTS.

 # 007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The Department reserves the right to require exhaust stack testing of sources as necessary during the permit term to verify emissions for purposes including permit condition violations, emission fees or malfunctioning.

III. MONITORING REQUIREMENTS.

 # 008 [25 Pa. Code §123.43]

Measuring techniques

Visible air contaminants may be measured using either of the following:

(a) A device approved by the Department and maintained to provide accurate opacity measurement.

(b) Observers, trained and certified, to measure plume opacity with the naked eye or with the aid of any devices approved by the Department.

 # 009 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall conduct a monthly inspection around the periphery of the auxiliary boiler steam plant and the emergency & station-blackout diesel generators listed in Section D of this permit during daylight hours when the boilers and diesel generators are in production to detect fugitive visible emissions, visible emissions and malodorous emissions as follows:

(a) The presence of fugitive visible emissions beyond the plant property boundaries, as stated in Section C, Condition #002.

(b) The presence of malodorous air contaminants beyond the plant property boundaries as stated in Section C, Condition #003.

(c) Visible emissions in excess of the limits stated in Section C, Condition #004. Visible emissions may be measured according to the methods specified in Section C, Condition #008, or as an alternative, plant personnel who observe such emissions may report the incidence of visible emissions to the Department within two hours of each incident and make arrangements for a certified observer to verify the visible emissions.

Note: Operation of the these sources for maintenance or testing purposes does not trigger visible emission inspection

SECTION C. Site Level Requirements

requirements.

IV. RECORDKEEPING REQUIREMENTS.

 # 010 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall maintain and record monthly NOx, SOx and CO emissions emitted from the facility to demonstrate compliance with Section C, Condition #006.

 # 011 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall maintain a logbook for recording status of malodorous air contaminants, visible emissions and fugitive visible emission exceedences. The logbook shall also include the name of the facility representative, and the date and time the monitoring was conducted and wind direction.

V. REPORTING REQUIREMENTS.

 # 012 [25 Pa. Code §127.442]

Reporting requirements.

(a) The permitee shall report malfuctions which occur at the facility to the Department. As defined in 40 CFR § 60.2 and incorporated by reference in 25 Pa. Code Chapter 122, a malfunction is any sudden, infrequent and not resonably preventable failure or air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures caused in part by poor maintenance or careless operation are not malfunctions. Malfunctions shall be reported as follows:

(1) Malfunctions which occur at the facility which pose an imminent danger to public health, safety, welfare and the environment, shall be immediately reported to the Department by the telephone. The telephone report of such malfuctions shall occur no later than two (2) hours after the permittee is aware of the malfunction. The permittee shall submit a written report of instance of such malfunctions to the Department within three (3) days of the telephone report.

(2) Unless otherwise required by this permit, any other malfunction that is not subject to the reporting requirements of paragraph (1) above, shall be reported to the Department, in writing, within five (5) days of discovery of the malfunction.

(b) Malfunctions shall be reported to the Department at the following address:

PADEP
Air Quality Program
909 Elmerton Avenue
Harrisburg, PA 17110

Telephone reports can be made to the Air Quality Program at (717)705-4702 during normal business hours or to the Department's Emergency Hotline (866)825-0208 at any time.

 # 013 [25 Pa. Code §135.3]

Reporting

An annual report containing information for all sources listed in this operating permit, new sources which were first operated during preceding year and sources modified during the same period shall be submitted to the Department's Air Quality District Supervisor. The report for January 1 through December 31 is due no later than March 1 of the following year.

VI. WORK PRACTICE REQUIREMENTS.

 # 014 [25 Pa. Code §123.1]

Prohibition of certain fugitive emissions

The permittee shall take all reasonable actions to prevent particulate matter from a source identified in Condition #001 from becoming airborne, as per §§123.1 (c). These actions shall include, but are not limited to, the following:

(a) Use, where possible, of water or chemicals for control of dust in the demolition of buildings or structures, construction

SECTION C. Site Level Requirements

operations, the grading of roads, or the clearing of land.

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

(c) Paving and maintenance of roadways.

(d) 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.

 # 015 [25 Pa. Code §127.441]

Operating permit terms and conditions.

NOx emissions from Source IDs. B1A, B1B, Y1A, Y1B and Y4 shall be based on the fuel usage of each source measured by separate flow meters (fuel usage for the Y4 may be based on tank level measurement). NOx emissions from the rest of the sources may be estimated from operating hours, manufacturers' recommended fuel consumption (gallon per hour or gram per hp-hr), or tank level changes.

 # 016 [25 Pa. Code §129.14]

Open burning operations

(a) No person shall conduct open burning of materials in such 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 and 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) do 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 public official.

(2) Any 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 solely for recreational or ceremonial purposes.

(5) A fire set solely for cooking food.

(c) This permit does not constitute authorization to burn solid waste pursuant to Section 610 (3) of the Solid Waste Management Act, 35 P.S. Section 6018.610 (3), or any other provision of the Solid Waste Management Act.

VIII. COMPLIANCE CERTIFICATION.

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

IX. COMPLIANCE SCHEDULE.

SECTION C. Site Level Requirements

No compliance milestones exist.

SECTION D. Source Level Requirements

Source ID: B1A Source Name: AUXILIARY BOILER A

Source Capacity/Throughput: 168.000 MMBTU/HR
2,420.000 Gal/HR #2 OIL

Conditions for this source occur in the following groups: GROUP 001
GROUP 004

I. RESTRICTIONS.

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

SECTION D. Source Level Requirements

Source ID: B1B Source Name: AUXILIARY BOILER B

Source Capacity/Throughput: 168.000 MMBTU/HR
2,420.000 Gal/HR #2 OIL

Conditions for this source occur in the following groups: GROUP 001
GROUP 004

I. RESTRICTIONS.

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

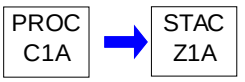
VII. ADDITIONAL REQUIREMENTS.

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

SECTION D. Source Level Requirements

Source ID: C1A Source Name: COOLING TOWER A

Source Capacity/Throughput:



I. RESTRICTIONS.

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

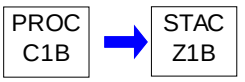
VII. ADDITIONAL REQUIREMENTS.

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

SECTION D. Source Level Requirements

Source ID: C1B Source Name: COOLING TOWER B

Source Capacity/Throughput:



I. RESTRICTIONS.

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

SECTION D. Source Level Requirements

Source ID: FSP1 Source Name: FIRE PUMP DIESEL

Source Capacity/Throughput: 19.000 Gal/HR #2 OIL

Conditions for this source occur in the following groups: GROUP 002
GROUP 003

I. RESTRICTIONS.

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

SECTION D. Source Level Requirements

Source ID: FSP3 Source Name: FIRE PUMP DIESEL

Source Capacity/Throughput: 19.000 Gal/HR #2 OIL

Conditions for this source occur in the following groups: GROUP 002
GROUP 003

I. RESTRICTIONS.

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

SECTION D. Source Level Requirements

Source ID: FX1A Source Name: CUMMINS EMERGENCY DIESEL GENERATOR 1, 755 HP, 2015 (FX-Y-1A)

Source Capacity/Throughput: 35.000 Gal/HR #2 Oil

Conditions for this source occur in the following groups: GROUP 002
GROUP 005

I. RESTRICTIONS.

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

SECTION D. Source Level Requirements

Source ID: FX1B Source Name: CUMMINS EMERGENCY DIESEL GENERATOR 2, 755 HP, 2015 (FX-Y-1B)

Source Capacity/Throughput: 35.000 Gal/HR #2 Oil

Conditions for this source occur in the following groups: GROUP 002
GROUP 005

I. RESTRICTIONS.

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

SECTION D. Source Level Requirements

Source ID: Y1A Source Name: EMERGENCY DIESEL GENERATOR 1A

Source Capacity/Throughput: 230.000 Gal/HR #2 OIL

Conditions for this source occur in the following groups: GROUP 002
GROUP 003

I. RESTRICTIONS.

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

SECTION D. Source Level Requirements

Source ID: Y1B Source Name: EMERGENCY DIESEL GENERATOR 1B

Source Capacity/Throughput: 230.000 Gal/HR #2 OIL

Conditions for this source occur in the following groups: GROUP 002
GROUP 003

I. RESTRICTIONS.

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

SECTION D. Source Level Requirements

Source ID: Y2 Source Name: SECURITY UNINT. POWER GEN.

Source Capacity/Throughput: 11.000 Gal/HR #2 OIL

Conditions for this source occur in the following groups: GROUP 002
GROUP 003

I. RESTRICTIONS.

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

SECTION D. Source Level Requirements

Source ID: Y4 Source Name: STATION BLACKOUT DIESEL GEN.

Source Capacity/Throughput: 230.000 Gal/HR #2 OIL

Conditions for this source occur in the following groups: GROUP 002
GROUP 003

I. RESTRICTIONS.

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

SECTION E. Source Group Restrictions.

Group Name: GROUP 001

Group Description: (2) Auxiliary Boilers - State Requirements

Sources included in this group

ID	Name
B1A	AUXILIARY BOILER A
B1B	AUXILIARY BOILER B

I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §123.11]

Combustion units

No person shall permit the emission into the outdoor atmosphere of particulate matters from each of the boilers in excess of the rate determined by the following formula, as per §123.11(a)(2).

A = 3.6 E-0.56 (Note: 3.6 times E raised to the power -0.56)

Where:
A = Allowable emissions in pounds per million btus of heat input, and

E = Heat Input to the Boiler in million of btu per hour, when E is equal to or greater than 50 but less than 600.

 # 002 [25 Pa. Code §123.22]

Combustion units

No person shall permit the emission into the outdoor atmosphere of sulfur oxides, expressed as SO2, from each of the boilers, in excess of 4 pounds per million btu heat input over any one hour period, as per §123.22(a)(1).

 # 003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Maximum Allowable Sulfur Content Beginning July 1, 2016, Expressed as Parts per Million (ppm) by Weight or Percentage by Weight:

Grades Commercial Fuel Oil (Consistent with ASTM D396)
No. 2 and lighter oil 500 ppm (0.05%)

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

 # 004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall monitor the sulfur content of the No. 2 fuel oil by conducting a fuel oil analysis for each shipment of oil received, or by obtaining a fuel supplier's certification.

IV. RECORDKEEPING REQUIREMENTS.

 # 005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The permittee shall maintain comprehensive and accurate records of the following:

(1) Boiler operating hours both on a monthly and calendar year basis.

(2) Amount of fuel consumed both on a monthly and calendar year basis for each boiler and facility.

(3) Fuel analysis including the heating value in btu/lb.

SECTION E. Source Group Restrictions.

(4) Sulfur content of fuel as stated above in Condition #004.

(b) The permittee shall maintain a logbook and keep a record of annual adjustments and maintainence performed.

(c) The record shall be made available to the Department representative upon request.

 # 006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

For each source listed above, separate monthly records of fuel consumption and operating hours shall be maintained for each calendar year (January 1 through December 31).

V. REPORTING REQUIREMENTS.

 # 007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

In conjunction with Section C, Site Level Condition #013, the permittee shall submit the following annual report to the Department's Air Quality Harrisburg District Supervisor by March 1 of the following year:

(a) No. 2 fuel oil used in each of the boilers.

