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June 10, 2026

Muhammad Zaman
Pennsylvania Department of Environmental Protection
Regional Air Quality Program Manager
Northcentral Regional Office
208 West Third Street, Suite 101
Williamsport, PA 17701-6448

**RE: Montour CT Project, LLC
Air Quality Plan Approval Application – CCCT Project**

Dear Mr. Zaman:

Please find enclosed a complete air permit plan approval application and associated permit application fee for the proposed Montour CT Project, LLC natural gas fired combined cycle combustion turbine (CCCCT) project.

If there are any questions, please feel free to contact me via phone at: (484) 294-8253 or via email at: edward.werkheiser@talenergy.com.

Regards,



Edward Werkheiser
Sr. Manager – Eastern Environmental Compliance Support

Enclosed – Air Permit Plan Approval Application

PSD AIR PERMIT APPLICATION
Two Natural Gas CCCT



Montour CT Project LLC

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June 10, 2026

Project 253902.0068



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1. EXECUTIVE SUMMARY

Montour CT Project LLC (“Montour CT”) is proposing to construct and operate a new electric generating station located in Derry Township, Montour County, Pennsylvania. Montour CT Project LLC is a separate entity from Montour LLC which operates the existing Montour Steam Electric Station in Derry Township, Montour County, Pennsylvania (“Montour SES”). The Montour SES currently operates under Pennsylvania Department of Environmental Protection (PADEP) Bureau of Air Quality Title V Operating Permit No. 47-00001, issued to Montour LLC on April 23, 2025. Montour SES recently converted from coal-firing to natural gas-firing. The Montour CT and Montour SES facilities will be aggregated for purposes of major source applicability determinations. 25 Pa. Code 121.1 defines a Title V facility as *A stationary air contamination source, or a group of stationary sources:*

- ▶ *located on one or more contiguous or adjacent properties,*
- ▶ *which are under common control of the same person (or persons under common control), and*
- ▶ *belonging to a single major industrial grouping.*

Montour CT and Montour SES meet the three above criteria. The facilities are located on contiguous properties, will operate under the same SIC code (4911 – Electric Services), and are under common control through common ownership and shared staffing. Even though Montour CT and Montour SES are aggregated, a separate Title V air permit is requested for Montour CT. This application includes emissions from both Montour CT and Montour SES in applicability evaluations.

Montour CT is proposing to install and operate two new identical (~655 MW) combined cycle combustion turbine trains (herein labeled as the CCCT Project), each of which consists of a natural gas-fired combined cycle combustion turbine (CCCT) with a generator and a heat recovery steam generator (HRSG) with a dedicated steam turbine generator. Each HRSG has natural gas duct burners, oxidation catalyst, and Selective Catalytic Reduction (SCR). Cooling for condensing the steam in the HRSGs will be done using air-cooled condensers to reduce water demand. Natural gas for the project will be provided by the existing natural gas pipeline brought to the Montour SES property. The proposed turbines will be located within the existing facility property, which will allow for considerable utilization of existing site infrastructure including transmission connectivity. Montour CT is evaluating various models of combustion turbines (CTs), but, to be conservative and to submit the plan approval application, Montour CT has based all air emissions on the largest and most conservative emissions model: the GE 7HA.02 CT. If a different CT is selected, emissions and impacts will be less.

Montour SES is an existing major source under Title V and New Source Review (NSR). Thus, any new sources affecting air emissions at the site must be evaluated as aggregated sources in order to determine if Prevention of Significant Deterioration (PSD) or non-attainment New Source Review (NNSR) requirements are triggered. This project is defined as a major modification to an existing major stationary source and is subject to the NSR permitting program.

1.1 Facility Background

All of the equipment to be installed at the Montour CT facility is new. However, the existing Montour SES facility currently operates EGUs and ancillary equipment. The facility’s two existing EGUs, Unit 1 (Source ID 031) and Unit 2 (Source ID 032), are natural gas-fired. Both units are equipped with low nitrogen oxides (NO_x) burners and selective catalytic reduction (SCR) systems for NO_x control. The facility operates additional combustion equipment and ancillary sources as discussed in the following section.

1.1.1 Existing Permitted Emission Units

The Montour SES Facility's Title V Permit authorizes the operation of the following emissions units/activities:

- ▶ Source ID 031 – CE BOILER - UNIT 1
- ▶ Source ID 032 – CE BOILER - UNIT 2
- ▶ Source ID 033A – AUXILIARY BOILER 11A
- ▶ Source ID 034 – AUX CE BOILER 11B
- ▶ Source ID 041 – THREE FUEL GAS HEATERS
- ▶ Source ID P201A – EMERGENCY GENERATOR 1A D398
- ▶ Source ID P202A – EMERGENCY GENERATOR 1B D398
- ▶ Source ID P203 – EMERGENCY GENERATOR 2 D343
- ▶ Source ID P101 – TWO #2 FUEL OIL STORAGE TANKS
- ▶ Source ID P106 – COAL STORAGE PILE¹
- ▶ Source ID P301 – TWO (2) DIESEL-FIRED ENGINE-PUMPS
- ▶ Source ID P302 – EMERGENCY SERVICE WATER PUMP 1A
- ▶ Source ID 401 – NATURAL GAS PIPELINE AND ANCILLARY EQUIPMENT
- ▶ Source ID 402 – 267 BHP CAT DG175 GC GAS CONDITIONING YARD EMER GEN

1.2 Project Schedule

Montour CT plans to commence construction on this project in 2028 with commercial operation expected to occur in 2031. The exact timing is unknown because Montour CT has not made the final selection of turbine or vendor. Demand for new combustion turbines is extremely strong given the spike in power demand for data centers. However, to bring safe, reliable electrical power to the market and to satisfy that demand, it is important that construction authority for this project be obtained in a timely manner. Montour CT will be seeking opportunities to proactively engage with PADEP and is committed to providing information and/or responses to any questions promptly to allow the agency's review and processing of this application and development of an amended Title V permit to proceed smoothly on a timely basis.

1.3 Air Permitting Program Applicability

Montour County is designated as non-attainment for ozone and attainment for all other pollutants. PSD applicability is evaluated for attainment pollutants and NNSR applicability is evaluated for non-attainment pollutants. The CCCT Project will be constructed and operated within the existing Montour SES property. As discussed above, Montour CT and Montour SES are aggregated facilities. Thus, the CCCT Project will be considered a *modification* to an existing major stationary source. Therefore, the applicability of the PSD permitting program is evaluated for the CCCT Project to assess the PSD triggering status of the overall project emissions increase.

Table 1-1 provides a summary of emission increases of regulated NSR pollutants associated with the proposed project. A detailed discussion of NSR applicability is provided in Section 3.

¹ Removal and closure of the coal storage pile is in process and will be complete prior to construction commencing on the CCCT Project.

Table 1-1. Project Emission Increases and NSR Applicability

Pollutant	"Step 1" Project Emissions Increase (tpy)	"Step 2" Net Project Emissions Increase (tpy)	PSD/NNSR Significant Emission Rate (tpy)	Project Triggers PSD/NNSR Review? (Yes/No)
PM	211	212	25	Yes
PM ₁₀	211	212	15	Yes
PM _{2.5}	211	212	10	Yes
SO ₂	57	-1,980	40	No
CO	225	271	100	Yes
NO _x	291	293	40	Yes
VOC ²	80	80	40	Yes
Lead	0.004	0.12	0.6	No
CO _{2e}	4,699,352	4,735,365	75,000	Yes
H ₂ SO ₄	40	40	7	Yes

As shown in Table 1-1, the pollutants triggering PSD permitting requirements include particulate matter (PM), PM 10 microns or less in diameter (PM₁₀), PM 2.5 microns or less in diameter (PM_{2.5}), nitrogen dioxide (NO₂), carbon monoxide (CO), sulfuric acid (H₂SO₄) mists, and greenhouse gases (GHG). NNSR is triggered for volatile organic compounds (VOC) and oxides of nitrogen (NO_x). This application provides the Best Available Control Technology (BACT) and Lowest Achievable Emission Rate (LAER) analyses for each pollutant triggering PSD and NNSR permitting requirements, respectively. A Best Available Technology review is provided for any pollutant not subject to BACT or LAER. A review of potentially applicable federal regulations and state standards is provided in Section 4.

1.4 Air Quality Analysis

The modeling analyses performed for the project include an evaluation of ambient impacts due to the CCCT Project in the area surrounding the existing Montour SES Facility and proposed Montour CT Facility, which is designated as a Class II area, and the regional Class I areas within 300 km. The Class II analysis provided in Appendix E demonstrates that the project will not cause or contribute to an exceedance of any NAAQS or any Class II PSD Increments. The Class I analysis, also provided in Appendix E, demonstrates compliance with Class I PSD Increment. Additionally, per Federal Land Manager (FLM) guidance, no Air Quality Related Values (AQRV) analysis is required. An Additional Impacts Analysis, consisting of an assessment of growth associated with the proposed project, an assessment of potential impacts of the proposed project on soils and vegetation, and a Class II visibility analysis, is also included in Appendix E of this application. Table 1-2 provides a summary of the ambient air quality impacts for the project.

² Because the project is located in an area designated as non-attainment for ozone, VOC will not be evaluated for PSD applicability.

Table 1-2. Class II Ambient Air Quality Impacts Summary

Class II Significant Impact Level Analysis

Pollutant	Averaging Period	Maximum Modeled Concentration ($\mu\text{g}/\text{m}^3$)	U.S. EPA SIL ($\mu\text{g}/\text{m}^3$)	Exceeds SIL? (Yes or No)
CO	1-hr ²	772.2	2000	No
	8-hr ²	421.2	500	No
NO ₂	1-hr ²	128.9	7.5	Yes
	Annual	0.71	1	No
PM ₁₀	24-hour ¹	3.84 ³	5	No
	Annual ¹	0.58 ⁴	1	No
PM _{2.5} ⁵	24-hour ¹	3.07 ³	1.2	Yes
	Annual ¹	0.52 ⁴	0.13	Yes

PSD Increment Analysis

Pollutant	Averaging Period	Maximum Modeled Concentration ($\mu\text{g}/\text{m}^3$)	PSD Increment ($\mu\text{g}/\text{m}^3$)	Exceeds PSD Increment? (Yes or No)
PM _{2.5} ⁵	24-hour ¹	3.89 ⁽⁶⁾	9	No
	Annual ¹	0.73 ⁽⁷⁾	4	No

NAAQS Analysis

Pollutant	Averaging Period	Maximum Modeled Concentration ($\mu\text{g}/\text{m}^3$)⁸	NAAQS ($\mu\text{g}/\text{m}^3$)	Exceeds NAAQS? (Yes or No)
NO ₂	1-hour ¹	162.4	188	No
PM _{2.5} ⁵	24-hour ^{1,9}	24.3	35	No
	Annual ^{1,4}	7.9	9	No

- (1) Base Case: two (2) GE 7HA.02 at 100% load + Duct Burner
- (2) Worst Case: two (2) GE 7HA.02 at startup
- (3) Highest 24-hour average modeled concentration averaged over five (5) years.
- (4) Highest annual average modeled concentration over five (5) years.
- (5) Includes secondary PM_{2.5} concentration.
- (6) High-2nd-High 24-hour average modeled concentration.
- (7) Highest annual average modeled concentration.
- (8) Includes ambient background concentration.
- (9) High-8th-High 24-hour average modeled concentration over (5) years.