(b) Number of operating hours for each of the boilers.

(c) The amount of NOx, SOx, VOC and particulate matter that was emitted.

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

 # 008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

NOx emissions from the Sources listed in Section E, Group 1 may be calculated using the emissions factors listed in AP-42.

 # 009 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Emission restrictions listed above in Conditions #001 and #002 do not apply during the periods of start-up and shut down, subject to a maximum period of one hour at a time during each start-up and each shut down event.

SECTION E. Source Group Restrictions.

Group Name: GROUP 002

Group Description: CI Emergency Generators - State Requirements

Sources included in this group

ID	Name
FSP1	FIRE PUMP DIESEL
FSP3	FIRE PUMP DIESEL
FX1A	CUMMINS EMERGENCY DIESEL GENERATOR 1, 755 HP, 2015 (FX-Y-1A)
FX1B	CUMMINS EMERGENCY DIESEL GENERATOR 2, 755 HP, 2015 (FX-Y-1B)
Y1A	EMERGENCY DIESEL GENERATOR 1A
Y1B	EMERGENCY DIESEL GENERATOR 1B
Y2	SECURITY UNINT. POWER GEN.
Y4	STATION BLACKOUT DIESEL GEN.

I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §123.13]

Processes

No person shall permit the emission into the outdoor atmosphere of particulate matter from each of the emergency diesel generators in a manner that the concentration of particulate matter in the effluent gas exceeds 0.04 grain per dry standard cubic foot, as per §123.13(c)(1)(i).

 # 002 [25 Pa. Code §123.21]

General

No person shall permit the emission into the outdoor atmosphere of sulfur oxides from each of the emergency diesel generators in a manner that the concentration of sulfur oxides, expressed as SO2, in the effluent gas exceeds 500 parts per million, by volume, dry basis, as per §123.21(b).

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

 # 003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

For each source listed above separate monthly records of fuel consumption, and operating hours shall be maintained for each calendar year (January 1 through December 31). Fuel consumption will be determined based on direct fuel meter readings, source supply tank level reading, or calculated from operating hours and manufacturers' recommended fuel consumption rates.

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

SECTION E. Source Group Restrictions.

VII. ADDITIONAL REQUIREMENTS.

 # 004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

NOx emissions from the sources listed in Section E, Group 002 may be calculated using the emissions factors listed in AP-42.

 # 005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Emission restrictions listed above in Conditions #001 and #002 do not apply during the start-up and shutdown periods, subject to a maximum one hour period at a time during each start-up and shutdown events.

SECTION E. Source Group Restrictions.

Group Name: GROUP 003

Group Description: CI Emergency Generators - 40 CFR Part 63, Subpart ZZZZ Requirements

Sources included in this group

ID	Name
FSP1	FIRE PUMP DIESEL
FSP3	FIRE PUMP DIESEL
Y1A	EMERGENCY DIESEL GENERATOR 1A
Y1B	EMERGENCY DIESEL GENERATOR 1B
Y2	SECURITY UNINT. POWER GEN.
Y4	STATION BLACKOUT DIESEL GEN.

I. RESTRICTIONS.

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

 # 001 [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?

Emission and Operating Limitations

§ 63.6600 What emission limitations and operating limitations must I meet if I own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions?

[NA – NOT SUBJECT TO EMISSION OR OPERATING LIMITATIONS]

§ 63.6601 What emission limitations must I meet if I own or operate a new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 brake HP and less than or equal to 500 brake HP located at a major source of HAP emissions?

[NA – NOT SUBJECT TO EMISSION OR OPERATING LIMITATIONS]

SECTION E. Source Group Restrictions.

§ 63.6602 What emission limitations and other requirements must I meet if I own or operate an existing stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions?

[NA – NOT SUBJECT TO EMISSION OR OPERATING LIMITATIONS]

§ 63.6603 What emission limitations, operating limitations, and other requirements must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions?

Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in § 63.6620 and Table 4 to this subpart.

(a) If you own or operate an existing stationary RICE located at an area source of HAP emissions, YOU MUST COMPLY WITH THE REQUIREMENTS IN TABLE 2d to this subpart and the operating limitations in Table 2b to this subpart that apply to you.

TABLE 2d REQUIREMENTS:

4. For each EMERGENCY STATIONARY CI RICE and black start stationary CI RICE**, you must meet the following requirement, except during periods of startup:

a. Change oil and filter every 500 hours of operation or annually, whichever comes first*;

b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and

c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

*Sources have the option to utilize an oil analysis program as described in § 63.6625(i) or (j) in order to extend the specified oil change requirement in Table 2d of this subpart.

**If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of this subpart, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable.

[END OF TABLE 2d REQUIREMENTS]

(b) [NA – EMERGENCY ENGINE(S)]

(c) [NA – EMERGENCY ENGINE(S)]

(d) [NA – EMERGENCY ENGINE(S)]

(e) [NA – EMERGENCY ENGINE(S)]

(f) [NA – EMERGENCY ENGINE(S)]

[75 FR 9675, Mar. 3, 2010, as amended at 75 FR 51589, Aug. 20, 2010; 76 FR 12866, Mar. 9, 2011; 78 FR 6701, Jan. 30, 2013]

§ 63.6604 What fuel requirements must I meet if I own or operate a stationary CI RICE?

(a) [NA – EMERGENCY ENGINE(S)]

SECTION E. Source Group Restrictions.

(b) [NA - THE EMERGENCY STATIONARY RICE WILL NOT OPERATE AND ARE NOT CONTRACTUALLY OBLIGATED TO OPERATE PERSUANT TO THE REQUIREMENTS OF 40 CFR §63.6640(f)(2)(ii) AND (iii) OR 40 CFR §63.6640(f)(4)(ii)]

(c) [NA – NOT A MAJOR SOURCE]

(d) [NA – NOT IN SPECIFIED GEOGRAPHIC LOCATIONS]

[78 FR 6702, Jan. 30, 2013]

General Compliance Requirements

§ 63.6605 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emission limitations, operating limitations, and other requirements in this subpart that apply to you at all times.

(b) At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

[75 FR 9675, Mar. 3, 2010, as amended at 78 FR 6702, Jan. 30, 2013]

Testing and Initial Compliance Requirements

§ 63.6610 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions?

[NA – NOT A MAJOR HAP SOURCE]

§ 63.6611 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate a new or reconstructed 4SLB SI stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions?

[NA – NOT A MAJOR HAP SOURCE]

§ 63.6612 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate an existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing stationary RICE located at an area source of HAP emissions?

[NA – NO PERFORMANCE TESTING REQUIRED]

§ 63.6615 When must I conduct subsequent performance tests?

[NA – NOT SUBJECT TO EMISSION OR OPERATING LIMITATIONS]

§ 63.6620 What performance tests and other procedures must I use?

[NA – NO PERFORMANCE TESTING REQUIRED]

§ 63.6625 What are my monitoring, installation, collection, operation, and maintenance requirements?

(a) [NA – CEMS NOT REQUIRED]

SECTION E. Source Group Restrictions.

(b) [NA – CPMS NOT REQUIRED]

(c) [NA – LFG NOT USED]

(d) [NA – NOT A MAJOR HAP SOURCE]

(e) If you own or operate any of the following stationary RICE, you must 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 which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions:

(1) [NA – NOT A MAJOR HAP SOURCE]

(2) [NA – NOT A MAJOR HAP SOURCE]

(3) An existing emergency or black start stationary RICE located at an area source of HAP emissions;

(4) [NA – EMERGENCY ENGINE(S)]

(5) [NA – EMERGENCY ENGINE(S)]

(6) [NA – EMERGENCY ENGINE(S)]

(7) [NA – EMERGENCY ENGINE(S)]

(8) [NA – EMERGENCY ENGINE(S)]

(9) [NA – EMERGENCY ENGINE(S)]

(10) [NA – EMERGENCY ENGINE(S)]

(f) If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.

(g) [NA – EMERGENCY ENGINE(S)]

(h) If you operate a new, reconstructed, or existing stationary engine, you must 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, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to this subpart apply.

(i) If you own or operate a stationary CI engine that is subject to the work, operation or management practices in items 1 or 2 of Table 2c to this subpart or in items 1 or 4 of Table 2d to this subpart, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

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(j) [NA - NOT SI]

[69 FR 33506, June 15, 2004, as amended at 73 FR 3606, Jan. 18, 2008; 75 FR 9676, Mar. 3, 2010; 75 FR 51589, Aug. 20, 2010; 76 FR 12866, Mar. 9, 2011; 78 FR 6703, Jan. 30, 2013]

§ 63.6630 How do I demonstrate initial compliance with the emission limitations, operating limitations, and other requirements?

(a) You must demonstrate initial compliance with each emission limitation, operating limitation, and other requirement that applies to you according to Table 5 of this subpart. [NA – NONE OF THE CATEGORIES IN TABLE 5 APPLY TO EMERGENCY ENGINES]

(b) [NA – PERFORMANCE TESTING NOT REQUIRED]

(c) [NA – NOCS NOT REQUIRED FOR EXISTING EMERGENCY RICE]

(d) [NA – EMERGENCY ENGINE(S)]

(e) [NA – EMERGENCY ENGINE(S)]

[69 FR 33506, June 15, 2004, as amended at 78 FR 6704, Jan. 30, 2013]

Continuous Compliance Requirements

§ 63.6635 How do I monitor and collect data to demonstrate continuous compliance?

[NA – NOT SUBJECT TO EMISSION OR OPERATING LIMITATIONS]

§ 63.6640 How do I demonstrate continuous compliance with the emission limitations, operating limitations, and other requirements?

(a) You must demonstrate continuous compliance with each emission limitation, operating limitation, and other requirements in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you according to methods specified in Table 6 to this subpart.

TABLE 6 REQUIREMENTS

9. FOR EACH existing emergency and black start stationary RICE <=500 HP located at a major source of HAP, existing non-emergency stationary RICE <100 HP located at a major source of HAP, EXISTING EMERGENCY and black start STATIONARY RICE LOCATED AT AN AREA SOURCE OF HAP, existing non-emergency stationary CI RICE <=300 HP located at an area source of HAP, existing non-emergency 2SLB stationary RICE located at an area source of HAP, existing non-emergency stationary SI RICE located at an area source of HAP which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, existing non-emergency 4SLB and 4SRB stationary RICE <=500 HP located at an area source of HAP, existing non-emergency 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate 24 hours or less per calendar year, and existing non-emergency 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that are remote stationary RICE, complying with the requirement to “Work or Management practices”, you must demonstrate continuous compliance by:

i. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or

ii. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

[END OF TABLE 6 REQUIREMENTS]

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(b) [NA – NOT SUBJECT TO EMISSION OR OPERATING LIMITATIONS]

(c) [NA – ANNUAL COMPLIANCE DEMONSTRATION NOT REQUIRED]

(d) [NA – NOT SUBJECT TO EMISSION OR OPERATING LIMITATIONS]

(e) You must also report each instance in which you did not meet the requirements in Table 8 to this subpart that apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to this subpart: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing emergency stationary RICE, an existing limited use stationary RICE, or an existing stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to this subpart, except for the initial notification requirements: a new or reconstructed stati landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual b ted emergency stationary RICE, or a new or reconstructed limited use stationary RICE. RICE AT AREA HAP SOURCES ARE NOT AMONG THOSE EXEMPTED FROM THIS SECTION]

Please remove this language as the regulation has been updated.