Table 1-3. Class I Significant Impact Level Analysis

Pollutant	Averaging Period	Maximum Modeled Concentration ($\mu\text{g}/\text{m}^3$)	U.S. EPA SIL ($\mu\text{g}/\text{m}^3$)	Exceeds SIL? (Yes or No)
NO ₂	Annual	0.08	0.1	No
PM ₁₀	24-hour	1.45E-04	0.3	No
	Annual	0.06	0.2	No
PM _{2.5} ¹	24-hour	9.53E-04	0.27	No
	Annual	1.03E-04	0.03	No

(1) Includes secondary PM_{2.5} concentration.

1.5 Permit Coordination

As discussed above, the CCCT Project will be located within an existing industrial site, limiting the environmental impacts of the project. Montour CT is evaluating the applicability and potential permitting requirements for the following programs:

- ▶ Wastewater and stormwater discharges;
- ▶ Project Erosion and Sedimentation controls and stormwater management;
- ▶ Potential storage tank construction/registration (currently no tanks requiring a Site Specific Installation permit have been identified);
- ▶ Waste generation activities (no waste permits are expected to be required); and
- ▶ Water consumptive use permit update (Susquehanna River Basin Commission).

Permit coordination for the CCCT Project with other PADEP departments is outlined in the General Information Form in Appendix C.

1.6 Summary of Application Contents

The permit application is organized as follows:

- ▶ Section 2 provides relevant background information about the Montour CT facility and information about the proposed new CCCT operations.
- ▶ Section 3 discusses the emissions calculation methodologies used to define the potential emissions from the new emission units associated with the CCCT Project and provides a summary of the total emissions by pollutant.
- ▶ Section 4 provides a summary review of applicable regulatory requirements under state and federal air quality programs impacted by the CCCT Project including an NSR applicability evaluation.
- ▶ Section 5 provides BACT, LAER and BAT analyses for the CCCT Project.
- ▶ Section 6 provides an alternative sites analysis for the CCCT Project.
- ▶ Appendix A - Site Map and Process Flow Diagram

- ▶ Appendix B - Emission Calculations
- ▶ Appendix C - Plan Approval Application Forms
- ▶ Appendix D - BACT/LAER/BAT Supporting Documentation
- ▶ Appendix E - Ambient Air Quality Analysis
- ▶ Appendix F - Municipal Notifications
- ▶ Appendix G – Acid Rain Permit Application

2. PROJECT DESCRIPTION

This section describes the CCCT Project to install and operate two CCCT at the Montour CT Facility.

2.1 Site Location

The Montour CT facility is located approximately 12 miles Northwest of Bloomsburg, Pennsylvania and 7 miles Northeast of Potts Grove, Pennsylvania. The property encompasses an area of approximately 177 acres and includes both Montour CT and Montour SES properties.

Appendix A provides a topographical map showing the facility location and surrounding area. The proposed CCCT will be located on property currently owned by Montour CT. A detailed site layout of the proposed CCCT components and process flow diagram is also provided.

2.2 Proposed CCCT Project

This section describes aspects of the proposed CCCT associated with the CCCT Project, including proposed operations and equipment.

2.2.1 CCCT Project Overview

With this application, Montour CT will install and operate two identical natural gas fired CCCTs each with a generator and a heat recovery steam generator (HRSG) with a dedicated steam turbine generator. Each HRSG has natural gas duct burners. Natural gas for the project will be provided by the existing natural gas pipeline on the property. The project is being developed in response to the anticipated electric load growth and power generated by Montour CT will be provided to the PJM power grid. The proposed CCCT will be capable of operating as baseload units, able to be quickly and efficiently dispatched as needed and during times of high demand from customers.

Montour CT plans to install the following:³

- ▶ Two natural gas-fired CCCTs (GE Verona 7HA.02 CCCT) equipped with natural gas-fired duct burners in the heat recovery steam generators (HRSGs) arranged in a 1x1 configuration with a steam turbine (ST) generator serving each CT with a net power output of 1260 MW for the system based on ISO conditions. Each CCCT will have a maximum heat input capacity on natural gas of 4,509 MMBtu/hr when firing duct burners and 3,518 MMBtu/hr when not firing duct burners.⁴

The project will include several electric or steam-driven gas heaters. These are not sources of emissions since they are not natural gas combustion sources.

2.2.2 CCCT Equipment Details

In a combined cycle process, ambient air is drawn into the compressor section of the CT through an inlet air filtration system. Inlet evaporative cooling may take place during periods of warm ambient temperatures and low relative humidity to further enhance the overall production capability of the CCCT. After the

³ The equipment ratings listed are based on preliminary engineering designs.

⁴ Maximum heat input values correspond to operation at 20 °F. The capacities at ISO conditions are 4,176 MMBtu/hr when firing duct burners and 3,374 MMBtu/hr when not firing duct burners.

evaporative cooler section, air enters the compressor section where it is compressed and channeled to the fuel/mix combustion section of the CCCT.

The gas generator section generates emissions from the fuel combustion process. A transition duct within the CCCT directs the flow of hot gases from the gas generator to the power section of the turbine. The gas generator section combustion gases expand through the stages of the power turbine where the thermodynamic energy is converted to mechanical power. This mechanical power is then transmitted through the rotation of the shaft to the generator of the CT, which is directly coupled to the power turbine. The generator takes this rotational power and converts it to electricity.

The hot combustion gases that are produced in the CT are directed into the HRSG through an exhaust transition duct where waste heat is captured and converted into steam energy before the exhaust gases exit the vertical stack. The inlet to the HRSG contains the natural gas-fired duct burners, which will be used at times to increase the temperature of the exhaust gases in the HRSG to enable the production of additional steam on an as-needed basis. This installation is expected to primarily use the duct burners in the summer months and thus provide supplemental heat input capacity with the goal of ensuring the same MW generation as the winter months.

The steam produced in each HRSG is used in its associated ST to produce additional electrical power. Once mechanical work from the steam is captured, the steam is exhausted and condensed in a vacuum within an air-cooled condenser. The condensate is reused as feed water to the HRSG, creating a closed-loop system.

The proposed CCCT are designed for continuous operation. Each CCCT will be capable of operating between a nominal minimum emissions compliance load (MECL) and 100-percent load. MECL is defined as the minimum steady-state load at which the combustion turbine can operate at any given ambient condition and maintain compliance with all emission limits. Operating modes and emissions are further discussed in Section 3.

2.2.2.1 Emissions Controls

Each CCCT will utilize dry-low-NO_x combustors (DLN) in the CT portion with low NO_x burners in the HRSG portion. The CCCT will utilize oxidation catalysts and SCR as add-on controls to reduce stack NO_x, CO, VOC, and organic hazardous air pollutants (HAP) emissions. GHG emissions will be minimized through the use of a highly efficient CT and HRSG units, with combustion of low-carbon fuel (i.e., natural gas).

2.2.2.2 Emissions Monitoring

The facility will operate Continuous Emissions Monitoring Systems (CEMS) for NO_x, CO, and O₂ to provide continuous assurance that the combustion process and oxidation catalysts are operating properly. The CEMS will comply with the applicable monitoring requirements in 40 CFR Part 75.

A volatile organic compound (VOC) CEMS is not considered a technically feasible monitoring control for CCCTs. Commercially available CEMS for VOCs typically measure total hydrocarbons, not the specific compounds that are defined as VOCs. A monitor capable of continuously measuring all relevant species of VOCs from a combustion turbine exhaust stream is not a commercially available, demonstrated technology. Compliance with the VOC LAER limit will be ensured through the proper operation of the oxidation catalyst and stack testing using EPA Reference Methods 18 and 25A.

A particulate matter (PM) CEMS is not considered a technically feasible monitoring control for CCCTs. For a PM CEMS system to work accurately, it must follow Performance Standard 11 (PS-11), which is an EPA

standard that applies to PM CEMS. The accuracy of a PM CEMS is verified through a process known as correlation testing, which is comparing the output of a PM CEMS against Method 5 measurements for filterable PM. Gas turbine emissions are aerosol-like and the filterable PM concentrations are very low. Thus, the PM CEMS for a gas turbine would not yield accurate results. In addition, the PS-11 requires 3 different solid particulate levels to calculate a calibration curve. It is not possible to generate three different levels of solid particulate levels on natural gas fired combustion turbines; this means a PM CEMS would likely not be properly calibrated, making the outputs unreliable. For natural gas turbines, PM limit compliance can be reliably assured through stack tests.

Ammonia emissions will be continuously monitored. This is accomplished using an indirect, or "surrogate," CEMS. This system uses the certified NO_x CEMS data from after the SCR control device, data from the CEMS on the pre-control NO_x, and the measured ammonia injection rate, to continuously calculate the ammonia slip. This is a well-established and reliable method for continuously determining compliance with the ammonia slip limit and is standard practice for this source category.

3. EMISSIONS CALCULATION METHODOLOGIES AND SUMMARY

This section summarizes the emission calculation methodologies for the proposed CCCTs. The methods used to calculate emissions are discussed, followed by a summary of the emissions estimates and the mode of operation. The hourly and annual potential emissions are documented in detail in Appendix B. These potential emissions were used as the basis for determining applicability of the project with respect to certain regulatory requirements, which are discussed subsequently in Section 4.

3.1 Combustion Turbine Emissions

Emissions from the CCCT Project originate from the two identical natural gas-fired CCCTs and natural-fired duct burning within the HRSGs. Operations and associated emissions from each CCCT can be broken down into fired and unfired modes. Fired mode entails natural gas-fired duct burning within the HRSGs while unfired mode does not include duct burning. Generally, fired mode has higher hourly emissions, given the additional gas combustion in the HRSG.

The project operations can also be broken into steady-state operation vs startup/shutdown (SU/SD) operation. Steady-state represents operations when the air pollution control equipment are effective (i.e., exhaust gas temperatures are high enough), but heat input is at its highest (up to full load); SU/SD operations occur when very small amounts of natural gas are combusted (i.e., when just starting to run the turbine and heat steam in the HRSG), but the air pollution control equipment are not full in operation, so short-term emission rates are higher for certain pollutants.

The following subsections present the maximum hourly emissions during steady-state operations and startup/shutdown (SU/SD) events, as well as the total annual emissions including SU/SD emissions.

3.1.1 CCCT Emissions from Steady-State Operations

Normal or steady-state operation of a CCCT is characterized as continuous operation at loads generally in the 35 to 100% range (over the range at which emissions compliance is achieved). Each CCCT may be operated at base load (100% operating load for the current ambient conditions) up to 8,760 hr/yr. As detailed in Appendix B, annual steady-state potential emissions are calculated based on 8,760 hr/yr consuming natural gas with and without duct burner firing.