(f) If you own or operate an emergency stationary RICE, you must operate the emergency stationary RICE according to the requirements in paragraphs (f)(1) through (4) of this section. In order for the engine to be considered an emergency stationary RICE under this subpart, any operation other than emergency operation, maintenance and testing, ~~emergency demand response~~, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (4) of ~~this section~~, is prohibited. If you do not o g to the requirements in paragraphs (f)(1) through (4) of ~~this section~~, the engine will not be consi e under this subpart and must meet all requirements for non-emergency engines.

Please remove this language

(1) There is no time limit on the use of emergency stationary RICE in emergency situations.

(2) You may operate your emergency stationary RICE for ~~any combination of~~ the purpose~~s~~ specified in paragraph~~s~~ (f)(2)(i) ~~through (iii)~~ of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraphs (f)(3) and (4) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).

Please remove this language

(i) Emergency stationary RICE may be operated for maintenance checks and readin he tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent bal mission operator, or the insurance company associated with the engine. The owner or operato trator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

Please remove this language

(ii)-(iii) [VACATED AS OF 5/2/16 PER COURT ORDER]

(3) [NA – NOT A MAJOR HAP SOURCE]

Please remove this language

(4) Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing ~~and emergency demand response~~ provided in paragraph (f)(2) of this section. Except as provided in paragraphs (f)(4)(i) and (ii) of this section, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(i) Prior to May 3, 2014, the 50 hours per year for non-emergency situations can be used for peak shaving or non-emergency demand response to generate income for a facility, or to otherwise supply power as part of a financial arrangement with another entity if the engine is operated as part of a peak shaving (load management program) with the local distribution

SECTION E. Source Group Restrictions.

system operator and the power is provided only to the facility itself or to support the local distribution system.

(ii) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

(A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator.

(B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

(C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

(D) The power is provided only to the facility itself or to support the local transmission and distribution system.

(E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

[69 FR 33506, June 15, 2004, as amended at 71 FR 20467, Apr. 20, 2006; 73 FR 3606, Jan. 18, 2008; 75 FR 9676, Mar. 3, 2010; 75 FR 51591, Aug. 20, 2010; 78 FR 6704, Jan. 30, 2013]

Notifications, Reports, and Records

§ 63.6645 What notifications must I submit and when?

(a) You must submit all of the notifications in §§ 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified if you own or operate any of the following;

(1) [NA – NOT A MAJOR HAP SOURCE]

(2) [NA - PER (5) BELOW]

(3) [NA – NOT A MAJOR HAP SOURCE]

(4) [NA – NOT A MAJOR HAP SOURCE]

(5) THIS REQUIREMENT DOES NOT APPLY IF YOU OWN OR OPERATE an existing stationary RICE less than 100 HP, AN EXISTING STATIONARY EMERGENCY RICE, OR AN EXISTING STATIONARY RICE THAT IS NOT SUBJECT TO ANY NUMERICAL EMISSION STANDARDS.

(b) [NA – NOT A MAJOR HAP SOURCE]

(c) [NA – NOT A MAJOR HAP SOURCE]

(d) [NA – NOT A MAJOR HAP SOURCE]

(e) [NA – NOT A MAJOR HAP SOURCE]

(f) [NA – 63.6590(b) DOES NOT APPLY]

(g) [NA – PERFORMANCE TEST NOT REQUIRED]

(h) [NA – PERFORMANCE TEST NOT REQUIRED]

(i) [NA – EMERGENCY ENGINE(S)]

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[73 FR 3606, Jan. 18, 2008, as amended at 75 FR 9677, Mar. 3, 2010; 75 FR 51591, Aug. 20, 2010; 78 FR 6705, Jan. 30, 2013]

§ 63.6650 What reports must I submit and when?

(a) [NA - THE EMERGENCY STATIONARY RICE WILL NOT OPERATE AND ARE NOT CONTRACTUALLY OBLIGATED TO OPERATE PERSUANT TO THE REQUIREMENTS OF 40 CFR §63.6640(f)(2)(ii) AND (iii) OR 40 CFR §63.6640(f)(4)(ii)]

(b) Unless the Administrator has approved a different schedule for submission of reports under § 63.10(a), you must submit each report by the date in Table 7 of this subpart and according to the requirements in paragraphs (b)(1) through (b)(9) of this section.

(1) [NA – ANNUAL REPORT REQUIRED, ONLY UNDER CERTAIN CONDITIONS]

(2) [NA – ANNUAL REPORT REQUIRED, ONLY UNDER CERTAIN CONDITIONS]

(3) [NA – ANNUAL REPORT REQUIRED, ONLY UNDER CERTAIN CONDITIONS]

(4) [NA – ANNUAL REPORT REQUIRED, ONLY UNDER CERTAIN CONDITIONS]

(5) [NA – ANNUAL REPORT REQUIRED, ONLY UNDER CERTAIN CONDITIONS]

(6) For annual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in § 63.6595 and ending on December 31.

(7) For annual Compliance reports, the first Compliance report must be postmarked or delivered no later than January 31 following the end of the first calendar year after the compliance date that is specified for your affected source in § 63.6595.

(8) For annual Compliance reports, each subsequent Compliance report must cover the annual reporting period from January 1 through December 31.

(9) For annual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than January 31.

(c) [NA – "COMPLIANCE REPORT" NOT REQUIRED]

(d) [NA – NOT SUBJECT TO EMISSION OR OPERATING LIMITATIONS]

(e) [NA – NOT SUBJECT TO EMISSION OR OPERATING LIMITATIONS]

(f) [NA – NOT SUBJECT TO TITLE V PERMITTING]

(g) [NA – LFG NOT USED]

(h) [NA - THE EMERGENCY STATIONARY RICE WILL NOT OPERATE AND ARE NOT CONTRACTUALLY OBLIGATED TO OPERATE PERSUANT TO THE REQUIREMENTS OF 40 CFR §63.6640(f)(2)(ii) AND (iii) OR 40 CFR §63.6640(f)(4)(ii)]

[69 FR 33506, June 15, 2004, as amended at 75 FR 9677, Mar. 3, 2010; 78 FR 6705, Jan. 30, 2013]

§ 63.6655 What records must I keep?

(a) [NA – NOT SUBJECT TO EMISSION OR OPERATING LIMITATIONS]

(b) [NA – NO CEMS OR CPMS]

(c) [NA – LFG NOT USED]

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(d) [NA – NOT SUBJECT TO EMISSION OR OPERATING LIMITATIONS]

(e) You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE;

(1) [NA – NOT A MAJOR HAP SOURCE]

(2) An existing [Please remove this language] E.

(3) An existing stationary RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to this subpart.

(f) If you own or operate any of the stationary RICE in paragraphs (f)(1) through (2) of this section, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in § 63.6640(f)(~~2)(ii) or (iii) or § 63.6640(f)~~(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.

(1) [NA – NOT A MAJOR HAP SOURCE]

(2) An existing emergency stationary RICE located at an area source of HAP emissions that does [Please remove this language] applicable to non-emergency engines.

[69 FR 33506, June 15, 2004, as amended at 75 FR 9678, Mar. 3, 2010; 75 FR 51592, Aug. 20, 2010; 78 FR 6706, Jan. 30, 2013]

§ 63.6660 In what form and how long must I keep my records?

(a) Your records must be in a form suitable and readily available for expeditious review according to § 63.10(b)(1).

(b) As specified in § 63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to § 63.10(b)(1).

[69 FR 33506, June 15, 2004, as amended at 75 FR 9678, Mar. 3, 2010]

Other Requirements and Information

§ 63.6665 What parts of the General Provisions apply to me?

Table 8 to this subpart shows which parts of the General Provisions in §§ 63.1 through 63.15 apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with any of the requirements of the General Provisions specified in Table 8: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing stationary RICE that combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, an existing emergency stationary RICE, or an existing limited use stationary RICE. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in the General Provisions specified in Table 8 except for the initial notification requirements: A new stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new emergency stationary RICE, or a new limited use stationary RICE. [EXISTING EMERGENCY RICE AT AREA HAP SOURCES ARE NOT AMONG THOSE

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EXEMPTED FROM THIS SECTION]

[75 FR 9678, Mar. 3, 2010]

Regulatory Changes:

Individual sources within this source group that are subject to 40 CFR Part 63 Subpart ZZZZ -National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines shall comply with all applicable requirements of the Subpart. 40 CFR 63.13(a) requires submission of copies of all requests, reports and other communications to both the Department and the EPA. The EPA copies shall be forwarded to:

Director
Air Protection Division (3AP00)
U.S. EPA Region III
1650 Arch Street
Philadelphia, PA 19103-2029

The Department copies shall be forwarded to:

Regional Air Program Manager
PA Department of Environmental Protection
909 Elmerton Avenue
Harrisburg, PA 17110-8200

In the event that the Federal Subpart that is the subject of this Source Group is revised, the permittee shall comply with the revised version of the subpart, and shall not be required to comply with any provisions in this permit designated as having the subpart as their authority, to the extent that such permit provisions would be inconsistent with the applicable provisions of the revised subpart.

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Group Name: GROUP 004

Group Description: (2) Auxiliary Boilers - 40 CFR Part 63, Subpart JJJJJJ Requirements

Sources included in this group

ID	Name
B1A	AUXILIARY BOILER A
B1B	AUXILIARY BOILER B

I. RESTRICTIONS.

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

 # 001 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11193]

SUBPART JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources

Am I subject to this subpart?

§ 63.11194 What is the affected source of this subpart?

(a) This subpart applies to each new, reconstructed, or existing affected source as defined in paragraphs (a)(1) and (2) of this section.

(1) The affected source of this subpart is the collection of all existing industrial, commercial, and institutional boilers within a subcategory, as listed in § 63.11200 and defined in § 63.11237, located at an area source.

(2) The affected source of this subpart is each new or reconstructed industrial, commercial, or institutional boiler within a subcategory, as listed in § 63.11200 and as defined in § 63.11237, located at an area source.

(b) An affected source is an existing source if you commenced construction or reconstruction of the affected source on or before June 4, 2010.

(c) [NA – UNIT(S) ARE EXISTING]

(d) [NA – UNIT(S) ARE EXISTING]

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(e) [NA - UNIT(S) ARE OIL-FIRED]

(f) [NA - FACILITY HAS TITLE V PERMIT]

[76 FR 15591, Mar. 21, 2011, as amended at 78 FR 7506, Feb. 1, 2013]

Emission Limits, Work Practice Standards, Emission Reduction Measures, and Management Practices

§ 63.11200 What are the subcategories of boilers?

The subcategories of boilers, as defined in § 63.11237 are:

(a) [NA – UNIT(S) ARE OIL-FIRED]

(b) [NA – UNIT(S) ARE OIL-FIRED]

(c) Oil.

(d) Seasonal boilers.

(e) [NA – UNIT(S) > 5 MMBTU]

(f) [NA - NO OXYGEN TRIM SYSTEMS]

(g) [NA - UNIT(S) NOT LIMITED USE]

[78 FR 7506, Feb. 1, 2013]

§ 63.11201 What standards must I meet?

(a) [NA - UNIT(S) ARE NOT SUBJECT TO EMISSION LIMITS]

(b) You must comply with each work practice standard, emission reduction measure, and management practice specified in Table 2 to this subpart that applies to your boiler. An energy assessment completed on or after January 1, 2008 that meets or is amended to meet the energy assessment requirements in Table 2 to this subpart satisfies the energy assessment requirement. A facility that operates under an energy management program established through energy management systems compatible with ISO 50001, that includes the affected units, also satisfies the energy assessment requirement.

TABLE 2 REQUIREMENTS:

As stated in § 63.11201, you must comply with the following applicable work practice standards, emission reduction measures, and management practices:

8. If your boiler is in this subcategory: Existing seasonal boilers, you must meet the following: Conduct an initial tune-up as specified in § 63.11214, and conduct a tune-up of the boiler every 5 years as specified in § 63.11223.

END OF TABLE 2 REQUIREMENTS

(c) [NA – UNIT(S) ARE NOT SUBJECT TO OPERATING LIMITS]

(d) These standards apply at all times the affected boiler is operating, except during periods of startup and shutdown as defined in § 63.11237, during which time you must comply only with Table 2 to this subpart.

[76 FR 15591, Mar. 21, 2011, as amended at 78 FR 7506, Feb. 1, 2013]

General Compliance Requirements

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§ 63.11205 What are my general requirements for complying with this subpart?

(a) At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

(b) [NA - UNIT(S) ARE NOT SUBJECT TO EMISSION LIMITS]

(c) [NA - UNIT(S) ARE NOT SUBJECT TO EMISSION LIMITS]

[76 FR 15591, Mar. 21, 2011, as amended at 78 FR 7506, Feb. 1, 2013]

Initial Compliance Requirements

§ 63.11210 What are my initial compliance requirements and by what date must I conduct them?

(a) [NA - UNIT(S) ARE NOT SUBJECT TO EMISSION LIMITS]

(b) [NA - UNIT(S) ARE NOT SUBJECT TO EMISSION LIMITS]

(c) For existing affected boilers that have applicable work practice standards, management practices, or emission reduction measures, you must demonstrate initial compliance no later than the compliance date that is specified in § 63.11196 and according to the applicable provisions in § 63.7(a)(2), except as provided in paragraph (j) of this section.

(d) [NA - UNIT(S) ARE NOT SUBJECT TO EMISSION LIMITS]

(e) –(g) [NA – THE SOURCES IN THIS GROUP ARE EXISTING]

(h) [NA – NSPS 4C AND 4D EXEMPTIONS NOT INVOKED]

(i) For affected boilers that switch fuels or make a physical change to the boiler that results in the applicability of a different subcategory within subpart JJJJJJ or the boiler becoming subject to subpart JJJJJJ, you must demonstrate compliance within 180 days of the effective date of the fuel switch or the physical change. Notification of such changes must be submitted according to § 63.11225(g).

(j) [NA – FACILITY IS MINOR FOR HAP]

(k) [NA – UNITS HAVE OPERATED SINCE 6J EFFECTIVE DATE]

[76 FR 15591, Mar. 21, 2011, as amended at 78 FR 7507, Feb. 1, 2013; 81 FR 63125, Sept. 14, 2016]

§ 63.11211 How do I demonstrate initial compliance with the emission limits?

[NA - UNIT(S) ARE NOT SUBJECT TO EMISSION LIMITS]

§ 63.11212 What stack tests and procedures must I use for the performance tests?

[NA - UNIT(S) ARE NOT SUBJECT TO PERFORMANCE TESTING]

§ 63.11213 What fuel analyses and procedures must I use for the performance tests?

[NA - UNIT(S) ARE NOT SUBJECT TO PERFORMANCE TESTING]

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§ 63.11214 How do I demonstrate initial compliance with the work practice standard, emission reduction measures, and management practice?

(a) [NA – UNIT(S) ARE OIL-FIRED]

(b) If you own or operate an existing or new biomass-fired boiler or an existing or new oil-fired boiler, you must conduct a performance tune-up according to §63.11210(c) or (g), as applicable, and §63.11223(b). If you own or operate an existing biomass-fired boiler or existing oil-fired boiler, you must submit a signed statement in the Notification of Compliance Status report that indicates that you conducted an initial tune-up of the boiler.

(c) [NA – ENERGY ASSESSMENT NOT REQUIRED]

(d) [NA - UNIT(S) ARE NOT SUBJECT TO EMISSION LIMITS]

[76 FR 15591, Mar. 21, 2011, as amended at 78 FR 7508, Feb. 1, 2013; 81 FR 63126, Sept. 14, 2016]

Continuous Compliance Requirements

§ 63.11220 When must I conduct subsequent performance tests or fuel analyses?

[NA - UNIT(S) ARE NOT SUBJECT TO PERFORMANCE TESTING OR FUEL ANALYSES]

§ 63.11221 Is there a minimum amount of monitoring data I must obtain?

[NA - UNIT(S) ARE NOT SUBJECT TO EMISSION LIMITS]

§ 63.11222 How do I demonstrate continuous compliance with the emission limits?

[NA - UNIT(S) ARE NOT SUBJECT TO EMISSION LIMITS]

§ 63.11223 How do I demonstrate continuous compliance with the work practice and management practice standards?

(a) For affected sources subject to the work practice standard or the management practices of a tune-up, you must conduct a performance tune-up according to paragraph (b) of this section and keep records as required in § 63.11225(c) to demonstrate continuous compliance. You must conduct the tune-up while burning the type of fuel (or fuels in the case of boilers that routinely burn two types of fuels at the same time) that provided the majority of the heat input to the boiler over the 12 months prior to the tune-up.

(b) Except as specified in paragraphs (c) through (f) of this section, you must conduct a tune-up of the boiler biennially [SEASONAL BOILER TUNE-UPS ARE ONCE EVERY FIVE YEARS] to demonstrate continuous compliance as specified in paragraphs (b)(1) through (7) of this section.

(1) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (you may delay the burner inspection until the next scheduled unit shutdown, not to exceed 72 months from the previous inspection). Units that produce electricity for sale may delay the burner inspection until the first outage, not to exceed 72 months from the previous inspection.

(2) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.

(3) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (you may delay the inspection until the next scheduled unit shutdown, not to exceed 72 months from the previous inspection). Units that produce electricity for sale may delay the inspection until the first outage, not to exceed 72 months from the previous inspection.

(4) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any nitrogen oxide requirement to which the unit is subject.

SECTION E. Source Group Restrictions.

(5) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer.

(6) Maintain on-site and submit, if requested by the Administrator, a report containing the information in paragraphs (b)(6)(i) through (iii) of this section.

(i) The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler.

(ii) A description of any corrective actions taken as a part of the tune-up of the boiler.

(iii) The type and amount of fuel used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.

(7) If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of startup.

(c) [NA – UNIT(S) DO NOT HAVE OXYGEN TRIM SYSTEM]

(d) Seasonal boilers must conduct a tune-up every 5 years as specified in paragraphs (b)(1) through (7) of this section. Each 5-year tune-up must be conducted no more than 61 months after the previous tune-up. For a new or reconstructed seasonal boiler, the first 5-year tune-up must be no later than 61 months after the initial startup. You may delay the burner inspection specified in paragraph (b)(1) of this section and inspection of the system controlling the air-to-fuel ratio specified in paragraph (b)(3) of this section until the next scheduled unit shutdown, but you must inspect each burner and system controlling the air-to-fuel ratio at least once every 72 months. Seasonal boilers are not subject to the emission limits in Table 1 to this subpart or the operating limits in Table 3 to this subpart.

(e) [NA - UNIT(S) > 5 MMBTU]]

(f) [NA – UNIT(S) NOT LIMITED USE]

(g) [NA - UNIT(S) ARE NOT SUBJECT TO EMISSION LIMITS]

[76 FR 15591, Mar. 21, 2011, as amended at 78 FR 7509, Feb. 1, 2013; 81 FR 63127, Sept. 14, 2016]

§ 63.11224 What are my monitoring, installation, operation, and maintenance requirements?

(a) [NA - UNIT(S) ARE NOT SUBJECT TO EMISSION LIMITS]

(b) [NA - UNIT(S) ARE NOT SUBJECT TO EMISSION LIMITS]

(c) [NA - UNIT(S) ARE NOT SUBJECT TO EMISSION LIMITS]

(d) [NA – UNIT(S) ARE NOT SUBJECT TO OPERATING LIMITS]

(e) [NA - UNIT(S) ARE NOT SUBJECT TO EMISSION LIMITS]

(f) [NA – BLDS NOT USED OR REQUIRED]

[76 FR 15591, Mar. 21, 2011, as amended at 78 FR 7510, Feb. 1, 2013]

§ 63.11225 What are my notification, reporting, and recordkeeping requirements?

(a) You must submit the notifications specified in paragraphs (a)(1) through (5) of this section to the administrator.

(1) You must submit all of the notifications in §§ 63.7(b); 63.8(e) and (f); and 63.9(b) through (e), (g), and (h) that apply to you

SECTION E. Source Group Restrictions.

by the dates specified in those sections except as specified in paragraphs (a)(2) and (4) of this section.

(2) [NA - INITIAL NOTIFICATION WAS ALREADY SUBMITTED]

(3) [NA - UNIT(S) ARE NOT SUBJECT TO PERFORMANCE TESTING]

(4) [NA - THE NOTIFICATION OF COMPLIANCE STATUS WAS ALREADY SUBMITTED]

(5) [NA - UNIT(S) ARE NOT SUBJECT TO EMISSION LIMITS]

(b) You must prepare, by March 1 of each year, and submit to the delegated authority upon request, an annual compliance certification report for the previous calendar year containing the information specified in paragraphs (b)(1) through (4) of this section. You must submit the report by March 15 if you had any instance described by paragraph (b)(3) of this section. For boilers that are subject only to the energy assessment requirement and/or a requirement to conduct a biennial or 5-year tune-up according to §63.11223(a) and not subject to emission limits or operating limits, you may prepare only a biennial or 5-year compliance report as specified in paragraphs (b)(1) and (2) of this section.

(1) Company name and address.

(2) Statement by a responsible official, with the official's name, title, phone number, email address, and signature, certifying the truth, accuracy and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements of this subpart. Your notification must include the following certification(s) of compliance, as applicable, and signed by a responsible official:

(i) “This facility complies with the requirements in § 63.11223 to conduct a biennial or 5-year tune-up, as applicable, of each boiler.”

(ii) [NA – UNIT(S) DO NOT COMBUST SOLID WASTE]

(iii) [NA - UNIT(S) ARE NOT SUBJECT TO EMISSION LIMITS]

(3) If the source experiences any deviations from the applicable requirements during the reporting period, include a description of deviations, the time periods during which the deviations occurred, and the corrective actions taken.

(4) [NA - UNIT(S) ARE NOT SUBJECT TO EMISSION LIMITS]

(c) You must maintain the records specified in paragraphs (c)(1) through (7) of this section.

(1) As required in § 63.10(b)(2)(xiv), you must keep a copy of each notification and report that you submitted to comply with this subpart and all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted.