Heat input to a gas turbine varies as a function of the fuel (type, composition, and quality), ambient temperature, relative humidity, and evaporative cooler operation. Each individual CCCT can achieve a maximum heat input capacity in fired mode of 4,509 MMBtu/hr (operating at 100% of base load with duct burners, ambient temperature of 20 °F, and combustion air relative humidity of 60%) and a maximum heat input in unfired mode of 3,518 MMBtu/hr (operating at 100% of base load without duct burners, ambient temperature of 20 °F, and combustion air relative humidity of 60%).

3.1.1.1 Criteria Pollutant Steady-State Emissions

As documented in Appendix B, maximum hourly controlled and uncontrolled emissions of NO_x, CO, VOC, PM, PM₁₀, PM_{2.5}, SO₂, H₂SO₄, NH₃, and GHGs for the proposed CCCT rely on the vendor operational data and vendor guarantee requirements. Table 3-1 below lists the maximum hourly potential emissions on a per unit basis for these pollutants. Emission factors for these pollutants were obtained from GE vendor specified cases. The fired and unfired cases with the largest hourly heat inputs were used as conservative estimates of maximum hourly potential emissions. The GE vendor specified cases can be found in Appendix B. The

hourly maximum operating case for each CCCT in fired mode was vendor data Case 6 while the hourly maximum operating case for each CCCT in unfired mode was vendor data Case 5. The only exception was for the maximum fired mode emissions of PM, PM₁₀, and PM_{2.5} which corresponded to vendor data Case 2 (operating at 100% of base load with duct burners, ambient temperature of -20 °F, and combustion air relative humidity of 80%).

According to 40 CFR §52.21(b)(49)(ii), GHG emissions for PSD applicability must show carbon dioxide equivalent (CO_{2e}) emissions calculated by multiplying the mass of each of the GHGs by its associated global warming potential (GWP), which are specified in Table A-1 to Subpart A of 40 CFR Part 98. The GWPs chosen for this analysis are those required to be used for GHG reporting under 40 CFR Part 98 beginning January 1, 2025.⁵

Table 3-1. Maximum Hourly Steady-State Emissions per CCCT

Pollutant	Emissions Basis	Emission Rate Fired Mode (lb/hr)	Emission Rate UnFired Mode (lb/hr)
NO _x	2 ppmvd at 15% O ₂	33.2	25.9
CO	2 ppmvd at 15% O ₂	20.2	15.8
VOC	1.5/1 ppmvd at 15% O ₂	8.7	4.5
PM/PM ₁₀ /PM _{2.5}	0.0054 lb/MMBtu	24.1	19.0
NH ₃	5 ppmvd at 15% O ₂	30.7	23.6
SO ₂	Natural Gas Fuel	6.50	5.00
H ₂ SO ₄	Natural Gas Fuel	4.60	3.40
CO _{2e}	40 Part 75 App G	536,456	418,575

Source: GE Vendor Specified Cases 5 and 6.

Each CCCT will continue to comply with these emission rates irrespective of ambient weather conditions at all loads above MECL. Emissions resulting from SU/SD operations are described in Section 3.1.2.

3.1.1.2 Formaldehyde and HAP Steady-State Maximum Hourly Potential Emissions

Controlled formaldehyde emissions from natural gas were calculated based on 91 parts per billion by volume, dry (ppbvd) at 15% O₂, per NESHAP Subpart YYYY, 40 CFR 63.6100. This concentration was then converted to a lb/MMBtu emission factor based 40 CFR 75 Appendix F, Equation F-5. The uncontrolled emissions factors for formaldehyde were obtained from Table 3.1-3 (for natural gas) of the U.S. EPA's AP-42 Chapter 3, Section 3.1 *Stationary Gas Turbines*.⁶

Each CCCT's uncontrolled emission factors for HAPs emitted via natural gas combustion were also based on Tables 3.1-3 of AP-42 for turbine operation and Tables 1.4-2, 1.4-3, and 1.4-4 of AP-42 for duct burner operation. For organic HAPs (except formaldehyde), a nominal VOC control efficiency (CE) afforded by the oxidation catalyst was applied. See Appendix B for additional details and for the derivation of organic HAP control efficiencies.

⁵ 89 FR 31802, <https://www.federalregister.gov/d/2024-07413>

⁶ <https://www.epa.gov/sites/default/files/2020-10/documents/c03s01.pdf>

Consistent with the criteria pollutant emissions, the heat inputs and fuel consumption rates from vendor data Case 5 and vendor data Case 6 were utilized to generate lb/hr emission rates for the respective unfired and fired mode operations. These calculated emissions rates are listed below in Table 3-2.

Table 3-2. Formaldehyde and Total HAP Maximum Hourly Steady-State Emissions per CCCT

Pollutant	Emission Rate Fired Mode (lb/hr)	Emission Rate UnFired Mode (lb/hr)
Formaldehyde	0.99	0.77
Total HAPs	2.42	1.32

3.1.2 CCCT Emissions from SU/SD Operations

Emissions during startups and shutdowns are estimated based on vendor specified operation profiles which provide the maximum potential to emit of each pollutant in pounds per event. The following provides the underlying basis for the total event estimates per CCCT unit:

- ▶ Cold Start is preceded by over 72 hours of shutdown (or any warming events). The minimum value of 72 hours is assumed, which allows for a conservatively high number of cold starts per year.
 - Expected maximum annual cold start events = 14 events/yr. Each event has emissions over a conservatively low 70-minute ramp up time (to present the maximum hourly emission rate).
- ▶ Warm Start is preceded by a shutdown (or any warming events) between 8 and 72 hours. The median value of 48 hours is assumed, which allows for a conservatively high number of warm starts per year.
 - Expected maximum annual warm start events = 40 events/yr. Each event has emissions over a conservatively low 60-minute ramp up time.
- ▶ Hot Start (HS) is defined as taking place within 0 to 8 hours of the previous shutdown without any warming provisions. No idling time was incorporated prior to a hot start to allow for a conservatively high number of hot starts per year.
 - Expected maximum annual HS events = 200 events/yr. Each event has emissions over a conservatively low 30-minute ramp up time.
- ▶ A Shutdown occurs for 12 minutes until emissions cease and the total number assumed for annual emission total is the sum of all startup events.
 - Expected maximum annual SD events = 254 events/yr.

NO_x, CO, VOC, PM, PM₁₀, and PM_{2.5} emissions during SU/SD events vary from steady state emissions; however, emissions of other pollutants (SO₂, H₂SO₄, and CO₂) do not vary substantively during these events (compared to those during normal steady-state operations). Therefore, only emissions of NO_x, CO, VOC, PM, PM₁₀, and PM_{2.5} were separately defined for SU/SD events. The total emissions for each event are provided in Appendix B. Emissions were based on vendor data for the CCCT units. Montour CT is conservatively estimating the maximum number of each type of startup and shutdown event.

3.1.3 CCCT Annual Emissions

The calculations in Appendix B detail the methodologies used to determine the annual emissions from the gas turbine, duct burners, and SU/SD events.

Montour CT evaluated the following scenarios to determine a “worst-case” emissions profile for each pollutant:

▶ **Scenario 1 – Fired Mode**

- 8,760 hr/yr CCCT steady-state operation in full load, fired mode
- No SU/SD events
- Based on Vendor Data Case 6 operating conditions in fired mode

▶ **Scenario 2 – Unfired Mode**

- 8,760 hr/yr CCCT steady-state operation in full load, unfired mode
- No SU/SD events
- Based on Vendor Data Case 5 operating conditions in unfired mode

▶ **Scenario 3 – SU/SD Operations**

- 5,625 hr/yr CCCT steady-state operation in full load, fired mode (Scenario 1 – Case 14)
- 3,135 hr/yr worst-case emissions from each of the SUSD events (in lbs/event), with minimum amount of time per event and minimum downtime between events corresponding to the number of SUSD events in Section 3.1.2

Table 3-3 below summarizes the annual emissions for NSR-regulated air pollutants from each of the three scenarios outlined above for one individual CCCT unit. Annual emissions of additional pollutants are summarized in Appendix B.

Table 3-3. Annual Emissions from Each Scenario per CCCT (tpy)

Pollutant	Scenario 1	Scenario 2	Scenario 3	Max PTE
NO _x	145	113	111	145
CO	88	69	112	112
VOC	38	20	40	40
PM	106	83	69	106
PM ₁₀	106	83	69	106
PM _{2.5}	106	83	69	106
SO ₂	28	22	19	28
H ₂ SO ₄	20	15	13	20
NH ₃	134	103	90	134
CO ₂ e	2.35E+06	1.83E+06	1.56E+06	2.35E+06
Lead	2.12E-03	N/A	1.41E-03	2.12E-03
Total HAP	10.60	5.80	7.05	10.60

For the detailed annual emissions derivations for each of the three scenarios outlined above, refer to Appendix B.

4. APPLICABLE FEDERAL AND STATE REQUIREMENTS

Authorization to begin construction and initially operate a new or modified source requires compliance with key regulatory elements:

1. Construction permitting requirements as incorporated and implemented in the Pennsylvania State Implementation Plan (SIP) under 25 Pa. Code §127.11 – 127.52;
2. Prevention of Significant Deterioration (PSD) and/or Non-attainment New Source Review programs (NNSR) [both parts of the federal New Source Review (NSR) as incorporated by reference under 25 Pa. Code §§127.81 –127.83 for PSD and implemented in the Pennsylvania SIP under 25 Pa. Code §§127.201–127.218 for NNSR]; and
3. Applicable federal and state emission standards and control programs contained in the Pennsylvania SIP.

This section of the report addresses the conformity of the proposed project to these permitting programs and requirements. The proposed project is subject to 25 Pa. Code §§127.11 – 127.51 plan approval requirements, as reflected by the application for a plan approval contained herein.

4.1 Major New Source Review (PSD/NNSR)

The federal New Source Review (NSR) program applies to major stationary sources. The NSR permitting regulations are comprised of two (2) programs: 1) PSD for projects located in areas where specified pollutant levels are in attainment with National Ambient Air Quality Standards (NAAQS); and 2) NNSR for projects located in areas where pollutant levels are not in attainment with the corresponding NAAQS. The NSR program regulates the installation of new major sources or major modifications to existing major sources.

4.1.1 Attainment Status of Montour County, Pennsylvania

The Montour CT facility will be located in Montour County, Pennsylvania. Montour County is classified as in attainment with all NAAQS except for ozone. The state of Pennsylvania is in the Ozone Transport Region (OTR) and therefore the entire state is classified as moderate nonattainment for ozone.

4.1.2 Major Source Status

The first step in completing a PSD applicability analysis is to determine whether the facility is currently considered a major stationary source. Under PSD permitting rules, the major source threshold is 250 tpy of any regulated NSR pollutant unless the facility belongs to one of 28 specially named source categories in 40 CFR 51.165(a)(4) (List of 28), in which case the major stationary source threshold is 100 tpy.