(2) You must keep records to document conformance with the work practices, emission reduction measures, and management practices required by § 63.11214 and § 63.11223 as specified in paragraphs (c)(2)(i) through (vi) of this section.

(i) Records must identify each boiler, the date of tune-up, the procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned.

(ii) [NA – UNIT(S) DO NOT COMBUST SOLID WASTE]

(iii) [NA – ENERGY ASSESSMENT NOT REQUIRED]

(iv) [NA - UNIT(S) ARE NOT SUBJECT TO EMISSION LIMITS]

(v) For each boiler that meets the definition of seasonal boiler, you must keep records of days of operation per year.

SECTION E. Source Group Restrictions.

(vi) [NA – UNIT(S) NOT LIMITED USE]

(3) [NA - UNIT(S) ARE NOT SUBJECT TO FUEL ANALYSES]

(4) Records of the occurrence and duration of each malfunction of the boiler, or of the associated air pollution control and monitoring equipment.

(5) Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in § 63.11205(a), including corrective actions to restore the malfunctioning boiler, air pollution control, or monitoring equipment to its normal or usual manner of operation.

(6) [NA - UNIT(S) ARE NOT SUBJECT TO EMISSION LIMITS]

(7) [NA – BLDS NOT USED OR REQUIRED]

(d) Your records must be in a form suitable and readily available for expeditious review. You must keep each record for 5 years following the date of each recorded action. You must keep each record on-site or be accessible from a central location by computer or other means that instantly provide access at the site for at least 2 years after the date of each recorded action. You may keep the records off site for the remaining 3 years.

(e) [NA - SOURCES IN THIS GROUP ARE NOT SUBJECT TO PERFORMANCE TESTING]

(f) [NA – SOURCES IN THIS GROUP ARE OIL-FIRED]

(g) If you have switched fuels or made a physical change to the boiler and the fuel switch or change resulted in the applicability of a different subcategory within this subpart, in the boiler becoming subject to this subpart, or in the boiler switching out of this subpart due to a fuel change that results in the boiler meeting the definition of gas-fired boiler, as defined in §63.11237, or you have taken a permit limit that resulted in you becoming subject to this subpart or no longer being subject to this subpart, you must provide notice of the date upon which you switched fuels, made the physical change, or took a permit limit within 30 days of the change. The notification must identify:

(1) The name of the owner or operator of the affected source, the location of the source, the boiler(s) that have switched fuels, were physically changed, or took a permit limit, and the date of the notice.

(2) The date upon which the fuel switch, physical change, or permit limit occurred.

[76 FR 15591, Mar. 21, 2011, as amended at 78 FR 7511, Feb. 1, 2013; 81 FR 63127, Sept. 14, 2016]

§63.11226 [Reserved]

Other Requirements and Information

§ 63.11235 What parts of the General Provisions apply to me?

Table 8 to this subpart shows which parts of the General Provisions in §§ 63.1 through 63.15 apply to you.

§ 63.11236 Who implements and enforces this subpart? [INCORPORATED BY REFERENCE]

§ 63.11237 What definitions apply to this subpart? [INCORPORATED BY REFERENCE]

Regulatory Changes

Individual sources within this source group that are subject to 40 CFR Part 63 Subpart JJJJJJ shall comply with all applicable requirements of the Subpart. 40 CFR 63.13(a) requires submission of copies of all requests, reports and other communications to both the Department and the EPA. The EPA copies shall be forwarded to:

Director

SECTION E. Source Group Restrictions.

Air Protection Division (3AP00)
U.S. EPA Region III
1650 Arch Street
Philadelphia, PA 19103-2029

The Department copies shall be forwarded to:

Regional Air Program Manager
PA Department of Environmental Protection
909 Elmerton Avenue
Harrisburg, PA 17110-8200

In the event that the Federal Subpart that is the subject of this Source Group is revised, the permittee shall comply with the revised version of the subpart, and shall not be required to comply with any provisions in this permit designated as having the subpart as their authority, to the extent that such permit provisions would be inconsistent with the applicable provisions of the revised subpart.

SECTION E. Source Group Restrictions.

Group Name: GROUP 005

Group Description: 40 CFR Part 60 Subpart IIII

Sources included in this group

ID	Name
FX1A	CUMMINS EMERGENCY DIESEL GENERATOR 1, 755 HP, 2015 (FX-Y-1A)
FX1B	CUMMINS EMERGENCY DIESEL GENERATOR 2, 755 HP, 2015 (FX-Y-1B)

I. RESTRICTIONS.

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

 # 001 [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?

§ 60.4200 Am I subject to this subpart?

(a) The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary compression ignition (CI) internal combustion engines (ICE) and other persons as specified in paragraphs (a)(1) through (4) of this section. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.

(1) [NA - NOT AN ENGINE MANUFACTURER]

(2) Owners and operators of stationary CI ICE that commence construction after July 11, 2005, where the stationary CI ICE are:

(i) Manufactured after April 1, 2006, and are not fire pump engines, or

(ii) [NA –ENGINE(S) REPORTEDLY WILL NOT BE MANUFACTURED AS CERTIFIED NFPA FIRE PUMP ENGINE(S)]

(3) [NA - NOT MODIFIED OR RECONSTRUCTED]

SECTION E. Source Group Restrictions.

(4) The provisions of § 60.4208 of this subpart are applicable to all owners and operators of stationary CI ICE that commence construction after July 11, 2005.

(b) [NA – TEST CELL NOT INVOLVED]

(c) If you are an owner or operator of an area source subject to this subpart, you are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71, provided you are not required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart applicable to area sources.

(d) Stationary CI ICE may be eligible for exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C (or the exemptions described in 40 CFR part 89, subpart J and 40 CFR part 94, subpart J, for engines that would need to be certified to standards in those parts), except that owners and operators, as well as manufacturers, may be eligible to request an exemption for national security.

(e) [NA – NOT TEMPORARY REPLACEMENT UNIT]

[71 FR 39172, July 11, 2006, as amended at 76 FR 37967, June 28, 2011]

Emission Standards for Owners and Operators

§ 60.4204 What emission standards must I meet for non-emergency engines if I am an owner or operator of a stationary CI internal combustion engine?

(ii) [NA – ENGINE(S) IS/ARE EMERGENCY]

§ 60.4205 What emission standards must I meet for emergency engines if I am an owner or operator of a stationary CI internal combustion engine?

(a) [NA – ENGINE(S) 2007 MODEL YEAR OR LATER]

(b) Owners and operators of 2007 model year and later emergency stationary CI ICE with a displacement of less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards for new nonroad CI engines in § 60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE.

60.4202 REQUIREMENTS

60.4202(a) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder that are not fire pump engines to the emission standards specified in paragraphs (a)(1) through (2) of this section.

(1) [NA – ENGINE(S) > 50 HP]

(2) For engines with a maximum engine power greater than or equal to 37 KW (50 HP), the certification emission standards for new nonroad CI engines for the same model year and maximum engine power in 40 CFR 89.112 (a) Tier 2 and 40 CFR 89.113 for all pollutants beginning in model year 2007.

FOR UNITS RATED AT kW>560 (HP>751.0)

NMHC + NOx: 6.4 g/kW-hr (4.8 g/hp-hr)

CO: 3.5 g/kW-hr (2.6 g/hp-hr)

PM: 0.2 g/kW-hr (0.1 g/hp-hr)

SECTION E. Source Group Restrictions.

END OF 89.112 REQUIREMENTS:

89.113 REQUIREMENTS:

(a) Exhaust opacity from compression-ignition nonroad engines for which this subpart is applicable must not exceed:

(1) 20 percent during the acceleration mode;

(2) 15 percent during the lugging mode; and

(3) 50 percent during the peaks in either the acceleration or lugging modes.

(b) Opacity levels are to be measured and calculated as set forth in 40 CFR part 86, subpart I. Notwithstanding the provisions of 40 CFR part 86, subpart I, two-cylinder nonroad engines may be tested using an exhaust muffler that is representative of exhaust mufflers used with the engines in use.

(c) The following engines are exempt from the requirements of this section:

(1) Single-cylinder engines;

(2) Propulsion marine diesel engines; and

(3) Constant-speed engines.

[59 FR 31335, June 17, 1994. Redesignated and amended at 63 FR 56995, 57003, Oct. 23, 1998]

END OF 89.113 REQUIREMENTS:

END OF 60.4202 REQUIREMENTS

(c) [NA –ENGINE(S) REPORTEDLY WILL NOT BE MANUFACTURED AS CERTIFIED NFPA FIRE PUMP ENGINE(S)]

(d) [NA – ENGINE(S) < 30 L/CYL]

(e) [NA - DOES NOT CONDUCT PERFORMANCE TESTS IN USE]

(f) [NA - NOT MODIFIED/RECONSRUCTED]

[71 FR 39172, July 11, 2006, as amended at 76 FR 37969, June 28, 2011]

§ 60.4206 How long must I meet the emission standards if I am an owner or operator of a stationary CI internal combustion engine?

Owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in §§ 60.4204 and 60.4205 over the entire life of the engine.

[76 FR 37969, June 28, 2011]

Fuel Requirements for Owners and Operators

§ 60.4207 What fuel requirements must I meet if I am an owner or operator of a stationary CI internal combustion engine subject to this subpart?

(a) Beginning October 1, 2007, owners and operators of stationary CI ICE subject to this subpart that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(a).

(b) Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of

SECTION E. Source Group Restrictions.

less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted.

(c) [Reserved]

(d) [NA – ENGINE(S) <30 L/CYL]

(e) [NA – NO NATIONAL SECURITY EXEMPTION]

[71 FR 39172, July 11, 2006, as amended at 76 FR 37969, June 28, 2011; 78 FR 6695, Jan. 30, 2013]

Other Requirements for Owners and Operators

§ 60.4208 What is the deadline for importing or installing stationary CI ICE produced in previous model years?

(a) After December 31, 2008, owners and operators may not install stationary CI ICE (excluding fire pump engines) that do not meet the applicable requirements for 2007 model year engines.

(b) [NA – ENGINE(S) > 25 HP AND NOT NFPA CERTIFIED FIRE PUMP ENGINE(S)]

(c) - (g) [NA - ENGINE(S) IS/ARE EMERGENCY]

(h) In addition to the requirements specified in §§ 60.4201, 60.4202, 60.4204, and 60.4205, it is prohibited to import stationary CI ICE with a displacement of less than 30 liters per cylinder that do not meet the applicable requirements specified in paragraphs (a) through (g) of this section after the dates specified in paragraphs (a) through (g) of this section.

(i) The requirements of this section do not apply to owners or operators of stationary CI ICE that have been modified, reconstructed, and do not apply to engines that were removed from one existing location and reinstalled at a new location.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37969, June 28, 2011]

§ 60.4209 What are the monitoring requirements if I am an owner or operator of a stationary CI internal combustion engine?

If you are an owner or operator, you must meet the monitoring requirements of this section. In addition, you must also meet the monitoring requirements specified in § 60.4211.

(a) If you are an owner or operator of an emergency stationary CI internal combustion engine that does not meet the standards applicable to non-emergency engines, you must install a non-resettable hour meter prior to startup of the engine.

(b) [NA – NO DIESEL PARTICULATE FILTER]

[71 FR 39172, July 11, 2006, as amended at 76 FR 37969, June 28, 2011]

Compliance Requirements

§ 60.4211 What are my compliance requirements if I am an owner or operator of a stationary CI internal combustion engine?

(a) If you are an owner or operator and must comply with the emission standards specified in this subpart, you must do all of the following, except as permitted under paragraph (g) of this section:

(1) Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions;

(2) Change only those emission-related settings that are permitted by the manufacturer; and

SECTION E. Source Group Restrictions.

(3) Meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you.

(b) [NA – ENGINE(S) IS/ARE 2007 MODEL YEAR OR LATER]

(c) If you are an owner or operator of a 2007 model year and later stationary CI internal combustion engine and must comply with the emission standards specified in § 60.4204(b) or § 60.4205(b), or if you are an owner or operator of a CI fire pump engine that is manufactured during or after the model year that applies to your fire pump engine power rating in table 3 to this subpart and must comply with the emission standards specified in § 60.4205(c), you must comply by purchasing an engine certified to the emission standards in § 60.4204(b), or § 60.4205(b) or (c), as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in paragraph (g) of this section. [ENGINES ARE CERTIFIED]

(d) [NA – ENGINE(S) NOT SUBJECT TO § 60.4204(c) or § 60.4205(d)]

(e) [NA - NOT MODIFIED/RECONSRUCTED]

(f) If you own or operate an emergency stationary ICE, you must operate the emergency stationary ICE according to the requirements in paragraphs (f)(1) through (3) of this section. In order for the engine to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (3) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (3) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

(1) There is no time limit on the use of emergency stationary ICE in emergency situations.

(2) You may operate your emergency stationary ICE for any combination of the purposes specified in paragraphs (f)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (f)(3) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).

(i) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.

(ii)-(iii) [NA – NOT OPERATED FOR DEMAND RESPONSE OR VOLTAGE DEVIATION]

(3) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. Except as provided in paragraph (f)(3)(i) of this section, the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(i) [NA – NOT USED TO SUPPLY POWER AS PART OF A FINANCIAL ARRANGEMENT]

(ii) [Reserved]

(g) If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must demonstrate compliance as follows:

(1) [ENGINE(S) NOT < 100 HP]

SECTION E. Source Group Restrictions.

(2) [ENGINE(S) NOT <= 500 HP]

(3) If you are an owner or operator of a stationary CI internal combustion engine greater than 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer. You must conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37970, June 28, 2011; 78 FR 6695, Jan. 30, 2013]

Testing Requirements for Owners and Operators

§ 60.4212 What test methods and other procedures must I use if I am an owner or operator of a stationary CI internal combustion engine with a displacement of less than 30 liters per cylinder?

[NA – TESTING NOT REQUIRED FOR CERTIFIED UNITS WHICH ARE NOT ALTERED PER 60.4211(g)]

[71 FR 39172, July 11, 2006, as amended at 76 FR 37971, June 28, 2011]

§ 60.4213 What test methods a
combustion engine with a displa

[NA – DISPLACEMENT <30 L/CY

[71 FR 39172, July 11, 2006, as

Notification, Reports, and Recor

§ 60.4214 What are my notificat
CI internal combustion engine?

(a) [NA – ENGINE(S) IS/ARE EMI

(b) If the stationary CI internal co
operator is not required to subm
emergency engine does not me
owner or operator must keep rec
recorded through the non-resetta
the engine was in operation duri

(c) [NA – NO DIESEL PARTICUL

(d) [NA – NOT OPERATED FOR I
FINANCIAL ARRANGEMENT]

Please update this condition with the following additions:
"(f) Beginning on February 26, 2025, within 60 days after the date of completing each performance test required by this subpart, you must submit the results of the performance test required under this section following the procedures specified in paragraphs (f)(1) and (2) of this section.
(1) Data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT website (https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert) at the time of the test. Submit the results of the performance test to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI), according to paragraph (g) of this section. The data must be submitted in a file format generated using the EPA's ERT. Alternatively, you may submit an electronic file consistent with the extensible markup language (XML) schema listed on the EPA's ERT website.
(2) Data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the test. The results of the performance test must be included as an attachment in the ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website. Submit the ERT generated package or alternative file to the EPA via CEDRI according to paragraph (g) of this section."

[71 FR 39172, July 11, 2006, as amended at 78 FR 6696, Jan. 30, 2013]

General Provisions

§ 60.4218 What parts of the General Provisions apply to me?

Table 8 to this subpart shows which parts of the General Provisions in §§ 60.1 through 60.19 apply to you.

SECTION E. Source Group Restrictions.

Regulatory Changes

Sources that are subject to 40 CFR Part 60 Subpart IIII shall comply with all applicable requirements of the Subpart. 40 CFR 60.4 requires submission of copies of all requests, reports and other communications to both the Department and the EPA. The EPA copies shall be forwarded to:

Director
Air Protection Division (3AP00)
U.S. EPA Region III
1650 Arch Street
Philadelphia, PA 19103-2029

The Department copies shall be forwarded to:

Regional Air Program Manager
PA Department of Environmental Protection
909 Elmerton Avenue
Harrisburg, PA 17110-8200

In the event that the Federal Subpart that is the subject of this Source Condition is revised, the permittee shall comply with the revised version of the subpart, and shall not be required to comply with any provisions in this permit designated as having the subpart as their authority, to the extent that such permit provisions would be inconsistent with the applicable provisions of the revised subpart.

SECTION F. Alternative Operation Requirements.

No Alternative Operations exist for this State Only facility.

SECTION G. Emission Restriction Summary.

No emission restrictions listed in this section of the permit.

SECTION H. Miscellaneous.

#001
This administrative amendment is the first revision to Permit No. 22-05029 which was issued on October 13, 2017. This permit has been amended to remove both "Substation Emergency Power Generator" air sources "Y3A" and "Y3B."

#002
The following sources do not require any work practice standards or testing, monitoring, recordkeeping and reporting requirements:

(3) Air compressors, engine driven, fired with #2 Oil, each engine of capacity less than 20 hp (EG-Y-P-1A, 1B, 11B).

Turbine Plant: vents and condenser off-gas.

Turbine oil vapor extractor, and 15,000 gal turbine lubricating oil storage tank (LO-T-1).

Storage Tanks for water, and various water /waste water treatment chemical storage tanks of capacity range from less than 1,000 gal to 25,000 gal each.

Water and wastewater treatment system.

Portable Circulating Water Flume Screen Washing Pump.

Portable Welding Unit.

Portable and temporary equipment used to support plant operations and maintenance (welding machine, light stations, pumps, power generators, etc.).

Portable Emergency Fire Pump (FX-P-3A, 3B).

(2) Mechanical draft industrial cooling towers.

Portable fire brigade emergency generator (Y7).

Portable south office emergency generator (Y8).

FX-P-4 Three Portable 5 HP Diesel Engine Driven Trash Pumps (3 units).

FX-Y-3 Portable 350 kW Diesel Generator (formerly named EG-Y-6).

FX-Y-4 Portable Yanmar 5.5 kW Diesel Powered Emergency Generator (3 units).

Other operations and support equipment (e.g., closed-top low VOC parts washer, fire suppression CO2 and halon systems, facility air conditioning, industrial gas use, on-site fire training).

The following #2 Oil storage tanks, aboveground (ast) except as noted for underground tanks (ust):

Tank ID	Capacity
FO-T-2	200,000 gal for Auxiliary Boilers and Emergency Diesel Generators.
FO-T-1	50,000 gal for Auxiliary Boilers and Emergency Diesel Generators.
DF-T-1	30,000 gal underground storage tank (ust), for emergency diesels.
DF-T-8	25,000 gal for Station Blackout Diesel Generator.
FO-T-3&4	350 gal for fire pumps.
FO-T-5	285 gal for fire training.

SECTION H. Miscellaneous.

DF-T-2 A/B 550 gal day tanks for diesel engines.

DF-T-4 100 gal day tank for diesel engine.

DF-T5 A/B 275 gal day tank for diesel engine.

DF-T-13 500 gal tank for Emergency Diesel Engine.

FX-T-2 5,000 gal diesel Storage Tank.

FX-T-3 120 gal Diesel Storage Tank.

FX-T-4 Portable 2000 Gallon Diesel Storage Tank on FLEX Truck.

#003

Table of Stationary Generators/Fire Pumps

Source ID	Capacity (HP)	SI or CI	Installed year
FSP1	265	CI	1974
FSP3	295	CI	1974
Y1A	4,320	CI	1974
Y1B	4,320	CI	1974
Y2	214	CI	1974
Y4	4,169	CI	1974
FX-1A	755	CI	2015
FX-1B	755	CI	2015

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

APPENDIX E. PTE CALCULATIONS

Facility Potential to Emit

Crane Clean Energy Center Total Facility PTE

Source	NOx (tpy)	VOC (tpy)	CO (tpy)	PM (tpy)	SOx (tpy)	HAPs (tpy)
Auxiliary Boiler A	2.90	0.02	0.61	0.24	0.03	0.50
Auxiliary Boiler B	2.90	0.02	0.61	0.24	0.03	0.50
Y1A	5.08	0.14	1.35	0.00	0.00	0.72
Y1B	5.08	0.14	1.35	0.00	0.00	0.72
Y2	0.33	0.03	0.07	0.00	0.00	0.04
Y4	7.00	0.56	1.51	0.00	0.00	0.93
FSP1	0.58	0.05	0.12	0.00	0.00	0.08
FSP3	0.58	0.05	0.12	0.00	0.00	0.08
FX1A	0.35	0.05	0.22	0.01	0.00	0.14
FX1B	0.35	0.05	0.22	0.01	0.00	0.14
Cooling Towers (2x)	0.00	0.00	0.00	8.41	0.00	0.00
Total	**25.15**	**1.11**	**6.17**	**8.92**	**0.05**	**3.85**

Potential to Emit

Crane Clean Energy Center Emission Inventory

Source Limits[1]

	Cooling Towers	
	Specification Value	Unit
Number of units	2	--
Design Flow	272000	Gal/min
Drift Rate	0.0010%	%
Total Dissolved Solids	1,410	ppm (mg/L)
Total operational hours	8,760	hours

1. PTE based on Total permitted usage

Emission Factors

Pollutants	Particle size Distribution	Units
PM	--	--
PM2.5[1]	14.5%	%
PM10[1]	95%	%
Total		

1. PM2.5 and PM10 emissions are based on the assumption that the percentages shown in column C is the breakdown of PM2.5 to PM10 in the exit stream. This is an estimate of the Particle Size distribution.