As discussed in Section 1, the existing Montour SES and new Montour CT facilities are aggregated for purposes of major source applicability determinations including NSR. Existing operations at the Montour SES facility and the proposed operations at the Montour CT facility are classified under SIC Code 4911, "Electric Services", which includes "fossil fuel-fired steam electric plants greater than 250 MMBtu/hr," which is a named category on the List of 28. As such, the major source threshold for the PSD program is 100 tpy. The potential emissions of at least one regulated NSR pollutant exceeds 100 tpy at the Montour SES facility; therefore, the Montour SES facility is classified as an existing major stationary source under the PSD program. Since the Montour CT facility is aggregated with the Montour SES facility, the Montour CT facility is an existing major source under the PSD program.

Additionally, for the NNSR regulated pollutants NO_x and VOC, 25 Pa. Code §121 establishes that sources located within the ozone transport region are major if their potential emissions exceed 50 tpy for VOC and 100 tpy NO_x.⁷ The Montour SES facility is an existing major source of NO_x and VOC. Since the Montour CT facility is aggregated with the Montour SES facility, the Montour CT facility is therefore an existing major source of NO_x and VOC.

4.1.3 PSD Analysis

For PSD applicability in Pennsylvania, 25 Pa Code §127.83 adopts by reference the requirements promulgated in 40 CFR 52 in their entirety. If a major source will undergo a physical or operational change, the facility must determine whether the project will be considered a major modification. Per 40 CFR 52.21(b)(2)(i), in order to be a major modification, the project must result in a significant emissions increase, and a significant *net* emissions increase. Per 40 CFR 52.21(b)(3), the net emissions increase applicability test includes evaluating the pollutant increases and decreases associated with the proposed project as well as any projects occurring contemporaneously with the proposed project. If a significant emissions increase (under “Step 1” of the analysis) and a significant net emissions increase (under “Step 2” of the analysis) results, then PSD permitting is required, which is determined on a pollutant-specific basis. An increase is considered significant if it is above the significant emission rate (SER) thresholds identified in Table 4-1 below.

Table 4-1. Significant Emission Rates – For PSD Applicability ⁸

Pollutant	PSD Significant Emission Rate (tpy)
PM	25
PM ₁₀	15
PM _{2.5}	10
NO ₂	40
CO	100
VOC ⁹	40
SO ₂	40
H ₂ SO ₄	7
Lead	0.6
GHGs (as CO ₂ e)	75,000 ¹⁰

⁷ Per Section i and ii of the definition of “Major facility” under 25 Pa. Code 121.1.

⁸ Other NSR regulated pollutants not listed in this table are considered not reasonably quantifiable or insignificant for NSR permitting purposes.

⁹ Because the project is located in an area designated as non-attainment for ozone, VOC will not be evaluated for PSD applicability.

¹⁰ The value listed for CO₂e listed functions similar to an SER when the source is already an existing major PSD source and the project triggers PSD for another pollutant (i.e., PSD “anyway” source).

Step 1 is commonly referred to as the “project emission increases (PEI)” analysis as it accounts only for emissions related to the proposed project itself. If the emission increases estimated per Step 1 exceed the major modification thresholds, then the applicant may move to Step 2, commonly referred to as the 5-year netting analysis. The netting analysis includes all projects in the contemporaneous period for which a creditable emission increases or decreases occurred. If the resulting net emission increases exceed the major modification threshold, then NSR permitting requirements apply.

4.1.3.1 Potential Emissions

Emissions from the two new natural gas-fired CCCT and HRSGs are calculated on a potential to emit (PTE) basis. As discussed in Section 3, several operating scenarios were evaluated to determine the maximum PTE for each pollutant in accordance with 40 CFR 52.21(b)(4). For new sources, the PEI equals the proposed potential emissions. The installation of the CCCT will not affect the rate or capacity at which any of the existing units at the Montour SES facility are operated. Further, there will be no modifications made to the existing emission units at Montour SES associated with this project.

4.1.3.2 PSD Project Emission Increase Evaluation (Step 1)

As stated above, the proposed CCCT Project involves only new emission units. Thus, emissions from the CCCT and HRSGs are provided on a potential to emit (PTE) basis. Table 4-2 summarizes the PSD Project emissions increases. Refer to Appendix B for the CCCT Project potential emissions calculations.

4.1.3.3 PSD Contemporaneous Netting Analysis (Step 2)

PSD regulations allow the calculation of creditable emission increases and decreases over a five-year contemporaneous period for each pollutant for which a significant emissions increase will occur as a result of the project. There are two projects that fall within the contemporaneous period for the CCCT Project:

- Gas Project Plan Approvals 47-00001-G, H, and I – These Plan Approvals authorized the addition of natural gas to Units 1 and 2 at Montour SES along with the installation of fuel gas heaters.
- Coal Cessation – September 5, 2024, Montour SES notified PADEP of the permanent cessation of using coal as a fuel source in existing Units 1 and 2. An Emission Reduction Credit Application for SO₂ was submitted in September 2025.

Appendix B provides emissions documentation for the contemporaneous emissions.

For each PSD pollutant, Table 4-2 lists the PSD SER for comparison against the Step 2 sum of the PEI from Step 1 and the contemporaneous netting from above.

Table 4-2. CCCT Project PSD Applicability

Pollutant	"Step 1" Project Emissions Increase (tpy)	"Step 2" Contemp. Emissions Netting (tpy)	"Step 2" Total Emissions Netting (tpy)	PSD Significant Emission Rate (tpy)	Project Triggers PSD Review? (Yes/No)
PM	211	1	212	25	Yes
PM ₁₀	211	1	212	15	Yes
PM _{2.5}	211	1	212	10	Yes
NO ₂	291	2	293	40	Yes
CO	225	47	271	100	Yes
SO ₂	57	-2,037	-1,980	40	No
H ₂ SO ₄	40	--	40	7	Yes
Lead	4.24E-03	0.12	0.12	0.6	No
GHGs (as CO _{2e})	4,699,352	36,013	4,735,365	75,000	Yes

The total net emissions calculated increase for lead and SO₂ will be less than their respective SERs. The Step 2 emissions for PM, PM₁₀, PM_{2.5}, NO_x, CO, VOC, H₂SO₄ mist, and GHG exceed each pollutant's respective SER. PSD review is required for these pollutants. The BACT analysis for these pollutants is provided in Section 5. Appendix E provides the Ambient Air Quality Analysis for the project.

4.1.4 Non-attainment New Source Review (NNSR) Analysis

As discussed above, Montour CT is located in a non-attainment area for ozone due to its location in the OTR. Unlike PSD where Pennsylvania adopts the federal PSD regulations by reference, PADEP administers its own SIP-approved program for NNSR in 25 Pa. Code §§127.201 – 127.218. Specifically, if the Step 1 – project emissions increases exceed the NNSR SERs for NO_x or VOC, the project is subject to major NNSR provisions in 25 Pa. Code §127.205.

As discussed in Section 4.1.2, the Montour SES facility is an existing major source of NO_x and VOC emissions. Since Montour CT is aggregated with Montour SES, the Montour CT facility is therefore an existing major source of NO_x and VOC.

4.1.4.1 Step 1 – Determine Project Emissions Increases

The project emissions increase (PEI) from the CCCT Project are calculated as discussed in Section 4.1.3. The PEI for all new sources is equal to the sources' potential to emit. Table 4-3 provides the Step 1 emission increases for the proposed project.

If the Step 1 project emissions increases are less than the SERs for NO_x or VOC, the project is a de minimis emission increase subject to 25 Pa. Code §127.203a(a)(2)(ii), which states that the proposed increases and decreases in emissions are aggregated with other increases and decreases which occurred within 10 years prior to the date of submission of a complete plan approval application and compared to the SER.

4.1.4.2 Step 2 – Determine Contemporaneous Emissions Increases and Decreases

In Step 2, projects that are deemed significant in Step 1 aggregate project emissions increases and decreases with other contemporaneous emissions increases and decreases over a five-year contemporaneous period for each pollutant. Note, the de minimis emission increase provisions of 25 Pa. Code 127.203a(a)(2) do not apply to projects which are significant in Step 1. There are two projects that fall within the contemporaneous period for the CCCT Project:

- Gas Project Plan Approvals 47-00001-G, H, and I – These Plan Approvals authorized the addition of natural gas to Units 1 and 2 at Montour SES along with the installation of fuel gas heaters.¹¹
- Coal Cessation – September 5, 2024, Montour SES notified PADEP of the permanent cessation of using coal as a fuel source in existing Units 1 and 2. An Emission Reduction Credit Application for SO₂ was submitted in September 2025.

Appendix B provides speciated emissions documentation for the contemporaneous emissions.

Table 4-3 lists the significant emissions threshold, as defined in 25 Pa. Code 121.1 for NO_x and VOC, for comparison against the Step 2 sum of the PEI from Step 1 and the contemporaneous netting.

Table 4-3. CCCT Project NNSR Applicability

Pollutant	“Step 1” Project Emissions Increase (tpy)	“Step 2” Contemp. Emissions Netting (tpy)	“Step 2” Net Emissions Increase (tpy)	Significant Emission Rate (tpy)	NEI>SER? (Yes/No)	Offsets Required
NO _x	291	2	293	40	Yes	338.0
VOC	80	--	80	40	Yes	93.0

The CCCT Project NO_x and VOC net emissions increases are both greater than the significant emission threshold for each respective pollutant. The offsets required for these emissions were calculated by multiplying the NEI by the offset ratio of 1.15 per 25 Pa. Code 127.210 for the transport region. For NO_x, 338 offset credits will be required. For VOC, 93 offset credits will be required. Per 25 Pa. Code 127.206, Montour CT will secure and obtain PADEP approval of the required offsets no later than the date the CCCT Project commences operation.

The LAER analysis is provided in Section 5 and Alternative Site Analysis is provided in Section 6.

4.2 New Source Performance Standards (NSPS)

Section 111 of the CAA, Standards of Performance of New Stationary Sources, requires EPA to establish federal emissions standards for source categories that cause or contribute significantly to air pollution. EPA is required to establish standards based on the best systems of emission reductions from technologies that have been adequately demonstrated, taking into account the cost of such technology and any other non-air quality, health, and environmental impact and energy requirements. These standards apply to sources that

¹¹ The Gas Project triggered minor NSR for VOC. This project reset the VOC contemporaneous tonnage to zero.

have been constructed or modified since the proposal of the standard. Since December 23, 1971, EPA has promulgated more than 75 standards. The NSPS are codified in 40 CFR 60.

Any source subject to an NSPS is also subject to the general provisions of NSPS Subpart A, except as noted. A review of all NSPS that could potentially be applicable to any of the new emission units associated with the project is presented in this section. The list of category-specific NSPS that will apply to the affected emission units (proposed CCCT) are as follows:

- ▶ 40 CFR 60 Subpart KKKKa – Standards of Performance for Stationary Combustion Turbines
- ▶ 40 CFR 60 Subpart TTTTa – Standards of Performance for GHG Emissions for Modified Coal-fired Steam Electric Generating Units and New Construction and Reconstruction Stationary Combustion Turbine Electric Generating Units

The following section outlines the above NSPS requirements that are applicable to Montour CT along with evaluated NSPS that were ultimately deemed not applicable to Montour CT.