Potential to Emit for Both Cooling Towers

Pollutants	Emission	
	lb/hr	tpy
PM[1]	1.92	8.411
PM2.5	0.28	1.220
PM10	1.82	7.990

1. PM Emissions (lb/hr) = Throughput (Gal/min) * Drift Rate * TSS (ppm) / 1,000,000 *60 min/hr * 8.345 lb/gal

Potential to Emit

Crane Clean Energy Center Emission Inventory

Source Limits[1]

Sources	Hours of Operation	Fuel Usage (gal/yr)
Auxiliary Boiler A	100	242000
Auxiliary Boiler B	100	242000
Y1A	100	23000
Y1B	100	23000
Y2	100	1100
Y4	100	23000
FSP1	100	1900
FSP3	100	1900

Sources	Hours of Operation	Rating (kW)
FX1A	100	563
FX1B	100	563

1. PTE based on Total permitted usage

Potential to Emit by Source

Sources	NOx Emissions	
	lb/year	ton/year [3]
Auxiliary Boiler A	5,808.00	2.904
Auxiliary Boiler B	5,808.00	2.904
Y1A	10,156.80	5.0784
Y1B [1]	10,156.80	5.0784
Y2 [1]	669.44	0.334719
Y4	13,997.34	6.99867
FSP1	1,156.30	0.578151
FSP3 [1]	1,156.30	0.578151
FX1A [2]	695.07	0.347536297
FX1B [2]	695.07	0.347536297
Total	50,299.13	25.15

1. Y1B, Y2, and FSP3 NOx Emissions (lb/year) = Hours of Operation (hr) * Capacity (hp) * Emission Factor (lb/hp-hr)
2. FX1A and FX1B NOx Emissions (lb/year) = Hours of Operation (hr/year) * Unit Rating (kW) * Emission Factor (g/kW-hr) * (lb/g)
3. 1 ton = 2,000 lb

Short Term Potential to Emit by Source

Sources	NOx Emissions	
	lb/hr[1]	lb/day[2]
Auxiliary Boiler A	58.08	1,393.920
Auxiliary Boiler B	58.08	1,393.920
Y1A	101.57	2,437.632
Y1B	101.57	2,437.632 *Higher than the exemption threshold
Y2	6.69	160.665
Y4	139.97	3,359.362
FSP1	11.56	277.512
FSP3	11.56	277.512
FX1A	6.95	166.817
FX1B	6.95	166.817
Total	502.99	12,071.79

1. NOx Emissions (lb/hr) = NOx Emissions (lb/yr) / Hours of Operation (hr/year)
2. NOx Emissions (lb/day) = NOx Emissions (lb/hr) * 24 hr/day

Potential to Emit

Crane Clean Energy Center Emission Inventory

Source Limits[1]

Sources	Hours of Operation	Fuel Usage (gal/yr)
Auxiliary Boiler A	100	242000
Auxiliary Boiler B	100	242000
Y1A	100	23000
Y1B	100	23000
Y2	100	1100
Y4	100	23000
FSP1	100	1900
FSP3	100	1900

Sources	Hours of Operation	Rating (kW)
FX1A	100	563
FX1B	100	563

1. PTE based on Total permitted usage

Potential to Emit by Source

Sources	VOC Emissions	
	lb/year	ton/year [3]
Auxiliary Boiler A	48.40	0.0242
Auxiliary Boiler B	48.40	0.0242
Y1A	285.66	0.14283
Y1B	285.66	0.14283
Y2	53.13	0.026565
Y4	1,110.90	0.55545
FSP1	91.77	0.045885
FSP3	91.77	0.045885
FX1A	99.30	0.049648042
FX1B	99.30	0.049648042
Total	2,214.28	1.11

1. Y1B, Y2, and FSP3 VOC Emissions (lb/year) = Hours of Operation (hr) * Capacity (hp) * Emission Factor (lb/hp-hr)
2. FX1A and FX1B VOC Emissions (lb/year) = Hours of Operation (hr/year) * Unit Rating (kW) * Emission Factor (g/kW-hr) * (lb/g)
3. 1 ton = 2,000 lb

Short Term Potential to Emit by Source

Sources	VOC Emissions	
	lb/hr[1]	lb/day[2]
Auxiliary Boiler A	0.48	11.616
Auxiliary Boiler B	0.48	11.616
Y1A	2.86	68.558
Y1B	2.86	68.558
Y2	0.53	12.751
Y4	11.11	266.616
FSP1	0.92	22.025
FSP3	0.92	22.025
FX1A	0.99	23.831
FX1B	0.99	23.831
Total	22.14	531.43

*Higher than the exemption threshold

1. VOC Emissions (lb/hr) = VOC Emissions (lb/yr) / Hours of Operation (hr/year)
2. VOC Emissions (lb/day) = VOC Emissions (lb/hr) * 24 hr/day

Potential to Emit

Crane Clean Energy Center Emission Inventory

Source Limits[1]

Sources	Hours of Operation	Fuel Usage (gal/yr)
Auxiliary Boiler A	100	242000
Auxiliary Boiler B	100	242000
Y1A	100	23000
Y1B	100	23000
Y2	100	1100
Y4	100	23000
FSP1	100	1900
FSP3	100	1900

Sources	Hours of Operation	Rating (kW)
FX1A	100	563
FX1B	100	563

1. PTE based on Total permitted usage

Potential to Emit by Source

Sources	CO Emissions	
	lb/year	ton/year [3]
Auxiliary Boiler A	1,210.00	0.605
Auxiliary Boiler B	1,210.00	0.605
Y1A	2,697.90	1.34895
Y1B [1]	2,697.90	1.34895
Y2 [1]	144.21	0.072105
Y4	3,015.30	1.50765
FSP1	249.09	0.124545
FSP3 [1]	249.09	0.124545
FX1A [2]	434.42	0.217210186
FX1B [2]	434.42	0.217210186
Total	12,342.33	6.17

1. Y1B, Y2, and FSP3 CO Emissions (lb/year) = Hours of Operation (hr) * Capacity (hp) * Emission Factor (lb/hp-hr)
2. FX1A and FX1B CO Emissions (lb/year) = Hours of Operation (hr/year) * Unit Rating (kW) * Emission Factor (g/kW-hr) * (lb/g)
3. 1 ton = 2,000 lb

Short Term Potential to Emit by Source

Sources	CO Emissions	
	lb/hr[1]	lb/day[2]
Auxiliary Boiler A	12.10	290.400
Auxiliary Boiler B	12.10	290.400
Y1A	26.98	647.496
Y1B	26.98	647.496
Y2	1.44	34.610
Y4	30.15	723.672
FSP1	2.49	59.782
FSP3	2.49	59.782
FX1A	4.34	104.261
FX1B	4.34	104.261
Total	123.42	2,962.16

*Higher than the exemption threshold

1. CO Emissions (lb/hr) = CO Emissions (lb/yr) / Hours of Operation (hr/year)
2. CO Emissions (lb/day) = CO Emissions (lb/hr) * 24 hr/day

Potential to Emit

Crane Clean Energy Center Emission Inventory

Source Limits[1]

Sources	Hours of Operation	Fuel Usage (gal/yr)
Auxiliary Boiler A	100	242000
Auxiliary Boiler B	100	242000
Y1A	100	23000
Y1B	100	23000
Y2	100	1100
Y4	100	23000
FSP1	100	1900
FSP3	100	1900

Sources	Hours of Operation	Fuel Usage (gal/yr)
FX1A	100	563
FX1B	100	563

1. PTE based on Total permitted usage

Potential to Emit by Source

Sources	PM Emissions	
	lb/year	ton/year [3]
Auxiliary Boiler A	484.00	0.242
Auxiliary Boiler B	484.00	0.242
Y1A	0.32	0.0001587
Y1B [1]	0.32	0.0001587
Y2 [1]	0.05	0.000023529
Y4	0.98	0.00049197
FSP1	0.08	0.000040641
FSP3 [1]	0.08	0.000040641
FX1A [2]	24.82	0.012412011
FX1B [2]	24.82	0.012412011
Total	1,019.48	0.51

1. Y1B, Y2, and FSP3 PM Emissions (lb/year) = Hours of Operation (hr) * Capacity (hp) * Emission Factor (lb/hp-hr)
2. FX1A and FX1B PM Emissions (lb/year) = Hours of Operation (hr/year) * Unit Rating (kW) * Emission Factor (g/kW-hr) * (lb/g)
3. 1 ton = 2,000 lb

Short Term Potential to Emit by Source

Sources	PM Emissions	
	lb/hr[1]	lb/day[2]
Auxiliary Boiler A	4.84	116.160
Auxiliary Boiler B	4.84	116.160
Y1A	0.00	0.076
Y1B	0.00	0.076
Y2	0.00	0.011
Y4	0.01	0.236
FSP1	0.00	0.020
FSP3	0.00	0.020
FX1A	0.25	5.958
FX1B	0.25	5.958
Total	10.19	244.67

*Higher than the exemption threshold

1. PM Emissions (lb/hr) = PM Emissions (lb/yr) / Hours of Operation (hr/year)
2. PM Emissions (lb/day) = PM Emissions (lb/hr) * 24 hr/day

Potential to Emit

Crane Clean Energy Center Emission Inventory

Source Limits[1]

Sources	Hours of Operation	Throughput
Auxiliary Boiler A	100	242000
Auxiliary Boiler B	100	242000
Y1A	100	23000
Y1B	100	23000
Y2	100	1100
Y4	100	23000
FSP1	100	1900
FSP3	100	1900

Sources	Hours of Operation	Throughput
FX1A	100	563
FX1B	100	563

1. PTE based on Total permitted usage

Potential to Emit by Source

Sources	SOx Emissions	
	lb/year	ton/year [3]
Auxiliary Boiler A	51.55	0.025773
Auxiliary Boiler B	51.55	0.025773
Y1A	0.00	2.40431E-06
Y1B [1]	0.00	2.40431E-06
Y2 [1]	0.04	0.000022011
Y4	0.92	0.00046023
FSP1	0.08	0.000038019
FSP3 [1]	0.08	0.000038019
FX1A [2]	0.92	0.000458003
FX1B [2]	0.92	0.000458003
Total	106.05	0.05

1. Y1B, Y2, and FSP3 SOx Emissions (lb/year) = Hours of Operation (hr) * Capacity (hp) * Emission Factor (lb/hp-hr)
2. FX1A and FX1B SOx Emissions (lb/year) = Hours of Operation (hr/year) * Unit Rating (kW) * Emission Factor (g/kW-hr) * (lb/g)
3. 1 ton = 2,000 lb

Short Term Potential to Emit by Source

Sources	SOx Emissions	
	lb/hr[1]	lb/day[2]
Auxiliary Boiler A	0.52	12.371
Auxiliary Boiler B	0.52	12.371
Y1A	0.00	0.001
Y1B	0.00	0.001
Y2	0.00	0.011
Y4	0.01	0.221
FSP1	0.00	0.018
FSP3	0.00	0.018
FX1A	0.01	0.220
FX1B	0.01	0.220
Total	1.06	25.45

*Higher than the exemption threshold

1. SOx Emissions (lb/hr) = SOx Emissions (lb/yr) / Hours of Operation (hr/year)
2. SOx Emissions (lb/day) = SOx Emissions (lb/hr) * 24 hr/day

Potential to Emit

Crane Clean Energy Center Emission Inventory

Source Limits[1]

Sources	Hours of Operation	Fuel Usage (gal/yr)
Auxiliary Boiler A	100	242000
Auxiliary Boiler B	100	242000
Y1A	100	23000
Y1B	100	23000
Y2	100	1100
Y4	100	23000
FSP1	100	1900
FSP3	100	1900
FX1A	100	3500
FX1B	100	3500

1. PTE based on Total permitted usage

HAP Emissions (lb/hr)