4.2.1 NSPS Subpart D – Fossil Fuel-Fired Steam Generators > 250 MMBtu/hr

40 CFR 60 *Subpart D – Standards of Performance for Fossil-Fuel-Fired Steam Generators* (NSPS Subpart D), applies to fossil fuel-fired steam generating units with heat input capacities greater than 250 MMBtu/hr that have been constructed or modified since August 17, 1971.¹² The rule defines a fossil fuel-fired steam generating unit as:¹³

A furnace or boiler used in the process of burning fossil fuel for the purpose of producing steam by heat transfer.

Each CCCT (including HRSG) proposed in the CCCT Project will not be subject to NSPS Subpart D because:

- ▶ The gas turbines are not classified as a steam generating units under this regulation; and
- ▶ The HRSGs with natural gas-fired duct burners (DBs) will be subject to NSPS Subpart KKKKa instead and as such, are not subject to NSPS Subpart D.¹⁴

4.2.2 NSPS Subpart Da – Electric Utility Steam Generating Units > 250 MMBtu/hr

40 CFR *Subpart Da – Standards of Performance for Electric Utility Steam Generating Units* (NSPS Subpart Da), provides standards of performance for electric utility steam generating units with heat input capacities greater than 250 MMBtu/hr of fossil fuel (alone or in combination with any other fuel) for which construction, modification, or reconstruction commenced after September 18, 1978.¹⁵ The term “steam generating unit” is defined under this regulation as:¹⁶

For units constructed, reconstructed, or modified after May 3, 2011, steam generating unit means any furnace, boiler, or other device used for combusting fuel

¹² 40 CFR §60.40

¹³ 40 CFR §60.41

¹⁴ 40 CFR §60.40(e)

¹⁵ 40 CFR §60.40Da(a)

¹⁶ 40 CFR §60.41Da

for the purpose of producing steam (including fossil-fuel-fired steam generators associated with combined cycle gas turbines...

Each CCCT (including HRSG) proposed in the CCCT Project will not be subject to NSPS Subpart Da because:

- ▶ The HRSG with natural gas-fired DBs will be subject to NSPS Subpart KKKKa instead and as such, are not subject to NSPS Subpart Da.¹⁷

4.2.3 NSPS Subpart GG – Stationary Gas Turbines

40 CFR 60 *Subpart GG – Standards of Performance for Stationary Gas Turbines* (NSPS Subpart GG), applies to stationary gas turbines with a heat input at peak load equal to or greater than 10 MMBtu/hr, that are constructed, modified, or reconstructed after October 3, 1977.¹⁸

Each CCCT will be a stationary gas turbine with a heat input above the threshold and constructed after the applicability date. However, pursuant to 40 CFR §60.4305(b), stationary combustion turbines regulated under NSPS Subpart KKKKa are exempt from the requirements of NSPS Subpart GG. Therefore, NSPS Subpart GG does not apply to this project.

4.2.4 Subpart KKKK – Stationary Combustion Turbines

40 CFR 60 *Subpart KKKK – Standards of Performance for Stationary Combustion Turbines* (NSPS Subpart KKKK) establishes emissions limits for a combustion turbine and associated HRSG that commenced construction, modification, or reconstruction after February 18, 2005, and have a heat input from the turbine at peak load equal to greater than 10.7 gigajoules (10 MMBtu/hr) based on the HHV of the fuel.

Stationary combustion turbines subject to NSPS Subpart KKKKa are not subject to NSPS Subpart KKKK. The CCCTs associated with the proposed project will be subject to NSPS Subpart KKKKa and therefore not subject to NSPS Subpart KKKK.

4.2.5 Subpart KKKKa – Stationary Combustion Turbines

40 CFR 60 *Subpart KKKKa – Standards of Performance for Stationary Combustion Turbines* (NSPS Subpart KKKKa) establishes emissions limits for a stationary combustion turbine that commenced construction, modification, or reconstruction after December 13, 2024, and have a base load rating equal to greater than 10.7 gigajoules (10 MMBtu/hr) based on the HHV of the fuel. Any additional heat input from duct burners used with heat recovery steam generating (HRSG) units or fuel preheaters is not included in the heat input value used to determine the applicability of this subpart to a given stationary combustion turbine. However, this subpart does apply to emissions from any associated HRSG and duct burner(s) that are associated with a combustion turbine subject to this subpart. Any stationary combustion turbine subject to this subpart is not subject to NSPS Subpart GG or NSPS Subpart KKKK. HRSGs with duct burners regulated under NSPS Subpart KKKKa are exempt from the requirements of NSPS D, Da, Db, and Dc.

NSPS Subpart KKKKa specifies emissions limitations, monitoring, reporting, and recordkeeping requirements for NO_x and SO₂.

¹⁷ 40 CFR §60.40Da(e)

¹⁸ 40 CFR §60.330

4.2.5.1 Emission Limits

NSPS Subpart KKKKa has NO_x emissions standards for input-based and output-based emissions. Output-based emission standards are optional. Montour CT will comply with the required input-based standards.

For a new combustion turbine firing natural gas with a rating greater than 850 MMBtu/hr and a utilization rate greater than 45 percent, the input-based NO_x emission standard is 5 ppm at 15% O₂ or 0.018 lb/MMBtu heat input.¹⁹ For units greater than 300 MMBtu/hr, NSPS Subpart KKKKa also includes a NO_x limit of 96 ppm at 15% O₂ or 0.35 lb/MMBtu heat input for turbine operation at ambient temperatures less than 0°F, turbine operation at loads less than 70% of peak load, and turbine operation during turbine tuning.²⁰ Compliance with the input-based NO_x emission limit is determined on a 4-operating-hour rolling basis.²¹

SO₂ emissions into the atmosphere from combustion turbines located in the continental U.S. are limited to 0.9 lb/MWh gross output [or 110 nanograms per Joule (ng/J)], or the units must not burn any fuel with total potential sulfur emissions in excess of 0.060 lb SO₂/MMBtu heat input.²²

As documented in detail in Appendix B, Montour CT's proposed CCCT will have NO_x and SO₂ emissions well below the NSPS Subpart KKKKa emissions standards and will comply with the applicable monitoring, reporting, and performance test requirements of NSPS Subpart KKKKa.

4.2.5.2 General Monitoring and Testing Requirements

Pursuant to 40 CFR §60.4333a(a), the CCCT, air pollution control equipment, and monitoring equipment will be maintained in a manner that is consistent with good air pollution control practices for minimizing emissions. This requirement applies at all times including during startup, shutdown, and malfunction. Additional emissions limit-specific compliance demonstration requirements are detailed in the following subsections.

4.2.5.3 NO_x Compliance Demonstration Requirements

The CCCT will not use either water or steam injection; therefore, the continuous compliance requirements at 40 CFR §60.4340a apply. Pursuant to 40 CFR §60.4340a(b)(1), Montour CT will install, calibrate, maintain, and operate a continuous emission monitoring system (CEMS). Sources demonstrating compliance with the NO_x emission limit via CEMS are not subject to the requirement to perform initial and annual NO_x stack tests.²³ Initial compliance with the NO_x emission limit will be demonstrated by comparing the arithmetic average of the NO_x emissions measurements taken during the initial relative accuracy test audit (RATA) required pursuant to 40 CFR §60.4405a to the NO_x emission limit under NSPS Subpart KKKKa.²⁴

4.2.5.4 SO₂ Compliance Demonstration Requirements

For compliance with the SO₂ emission limit, facilities are required to perform regular determinations of the total sulfur content of the combustion fuel and to conduct initial and annual compliance demonstrations.

¹⁹ 40 CFR §60.4320a(a) and Table 1

²⁰ Ibid.

²¹ Ibid.

²² 40 CFR §60.4330a(a)(1) or (a)(2), respectively

²³ 40 CFR 60.4340a(b)

²⁴ 40 CFR 60.4405a(c)

The total sulfur content of gaseous fuel combusted in the combustion turbine must be determined and recorded once per operating day or using a custom schedule as approved by the Administrator.²⁵ However, Montour CT elects to opt out of this provision of the rule by using a fuel that is demonstrated not to exceed potential sulfur emissions of 0.060 lb/MMBtu SO₂.²⁶ This demonstration can be made using one of the following methods:

- ▶ By using a purchase contract specifying that the fuel sulfur content for the natural gas is less than or equal to 20 gr/100 scf of sulfur and results in potential emissions not exceeding 0.060 lb/MMBtu; or
- ▶ By using representative fuel sampling data meeting the requirements of 40 CFR 75, Appendix D, Sections 2.3.1.4 or 2.3.2.4 which show that the sulfur content of the fuel does not exceed 0.060 lb SO₂/MMBtu heat input.

Montour CT's current natural gas tariff specifies a fuel sulfur content of 20 gr S/100 scf demonstrating compliance with this requirement.

4.2.6 Subpart TTTTa – Standards of Performance for GHG Emissions for Modified Coal-Fired Steam Electric Generating Units and New Construction and Reconstruction Stationary Combustion Turbine Electric Generating Units

40 CFR 60 *Subpart TTTTa – Standards of Performance for Greenhouse Gas Emissions for Modified Coal-fired Steam Electric Generating Units and New Construction and Reconstruction Stationary Combustion Turbine Electric Generating Units* (NSPS Subpart TTTTa) is applicable to a stationary CT that commences construction or reconstruction after May 23, 2023, and meets the following relevant applicability conditions in 40 CFR 60.5509a(a)(1) and (2):

- ▶ Has a base load rating greater than 250 MMBtu/hr of fossil fuel; and
- ▶ Serves a generator(s) capable of selling greater than 25 MW of electricity to a utility power distribution system.

Given that the proposed CCCT meets all three applicability criteria under 40 CFR §60.5509a(a) and does not meet any of the exemption criteria under 40 CFR §60.5509a(b), both CCCT will be subject to the provisions of NSPS Subpart TTTTa.

NSPS Subpart TTTTa provides a different CO₂ emission limit for base load combustion turbines than the limit for intermediate load CTs. If a stationary combustion turbine supplies greater than 40 percent of its potential electric output as net-electric sales on both a 12-operating month and a 3-year rolling average basis, then the stationary combustion turbine is a base load CT. The CCCTs are being permitted as baseload units under this rule.

If the CCCT are operated as base load combustion turbines leading up to the compliance date for Subpart TTTTa, each CCCT will be subject to the following key requirements under Subpart TTTTa:

- ▶ **Phase 1 Standard of Performance for Base Load CTs.** Per 40 CFR §60.5520a(a) and Table 1 of Subpart TTTTa, the 12-operating month averages beginning before January 2032, emissions of CO₂ must be limited to 800 to 1,250 lb CO₂/MWh of gross energy output; **or** 820 to 1,280 lb CO₂/MWh of net energy output, as determined by the procedures in §60.5525a.

²⁵ 40 CFR 60.4370a(b)

²⁶ 40 CFR 60.4372a

- ▶ **Phase 2 Standard of Performance for Base Load CTs.** Per 40 CFR §60.5520a(a) and Table 1 of Subpart TTTTa, the 12-operating month averages beginning after December 2031, emissions of CO₂ must be limited to 100 to 150 lb CO₂/MWh of gross energy output; **or** 97 to 139 lb CO₂/MWh of net energy output, as determined by the procedures in §60.5525a.

On June 17, 2025, EPA issued a proposal to repeal all GHG emission standards for fossil fuel power plants including NSPS Subpart TTTTa. Montour CT will comply with any NSPS Subpart TTTTa requirements applicable at the time the CCCT commence operation.

4.2.7 Subpart UUUUb – Emission Guidelines for GHG Emissions for Electric Utility Generating Units

40 CFR 60 *Subpart UUUUb – Emission Guidelines for GHG Emissions for Electric Utility Generating Units* (NSPS Subpart UUUUb) provides guidelines for states to follow in developing, submitting, and implementing state plans to establish performance standards to reduce emissions of GHGs from an affected steam generating unit. This final rule became effective on July 8, 2024. NSPS Subpart UUUUb contains design options to develop an approval state plan but does not impose any requirements directly on any sources within a state. Guidelines for CCCT are not included in NSPS Subpart UUUUb.

On June 17, 2025, EPA issued a proposal to repeal all GHG emission standards for fossil fuel power plants including NSPS Subpart UUUUb. Montour CT will comply with any NSPS Subpart UUUUb requirements applicable at the time the CCCT commence operation.

4.3 National Emission Standards for Hazardous Air Pollutants (NESHAP)

National Emission 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 Montour SES facility is an existing major source of HAP emissions. Since Montour CT is aggregated with Montour SES, the Montour CT facility is considered a major source of HAP emissions.

Any source subject to a NESHAP is also subject to the general provisions of 40 CFR Subpart A, except as noted. A review of all NESHAP that could potentially be applicable to any of the new emission units associated with the CCCT Project is presented in this section. The list of NESHAPs that will apply to the emission units for the project are as follows:

- ▶ 40 CFR 63 Subpart YYYY – NESHAP for Combustion Turbines

The following section outlines the above NESHAP requirements that are applicable to Montour CT along with evaluated NESHAPs that were ultimately deemed not applicable to Montour CT.

4.3.1 NESHAP Subpart YYYY – Stationary Combustion Turbines

40 CFR 63 *Subpart YYYY – National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines* (NESHAP Subpart YYYY) establishes emissions and operating limitations for HAPs from existing, reconstructed, or new stationary combustion turbines, located at major stationary sources of HAPs.

The proposed CCCT meet the definition of an affected source under NESHAP Subpart YYYYY and therefore will be subject to this regulation.²⁷ Note that the duct burners and waste heat recovery units (even if part of a combustion turbine) are explicitly identified as not subject to this rule because they are considered steam generating units and, potentially, subject to other Part 63 standards.

NESHAP Subpart YYYYY requirements for each CCCT are dependent on the type of combustion system used (i.e., lean premix or diffusion flame combustion system). A lean premix combustion system operates with a lower flame temperature compared to a diffusion flame combustion system, resulting in lower NO_x emissions. Because the CCCT utilize dry low NO_x combustion technology, the CCCT are considered lean premix gas-fired stationary combustion turbines as defined in 40 CFR §63.6175.

As lean premix gas-fired stationary CCCT, the CCCT will be subject to requirements in **Error! Reference source not found.4.**

Table 4-4. NESHAP Subpart YYYYY Applicable Requirements

Category	Requirement Summary	Citation
Emission Limitations	Limit the concentration of formaldehyde to 91 ppbvd or less at 15% O ₂ , except during turbine startup.	40 CFR §63.6100 Table 1
Operating Limitations	Maintain 4-hour average catalyst inlet temperature within the range suggested by the oxidation catalyst manufacturer, excluding data recorded during startup.	40 CFR §63.6100 Table 2
General Compliance Requirements	Maintain the affected source, including associated air pollution control and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.	40 CFR §63.6105
Performance Testing	Conduct an initial performance test within 180 days after startup in accordance with the procedures in §63.6120 and submit a Notification of Compliance Status containing the results.	40 CFR §63.6110 40 CFR §63.6120 40 CFR §63.6130 Table 3 Table 4
	Conduct subsequent performance tests annually in accordance with the procedures in §63.6120.	40 CFR §63.6115 40 CFR §63.6120 Table 3
Monitoring Requirements	Monitor the oxidation catalyst inlet temperature on a continuous basis at all times that the source is operating. Do not use data during malfunctions, associated repairs, or quality assurance/quality control activities in data averages and calculations.	40 CFR §63.6125(a) 40 CFR §63.6135
	Develop and implement a CMS quality control program.	40 CFR §63.6125(e)
	Demonstrate compliance by maintaining oxidation catalyst within the catalyst manufacturer’s suggested inlet temperature range.	40 CFR §63.6140(a) Table 5
Notification Requirements	Submit an initial notification within 120 days after startup.	40 CFR §63.6145(b)
	Submit a notification of intent to conduct an initial performance test at least 60 days prior to conducting the initial performance test.	40 CFR §63.6145(e)
	Submit a Notification of Compliance Status within 60 days following the completion of a performance test.	40 CFR §63.6145(f)

²⁷ There was a stay for NESHAP Subpart YYYYY in 2004 on all requirements, except for an initial notification; however, this stay was lifted on March 9, 2022. <https://www.federalregister.gov/documents/2022/03/09/2022-04848/national-emission-standards-for-hazardous-air-pollutants-stationary-combustion-turbines-amendments>

Category	Requirement Summary	Citation
Reporting Requirements	Submit a semi-annual compliance report in CEDRI by January 31 and July 31 each year.	40 CFR §63.6140(b) 40 CFR §63.6150(a) 40 CFR §63.6150(g) Table 6
	Submit a performance test report in CEDRI within 60 days after completing each required performance test.	40 CFR §63.6150(f) 40 CFR §63.6150(g)
Recordkeeping Requirements	Keep copies of all notifications, performance tests, startup events, air pollution control equipment maintenance, and deviations for five years.	40 CFR §63.6155 40 CFR §63.6160

4.3.2 40 CFR 63, Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Major Sources: Boilers and Process Heaters

40 CFR 63 Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters (Boiler MACT) applies to industrial, commercial, or institutional boilers or process heaters, as defined in 40 CFR §63.7575 that are located at, or are part of, a major source of HAP, except as specified in 40 CFR §63.7491. The Boiler MACT applies to each new, reconstructed, or existing affected source, where the affected source includes the collection of all existing industrial, commercial, and institutional boilers and process heaters within an applicable subcategory defined in 40 CFR §63.7575 and each new or reconstructed industrial, commercial, or institutional boiler or process heater.

The proposed HRSG and duct burners of each CCCT meet the definition of a waste heat boiler, which is excluded from the definition of a boiler. Therefore, Subpart DDDDD is not applicable to the HRSG and duct burners of the proposed CCCT Project.

4.3.3 40 CFR 63, Subpart UUUUU – National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units

40 CFR 63 Subpart UUUUU - National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units is referenced to in short as the Mercury and Air Toxics Standards (MATS Rule) and, applies to electric utility steam generating units (EUSGUs) that combust coal or oil.²⁸ The MATS Rule regulates emissions of non-mercury metals, acid gases and mercury by providing a number of compliance options which provide a choice of surrogate compounds for several of these categories.

The proposed CCCT Project does not involve construction or modification of an EUSGU that combusts coal or oil. Therefore, Subpart UUUUU does not apply to CCCT associated with the proposed project.

4.4 Compliance Assurance Monitoring (CAM)

Pursuant to 40 (CFR) Part 64, facilities are required to develop a CAM Plan for certain emission units. The rule requires CAM Plans for emission units at Part 70 major sources that meet all of the following criteria:

- ▶ Are subject to an emission limitation or standard,

²⁸ 40 CFR 63.9980

- ▶ Use a control device to achieve compliance, and
- ▶ Have pre-control emissions that exceed or are equivalent to the major source threshold (i.e., 100 tpy).

CAM plans are required for large pollutant-specific emission units (PSEUs) with an operating permit significant modification and for all CAM applicable emission units with the first Part 70 operating permit renewal. The following emission limitations are exempt from CAM applicability under 40 CFR 64.2(b)(1)(i):

- ▶ NSPS (40 CFR 60) or NESHAP (40 CFR 61 and 63) emission limitation (proposed after November 15, 1990),
- ▶ Stratospheric ozone protection requirements,
- ▶ Acid rain program requirements, and
- ▶ Emission limitations or standards for which a Title V or State Operating Permit specifies a continuous compliance determination method, as defined in the CAM Rule.

The proposed CCCTs will utilize air pollution controls to reduce emissions of NO_x, CO, VOC, and formaldehyde. VOC uncontrolled emissions are estimated to be less than 100 tpy. Thus, this pollutant is not subject to CAM.

The CCCTs will be subject to NSPS Subpart KKKK, which includes a NO_x standard. Since the NSPS Subpart KKKK NO_x standard is a CAA Section 111 standard that was promulgated after November 15, 1990, the emission limit is exempt from CAM pursuant to 40 CFR §64.2(b)(1)(i). In addition, the CCCTs will be equipped with NO_x CEMS. Since the operation of CEMS is a continuous compliance determination method as defined in 40 CFR §64.1, CAM also does not apply per §64.2(2)(b)(1)(vi).

The CCCTs will be subject to NESHAP Subpart YYYY, which includes a formaldehyde standard. Although uncontrolled formaldehyde emissions from the turbines are greater than the Title V major source threshold, NESHAP Subpart YYYY is a CAA Section 112 standard that was promulgated after November 15, 1990, and is exempt from CAM pursuant to 40 CFR §64.2(b)(1)(i).

The proposed CCCTs will also be subject to BACT limits for CO emissions. Since emissions of CO are only controlled during steady-state operation, and are not controlled during startup and shutdown, CAM applicability is evaluated based on natural gas steady state operation. Montour CT plans to install a CO CEMS on each CCCT. As discussed previously, operation of CEMS is a continuous compliance demonstration method and exempts the CO emissions from each CCCT from CAM pursuant to 40 CFR §64.2(b)(1)(i). Therefore, CAM does not apply for CO.

4.5 CROSS-STATE AIR POLLUTION RULE (CSAPR)

The Cross State Air Pollution Rule (CSAPR) is a cap and trade program which regulates NO_x and SO₂ emissions from fossil fuel fired electric generating units in 27 states. These regulations apply to electric generating units (EGUs) with a name plate capacity greater than 25 MWe producing electricity for sale.

Montour CT's proposed CCCTs will be affected sources under this regulation and will comply with the monitoring, reporting, and recordkeeping requirements. Currently 40 CFR 97 Subparts AAAAA, CCCCC and EEEEE are applicable.²⁹ Montour CT will be required to monitor emissions of SO₂, NO_x, and maintain sufficient allowances under CSAPR for its operations. Allowances will be allocated from the state's new unit set-asides. Monitoring requirements for NO_x mass emissions and individual unit heat input, including all

²⁹ The requirements of 40 CFR 97 Subpart GGGGG are stayed per 89 FR 87960 Interim Final Rule issued November 6, 2024.

systems required to monitor NO_x emission rate, NO_x concentration, stack gas moisture content, stack gas flow rate, CO₂ or O₂ concentration, and fuel flow rate, as applicable, per 40 CFR Part 75.³⁰ Montour CT will comply with the requirements of these rules upon startup of the CCCTs.