	Benzene	Ethylbenzene	Formaldehyde	Naphthalene	1,1,1-Trichloroethane	Toluene	Xylene	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(b,k)fluoranthene	benzo(g,h,i)perylene	Chrysene	Dibenzo(a,h)anthracene	Fluoranthene	Fluorene	Indo(1,2,3-cd)pyrene	Phenanthrene	Pyrene	OCDD	Benzo(b)fluoranthene	Benzo(k)fluoranthene	PAH	Propylene	Acetaldehyde	1,3-Butadiene	Acrolein	benzo(a)pyrene
Auxiliary Boiler A	0.0518	0.0154	7.9860	0.2735	0.0571	1.5004	0.0264	0.0051	0.0001	0.0003	0.0010	0.0004	0.0005	0.0006	0.0004	0.0012	0.0011	0.0005	0.0025	0.0010	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Auxiliary Boiler B	0.0518	0.0154	7.9860	0.2735	0.0571	1.5004	0.0264	0.0051	0.0001	0.0003	0.0010	0.0004	0.0005	0.0006	0.0004	0.0012	0.0011	0.0005	0.0025	0.0010	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Y1A	2.4630	0.0000	0.2504	0.4126	0.0000	0.8918	0.6126	0.0149	0.0293	0.0039	0.0020	0.0000	0.0018	0.0049	0.0011	0.0128	0.0406	0.0013	0.1295	0.0118	0.0000	0.0035	0.0007	0.6729	8.8555	0.0000	0.0000	0.0250	0.0000
Y1B	2.4630	0.0000	0.2504	0.4126	0.0000	0.8918	0.6126	0.0149	0.0293	0.0039	0.0020	0.0000	0.0018	0.0049	0.0011	0.0128	0.0406	0.0013	0.1295	0.0118	0.0000	0.0035	0.0007	0.6729	8.8555	0.0000	0.0000	0.0250	0.0000
Y2	0.1416	0.0000	0.1791	0.0129	0.0000	0.0621	0.0433	0.0002	0.0008	0.0003	0.0003	0.0000	0.0001	0.0001	0.0001	0.0012	0.0044	0.0001	0.0045	0.0007	0.0000	0.0000	0.0000	0.0255	0.3916	0.0000	0.0059	0.0140	0.0000
Y4	2.9613	0.0000	3.7453	0.2692	0.0000	1.2982	0.9046	0.0045	0.0161	0.0059	0.0053	0.0000	0.0016	0.0011	0.0019	0.0242	0.0527	0.0012	0.0933	0.0152	0.0000	0.0003	0.0005	0.1332	8.1889	0.0000	0.1241	0.2936	0.0006
FSP1	0.2446	0.0000	0.3094	0.0222	0.0000	0.1072	0.0747	0.0004	0.0013	0.0005	0.0004	0.0000	0.0001	0.0001	0.0002	0.0020	0.0077	0.0001	0.0077	0.0013	0.0000	0.0000	0.0000	0.0440	0.6765	0.0000	0.0103	0.0243	0.0000
FSP3	0.2446	0.0000	0.3094	0.0222	0.0000	0.1072	0.0747	0.0004	0.0013	0.0005	0.0004	0.0000	0.0001	0.0001	0.0002	0.0020	0.0077	0.0001	0.0077	0.0013	0.0000	0.0000	0.0000	0.0440	0.6765	0.0000	0.0103	0.0243	0.0000
FX1A	0.4508	0.0000	0.5699	0.0410	0.0000	0.1975	0.1377	0.0007	0.0024	0.0009	0.0008	0.0000	0.0002	0.0002	0.0003	0.0037	0.0141	0.0002	0.0142	0.0023	0.0000	0.0000	0.0001	0.0811	1.2461	0.0000	0.0189	0.0447	0.0001
FX1B	0.4508	0.0000	0.5699	0.0410	0.0000	0.1975	0.1377	0.0007	0.0024	0.0009	0.0008	0.0000	0.0002	0.0002	0.0003	0.0037	0.0141	0.0002	0.0142	0.0023	0.0000	0.0000	0.0001	0.0811	1.2461	0.0000	0.0189	0.0447	0.0001

HAP Emissions (tons/year)

	Benzene	Ethylbenzene	Formaldehyde	Naphthalene	1,1,1-Trichloroethane	Toluene	Xylene	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(b,k)fluoranthene	benzo(g,h,i)perylene	Chrysene	Dibenzo(a,h)anthracene	Fluoranthene	Fluorene	Indo(1,2,3-cd)pyrene	Phenanthrene	Pyrene	OCDD	Benzo(b)fluoranthene	Benzo(k)fluoranthene	PAH	Propylene	Acetaldehyde	1,3-Butadiene	Acrolein	benzo(a)pyrene	Source Total
Auxiliary Boiler A	0.0026	0.0008	0.3993	0.0137	0.0029	0.0750	0.0013	0.0003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.4963
Auxiliary Boiler B	0.0026	0.0008	0.3993	0.0137	0.0029	0.0750	0.0013	0.0003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.4963
Y1A	0.1232	0.0000	0.0125	0.0206	0.0000	0.0446	0.0306	0.0007	0.0015	0.0002	0.0001	0.0000	0.0001	0.0002	0.0001	0.0006	0.0020	0.0001	0.0065	0.0006	0.0000	0.0002	0.0000	0.0336	0.4428	0.0000	0.0000	0.0013	0.0000	0.7221
Y1B	0.1232	0.0000	0.0125	0.0206	0.0000	0.0446	0.0306	0.0007	0.0015	0.0002	0.0001	0.0000	0.0001	0.0002	0.0001	0.0006	0.0020	0.0001	0.0065	0.0006	0.0000	0.0002	0.0000	0.0336	0.4428	0.0000	0.0000	0.0013	0.0000	0.7221
Y2	0.0071	0.0000	0.0090	0.0006	0.0000	0.0031	0.0022	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0002	0.0000	0.0002	0.0000	0.0000	0.0000	0.0000	0.0013	0.0196	0.0000	0.0003	0.0007	0.0000	0.0444
Y4	0.1481	0.0000	0.1873	0.0135	0.0000	0.0649	0.0452	0.0002	0.0008	0.0003	0.0003	0.0000	0.0001	0.0001	0.0001	0.0012	0.0046	0.0001	0.0047	0.0008	0.0000	0.0000	0.0000	0.0267	0.4094	0.0000	0.0062	0.0147	0.0000	0.9291
FSP1	0.0122	0.0000	0.0155	0.0011	0.0000	0.0054	0.0037	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0004	0.0000	0.0004	0.0001	0.0000	0.0000	0.0000	0.0022	0.0338	0.0000	0.0005	0.0012	0.0000	0.0768
FSP3	0.0122	0.0000	0.0155	0.0011	0.0000	0.0054	0.0037	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0004	0.0000	0.0004	0.0001	0.0000	0.0000	0.0000	0.0022	0.0338	0.0000	0.0005	0.0012	0.0000	0.0768
FX1A	0.0225	0.0000	0.0285	0.0020	0.0000	0.0099	0.0069	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0007	0.0000	0.0007	0.0001	0.0000	0.0000	0.0000	0.0041	0.0623	0.0000	0.0009	0.0022	0.0000	0.1414
FX1B	0.0225	0.0000	0.0285	0.0020	0.0000	0.0099	0.0069	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0007	0.0000	0.0007	0.0001	0.0000	0.0000	0.0000	0.0041	0.0623	0.0000	0.0009	0.0022	0.0000	0.1414
Individual Totals	0.4762	0.0015	1.1078	0.0890	0.0057	0.3377	0.1325	0.0023	0.0042	0.0009	0.0007	0.0000	0.0003	0.0006	0.0003	0.0032	0.0112	0.0003	0.0203	0.0024	0.0000	0.0004	0.0001	0.1077	1.5068			0.0248	0.0000	3.8465

Potential to Emit - Exempt Propane Generator

Crane Clean Energy Center Emission Inventory

Rating	60	kW
Conversion factor	0.003412	
Rating	0.20472	MMBtu/hr
Max. Operating Hours	500	hours
Propane Heat Content	91.5	MMBTU/1000 gal

Energy Conversion			
1	kW	3412	Btu
1	MMBtu	1000000	Btu

Propane Heat content was provided in AP-42 Ch 1.5: Liquified Petroleum Gas Combustion
Limiting Max yearly operating hours to 100 hours
Rating taken from Vendor Spec Sheet

Ap-42 Ch 1.5 Emission Factors

NO_X Emission Factor	13	lb/1000 gal	0.142077	lb/MMBtu
SO_X Emission Factor	0.10*S	lb/1000 gal	0.016393	lb/MMBtu
$PM_{filterable}$ Emission Factor	0.2	lb/1000 gal	0.002186	lb/MMBtu
$PM_{Condensable}$ Emission Factor	0.5	lb/1000 gal	0.005464	lb/MMBtu
PM_{Total} Emission Factor	0.7	lb/1000 gal	0.00765	lb/MMBtu
CO Emission Factor	7.5	lb/1000 gal	0.081967	lb/MMBtu
VOC Emission Factor	1	lb/1000 gal	0.010929	lb/MMBtu

Standard sulfur content of 15 ppm was used for this
Emission Factors were taken from AP-42 Chapter 1.5 for Liquid Petroleum Gas Combustion which included propane.

	NO_X Emissions		SO_X Emissions		$PM_{filterable}$ Emissions		$PM_{Condensable}$ Emissions		PM_{Total} Emissions		CO Emissions		VOC Emissions	
	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
Generator Emissions	2.91E-02	7.27E-03	3.36E-03	8.39E-04	4.47E-04	1.12E-04	1.12E-03	2.80E-04	1.57E-03	3.92E-04	1.68E-02	4.20E-03	2.24E-03	5.59E-04

APPENDIX F. APPLICATION FEE DOCUMENT

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

AIR QUALITY FEES FOR NEW PLAN APPROVAL

Company Information	
Federal Tax ID: 23-3064219-31	Firm Name: Constellation Energy Generation LLC
Permit # (If any): 22-05029 (expired)	Facility Name: Crane Clean Energy Center
Municipality: Londonderry Township	County: Dauphin County
Contact Person Name: Trevor Orth	Telephone Number: (267) 533-5559
E-mail: trevor.orth@constellation.com	

New Plan Approval (The following fees are cumulative.)

Line #	Check the appropriate boxes below	Type of review requested	Fee 2021 - 2025	Total Fees
1	Base Fee	Subchapter B	$2,500	$2,500
2	☐	New Source Review, Subchapter E	$7,500	
3	☐	NSPS/NESHAP /MACT standard A. # of NSPS: _____ B. # of NESHAP/MACT: _____ C. Add lines A and B: _____ D. Maximum applicable standards: _____ E. Enter smaller of line C or line D: _____ Multiply line E by $2,500 and enter the amount in the "Total Fees" column.	$2,500	
4	☐	Case-by-Case MACT	$9,500	
5	☐	Prevention of Significant Deterioration (PSD) requirements. Subchapter D	$32,500	
6	☐	Plantwide Applicability Limit (PAL) for NSR regulated pollutants or PAL for PSD regulated pollutants or both	$7,500	
7	☐	Risk Assessment Analysis – Inhalation only	$10,000	
8	☐	Risk Assessment Analysis – Multi-pathway	$25,000	
		Add Lines 1 thru 8 of Total Fees column and write it here. →		$2,500