4.6 TITLE IV ACID RAIN PERMIT

The Acid Rain Program was developed to reduce SO₂ and NO_x emissions from electric utility plants. Upon Phase III implementation, the Acid Rain Program in general applies to fossil fuel-fired combustion sources that drive generators for the purpose of generating electricity for sale. The proposed CCCTs will be utility units subject to the Acid Rain Program. The Montour CT facility will be subject to the following requirements:

- ▶ 40 CFR 72 (Permits Regulation),
- ▶ 40 CFR 73 (SO₂ Allowance System),
- ▶ 40 CFR 75 (Continuous Emission Monitoring); and
- ▶ 40 CFR 77 (Excess Emissions).

The CCCTs will not be subject to the NO_x provisions (40 CFR 76) because the proposed units will not have the capability to burn coal. The Acid Rain permit application is provided in Appendix G.

4.7 PENNSYLVANIA SIP REGULATIONS

This section examines new or modified air quality regulations in the Commonwealth of Pennsylvania, which are codified in 25 PA Code Chapters 121 – 129 and 131 – 145, for applicability. The Pennsylvania Code contains regulations that fall under two main categories: those regulations that are generally applicable (e.g., permitting requirements), and those that have specific applicability (e.g., PM standards for manufacturing equipment). The generally applicable requirements are straightforward (e.g., filing of emission statements) and, as such, are not discussed in further detail. The specific requirements associated with the proposed facility are discussed in the following section.

4.7.1 25 Pa. Code 123.1 and 123.2 Prohibition of Certain Fugitive Emissions and Fugitive Particulate Matter

Sections 123.1 and 123.2, *Prohibition of Certain Fugitive Emissions and Fugitive Particulate Matter*, respectively, state prohibitions and exceptions to fugitive emission sources and methods for controlling fugitive emissions. The regulation generally applies to all facilities in the state.

4.7.2 25 Pa. Code §123.11 Particulate Matter Emissions: Combustion Units

Section 123.11, *Particulate Matter Emissions – Combustion Units*, contain limitations on particulate matter from combustion installations. According to 123.11(a)(2), combustion units with heat inputs equal to or greater than 600 MMBtu/hr are subject to an emission limit of 0.1 lb/MMBtu. This limit applies to the HRSG duct burners. Montour CT will comply with this requirement.

4.7.3 25 Pa. Code §123.13 Particulate Matter Emissions: Processes

Section 123.13, Particulate Matter Emissions: Processes, defines particulate matter emissions limitations for processes. The proposed CCCT will be subject to the particulate emission limit in 123.13(c)(1). Montour CT will comply with this requirement.

³⁰ 40 CFR §97.1029(a)(1) Requirements for installation, certification, and data accounting

4.7.4 25 Pa. Code §123.21 Sulfur Compound Emissions: General

Section 123.21, *Sulfur Compound Emissions - General*, states that sulfur oxide emissions may not exceed 500 parts per million, by volume, dry basis. Montour CT will comply with this requirement by firing natural gas fuel in the CCCT.

4.7.5 25 Pa. Code §123.22 Sulfur Compound Emissions: Combustion Units

Section 123.22, *Sulfur Compound Emissions – Combustion Unit*, provides fuel sulfur restrictions applicable to combustion units. The HRSG duct burners will be subject to the general provision limited SO₂ emissions to 4 lb/MMBtu. Montour CT will comply with this requirement by firing natural gas fuel in the duct burners.

4.7.6 25 Pa. Code §123.31 Odor Emissions: Limitations

Section 123.31, *Odor Emissions*, states that malodorous air contaminants may not be emitted into the outdoor atmosphere such that malodors are detectable outside the property of the person on whose land the source is being operated. Montour CT will comply with this requirement.

4.7.7 25 Pa. Code §123.41 Visible Emissions: Limitations

Section 123.41, *Visible Emissions*, states that visible air contaminants may not be emitted into the outdoor atmosphere such that 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. Montour CT will comply with this requirement.

4.7.8 25 Pa. Code §123.51 Nitrogen Compound Emissions

Section 123.51, *Nitrogen Compound Emissions – Monitoring Requirements*, contains a requirement that combustion units with rated heat inputs greater than 250 MMBtu/hr and an annual capacity factor greater than 30% must install, operate, and maintain continuous nitrogen oxides monitoring systems and other monitoring systems to convert data to required reporting units in compliance with Chapter 139, Subchapter C. The HRSG duct burners meet the applicability criteria. The CCCT (including HRSG duct burners) will utilize CEMS for monitoring NO_x emissions.

4.7.9 25 Pa. Code §129.96-100 and §129.111-115 RACT II and RACT III

25 Pa. Code §129.96-100 (RACT II) and 25 Pa. Code §129.111-115 (RACT III) apply to the owner or operator of a major source of NO_x or VOC. RACT II and RACT III apply to existing sources that commenced operation before July 20, 2012, for RACT II and August 3, 2018, for RACT III. The CCCT Project includes new sources that will commence operation after these dates. Thus, RACT II and RACT III are not applicable to this project.

4.7.10 25 Pa. Code §145 Interstate Pollution Transport Reduction

25 Pa. Code 145 sets forth Pennsylvania's NO_x budget requirements. These regulations apply to electric generating units with a nameplate capacity greater than 25 MWe and non-electric generating units greater than 250 MMBtu/hr. For electric generating units, 25 Pa. Code 145 incorporates the Clean Air Interstate Rule (CAIR) in Subchapter D. CAIR has been superseded with CSAPR requirements which are discussed in Section 4.5.

5. BACT/LAER/BAT ANALYSES

5.1 Top-Down Methodology

In a memorandum dated December 1, 1987, the EPA stated its preference for a “top-down” analysis for PSD applications.³¹ As part of this PSD and NNSR application, Montour CT is reviewing controls on combustion turbines for Best Available Technology (BAT), Best Available Control Technology (BACT), and Lowest Achievable Emissions Rates (LAER). For this BAT/BACT/LAER analysis, Montour CT is using the same top-down approach. The first step in this approach is to determine, for the emission unit in question, the most stringent control available or the lowest emission rate that has been proven possible for a similar or identical source or source category. If it can be shown that level of control is technically, environmentally, and economically feasible as well as appropriate on the basis of energy concerns for the unit in question, then it will prove that the proposed controls meet the requirements for BAT/BACT. The LAER analysis follows the same “top down” approach but does not include an economic feasibility evaluation.

A summary of the proposed BAT/BACT/LAER limits that will be discussed in the following sections is below in Table 5-1.

Table 5-1. Summary of Proposed BAT/BACT/LAER for CCCTs – Steady State Operation

Source Type	Pollutant	Proposed Limit	Control Technology	Regulatory Basis
Gas-Fired CCCT	NO _x	2.0 ppmvd @ 15% O ₂ , 30-day rolling average	SCR, DLN, Good Combustion Practices	LAER
	PM	0.0054 lb/MMBtu	Low Sulfur Fuel, Inlet Air Filters, Good Combustion Practices	BACT
	CO	2.0 ppmvd @ 15% O ₂ , 30-day rolling average	Oxidation Catalyst, Good Combustion Practices	BACT
	VOC	1.5 ppmvd @ 15% O ₂ w/ Duct Burners, 1.0 ppmvd @ 15% O ₂ w/o Duct Burners,	Oxidation Catalyst, Good Combustion Practices	LAER
	SO ₂	Natural Gas Fuel	Low Sulfur Fuel, Good Combustion Practices	BAT
	H ₂ SO ₄	Natural Gas Fuel	Low Sulfur Fuel, Good Combustion Practices	BACT
	GHG (CO ₂)	875 lb/MW-g w Duct Burners 1,000 lb/MW-g w/o Duct Burners 12-month rolling basis	Efficient Turbine Operation and Good Combustion Practices	BACT
	Ammonia	5 ppmvd at 15% O ₂ during steady-state operation	SCR Optimization and Good Combustion Practices	BAT

³¹ U.S. EPA, Office of Air and Radiation. Memorandum from J.C. Potter to the Regional Administrators. Washington, D.C. December 1, 1987.

The “top down” methodology is summarized in the following sections.

5.1.1 Step 1: Identify All Control Technologies

Under Step 1, all available control technologies are identified for each emission unit in question. The following methods may be used to identify potential technologies:

- ▶ Researching the RACT/BACT/LAER Clearinghouse (RBLC) database;
- ▶ Surveying regulatory agencies;
- ▶ Drawing from previous engineering experience;
- ▶ Surveying air pollution control equipment vendors; and
- ▶ Surveying available literature.

Once identified, the control technologies are ranked in descending order of expected control effectiveness.

5.1.2 Step 2: Eliminate Technically Infeasible Options

After control technologies are identified under Step 1, an analysis is conducted to eliminate technically infeasible options. A control option is eliminated from consideration if there are process-specific conditions that prohibit the implementation of the control technology or if the highest control efficiency of the option would result in an emission level that is higher than any applicable regulatory limits, such as a New Source Performance Standard (NSPS) or National Emission Standard for Hazardous Air Pollutants (NESHAP).

5.1.3 Step 3: Rank Remaining Control Technologies by Control Effectiveness

In Step 3, remaining control technology options are ranked based on their control effectiveness, from highest to lowest control efficiency. This list must identify, at a minimum, the baseline emissions of criteria pollutants and GHGs before implementation of each control option, the estimated reduction potential or control efficiency of each control option, the estimated emissions after the application of each control option and the economic impacts.

5.1.4 Step 4: Evaluate Most Effective Controls and Document Results

Beginning with the highest-ranked control technology option from Step 3, detailed economic, energy, and environmental impact evaluations for BAT/BACT are performed in Step 4. The economic evaluation is not completed for pollutants subject to LAER review. If a control option is determined to be economically feasible without adverse energy or environmental impacts, it is not necessary to evaluate the remaining options with lower control efficiencies.

The economic evaluation centers on the cost effectiveness of the control option. Costs of installing and operating control technologies are estimated and annualized following the methodologies outlined in the U.S. EPA’s Office of Air Quality Planning and Standards (OAQPS) Control Cost Manual (CCM) and other industry resources.³²

5.1.5 Step 5: Select BAT/BACT/LAER

Using the result of the prior steps to determine the appropriate control technology, the final step is to determine what the proper BAT/BACT/LAER would be for the given emission source.

³² OAQPS, *U.S. EPA Air Pollution Control Cost Manual*, Sixth Edition, EPA 452-02-001 (<http://www.epa.gov/ttn/catc/products.html#cccinfo>), Daniel C. Mussatti & William M. Vatauvuk, January 2002.

5.2 NO_x LAER Assessment for CCCT

Montour CT will be installing two (2) new identical GE CCCT (CCCT). These units will be authorized to fire only natural gas. NO_x emissions from the units will be controlled by dry low NO_x burners and selective catalytic reduction (SCR) systems. Montour CT is submitting this analysis to demonstrate that the proposed controls installed on these units will meet LAER.

5.2.1 Step 1: Identify All Control Technologies for NO_x

Based on a review of the U.S. Environmental Protection Agency's (EPA's) RACT/BACT/LAER Clearinghouse (RBLC) database and knowledge of the industry, Table 5-2. Potentially Available NO_x Control Technologies for of the various technologies that were identified as being theoretically for installation on the CCCTs. The results of the RBLC searches can be found in Appendix D.

Table 5-2. Potentially Available NO_x Control Technologies for Natural Gas CCCT

Potentially Available NO _x Control Technologies
SCR
SNCR
Multi-Pollutant Catalyst (EM _x TM /SCONO _x TM / METEOR TM)
Dry Low NO _x Burners
Good Combustion and Operating Practices

The following section provides a discussion of each potentially available technology identified above as it might be applied to the new CCCTs at Montour CT to achieve LAER.

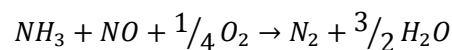
5.2.1.1 Selective Catalytic Reduction (SCR)

SCR is an exhaust gas treatment process in which NH₃ is injected into the exhaust gas upstream of a catalyst bed. On the catalyst surface, NH₃, NO, and NO₂ react to form water and N₂. The presence of the catalyst promotes this reaction at a much lower temperature than that required for SNCR. Although catalyst formulations have provided a continuum of temperature ranges, these are typically described by three temperature ranges for optimal NO_x reduction. A "normal" catalyst operates well at approximately 650°F, a "mid-range" catalyst operates well between 800 and 900°F, and a "hot" catalyst (generally zeolite based) can operate above a temperature of 1,100°F, although the effectiveness of NO_x removal declines as a function of the exhaust gas temperature. Conventional vanadium/titanium catalysts are commonly used in SCR applications and have an optimal operating temperature in the 600 to 750°F range. The application of SCR on the combined cycle units can utilize a conventional catalyst which is located downstream of the CCCT itself, within the tube banks at an appropriate temperature region, near the 600-700°F range.

SCRs are proposed to be installed for NO_x control on the new CCCTs.

5.2.1.2 Selective Non-Catalytic Reduction (SNCR)

SNCR uses ammonia (NH₃) or a urea solution, injected into the gas stream, to chemically reduce NO_x to form N₂ and water. High exhaust temperatures promote the reaction via the following equation:



Typical removal efficiencies for SNCR range from 30 to 50 percent and higher when coupled with combustion controls.³³ An important consideration for implementing SNCR is the operating temperature range. The optimum temperature range is approximately 1,600 to 2,000°F. Operation at temperatures below this range results in ammonia slip. Operation above this range results in oxidation of ammonia, forming additional NO_x.

5.2.1.3 EM_xTM / SCONO_xTM/METEORTM

EM_xTM (the second-generation of the SCONO_x NO_x Absorber Technology) is a multi-pollutant control technology that utilizes a coated oxidation catalyst to remove NO_x, CO, and VOC without a reagent, such as NH₃. The SCONO_x system consists of a platinum-based catalyst coated with potassium carbonate [K₂(CO₃)] to oxidize NO_x (to potassium nitrate [K(NO₃)]), CO (to CO₂), and VOC.³⁴ Hydrogen (H₂) is then used as the basis for the catalyst regeneration process where K(NO₃) is reacted to reform the K₂(CO₃) catalyst and release nitrogen gas and water.³⁵ The catalyst is installed in the flue gas with a temperature range between 300°F to 700°F. These catalysts are susceptible to fouling by sulfur if the sulfur content of the flue gas is high.³⁶ METEORTM is a multi-pollutant post-combustion control technology originally developed and patented by Siemens Energy Inc. and optimized by Cormetech.

Estimates of control efficiency for a SCONO_x system vary depending on the pollutant controlled. California Energy Commission reports a CE of 78% for NO_x reductions down to 2.0 ppm, and even higher NO_x reductions down to 1 ppm for some designs.³⁷ It should be noted that there are no RBLC entries for comparable combined cycle combustion turbine facilities with BACT limits below 2.0 ppm, and those facilities with limits of 2.0 ppm are all equipped with SCR, suggesting that SCONO_x / EM_xTM are, at best, no more effective at reducing NO_x emissions than SCR systems.

The METEORTM catalyst is similar to standard SCR systems, using ammonia to reduce NO_x emissions. An equivalent level of control to standard SCR is achieved.³⁸

5.2.1.4 Dry Low NO_x Burners (DLN)

DLN combustor technology is used during natural gas (NG) combustion. DLN combustors premix air and a lean fuel mixture prior to injection into the combustion turbine which significantly reduces peak flame temperature and thermal NO_x formation from NG combustion. Conventional combustors are diffusion controlled where fuel and air are injected separately.

³³ U.S. EPA, Clean Air Technology Center, *Air Pollution Control Technology Fact Sheet: Selective Non-Catalytic Reduction (SNCR)*, EPA-452/F-03-031.

³⁴ Georgia EPD, *Prevention of Significant Air Quality Deterioration Review Preliminary Determination – Dahlberg Combustion Turbine Electric Generating Facility*, October 2009.
https://epd.georgia.gov/air/sites/epd.georgia.gov.air/files/related_files/document/1570034pd.pdf

³⁵ Ibid.

³⁶ California Energy Commission, *Evaluation of Best Available Control Technology*, Appendix 8.1E, pages 8.1E-9 and 8.1E-10.

³⁷ California Energy Commission, *Evaluation of Best Available Control Technology*, Appendix 8.1E, page 8.1E-6.

³⁸ Application No. 17040013, *Project Summary for a Construction Permit Application from Jackson Generation, LLC, for an Electrical Generating Facility in Elwood, Illinois*, issued by the Illinois EPA for the public comment period beginning on September 21, 2018. Discussion related to selection of BACT for emissions of NO_x, Attachment B pages 15-16.

5.2.1.5 Good Combustion and Operating Practices

Good combustion and operating practices allow the equipment to operate as efficiently as possible. The air-to-fuel ratio is one of the primary indicators of efficient combustion. Good combustion practices involve the monitoring of the air to fuel ratio to ensure the most efficient combustion. Modern turbine control systems enhance combustion efficiency by automatically adjusting operating parameters through computer-based technology.

5.2.2 Step 2: Eliminate Technically Infeasible Options for NO_x Control

This next section reviews the technical feasibility of the control options listed in Step 1. The following subsections identify which technologies will be considered in the next step of the analysis due to being technically feasible.

5.2.2.1 SCR Technical Feasibility

SCR is regularly used on combined cycle units, since the exhaust from combined cycle operations has had heat removed, and the normal temperature is within the effective range for SCR. As stated previously, SCRs are proposed to be installed to control NO_x for these units.

5.2.2.2 SNCR Technical Feasibility

The temperature range required for effective operation of this technology is 1,600 to 2,000°F. This is above the peak exhaust temperature for the proposed CCCT.³⁹ SNCR is eliminated as a technically feasible option for control of NO_x emissions from the CCCTs.

5.2.2.3 EM_xTM / SCONO_xTM / METEORTM Technology Feasibility

As summarized by Illinois EPA in their project summary for the Jackson Energy Center PSD permit, the EM_xTM/SCONO_xTM catalyst system has operated successfully on several smaller, NG-fired combined cycle units, but there are engineering challenges with scaling up this technology for use on large gas turbines.^{40,41} Therefore, EM_xTM/SCONO_xTM is determined to be technically infeasible.

The METEORTM catalyst technology, developed and patented by Siemens Energy Inc., is currently only in use on one 320 MW Siemens/Westinghouse 501G combustion turbine installed in November 2015.^{42,43} A review of the RBLC database for turbines similar to the proposed units did not return any units that use the

³⁹ U.S. EPA, Clean Air Technology Center, Air Pollution Control Technology Fact Sheet: Selective Non-Catalytic Reduction (SNCR), EPA-452/F-03-031.

⁴⁰ Application No. 17040013, *Project Summary for a Construction Permit Application from Jackson Generation, LLC, for an Electrical Generating Facility in Elwood, Illinois*, issued by the Illinois EPA for the public comment period beginning on September 21, 2018. Discussion related to selection of BACT for emissions of NO_x, Attachment B pages 14.

⁴¹ National Energy Technology Laboratory, *8.7. Nitrogen Oxides (NO_x) Emissions*. Available online at <https://www.netl.doe.gov/research/Coal/energy-systems/gasification/gasifipedia/nitrogen-oxides>. Accessed August 15, 2024.

⁴² Application No. 17040013, *Project Summary for a Construction Permit Application from Jackson Generation, LLC, for an Electrical Generating Facility in Elwood, Illinois*, issued by the Illinois EPA for the public comment period beginning on September 21, 2018. Discussion related to selection of BACT for emissions of NO_x, Attachment B page 16.

⁴³ Siemens Energy and Cormetech, *Capital and O&M Benefits of Advanced Multi-Function Catalyst Technology for Combustion Turbine Power Plants*, Power Gen 2015, page 2.

METEOR™ catalyst technology. As there is limited commercial operating experience with the METEOR™ catalyst and it does not achieve greater reduction than SCR, the METEOR™ technology option is not considered a technically feasible control option for purposes of LAER.

5.2.2.4 DLN Technical Feasibility

DLN combustion technology is technically feasible and the proposed turbines will have DLN burners. DLN combustion technology is included in the following BACT steps but represents part of the base case for NO_x performance as it is inherent in the operation of the combustion systems. As previously discussed, DLN cannot be used at low loads, during which the combustor operates in diffusion mode. Therefore, DLN is technically infeasible at low loads.

5.2.2.5 Good Combustion and Operating Practices Feasibility

Good combustion practices are technically feasible. The proposed CCCTs will be equipped with automated computer-based control systems capable of adjusting operating parameters to ensure that all turbine and duct burner systems, including those intended to minimize pollutant formation, operate as effectively and efficiently as possible.

5.2.3 Step 3: Rank Remaining Control Technologies by Control Effectiveness

Montour CT will employ the top-ranked NO_x control technologies for new CCCTs including: SCR, low NO_x burners, and good combustion practices. Typical control efficiencies for the remaining control technologies are as follows:

Table 5-3. NO_x Control Efficiencies for Technically Feasible Controls

Technology	NO_x Control Efficiency
SCR	70-90%
DLN	Turbine Design
Good Combustion Practices	Turbine/Duct Burner Design

5.2.4 Step 4: Evaluate Most Effective Controls and Document Results

SCR is the highest ranking potentially feasible control technology. As required by LAER, the CCCTs will utilize SCR, DLN and good combustion practices for NO_x control.

5.2.5 Step 5: Select LAER

NO_x LAER for the proposed CCCTs is based on SCR, DLN and good combustion practices. Based on the RBLC search results, NO_x emission limits for CCCTs with similar controls are set at 2.0 ppmvd when firing natural gas. Based on this information, the following is being proposed as NO_x LAER for each of the proposed CCCTs:

- 2.0 ppmvd NO_x or less, corrected to 15% O₂, on a 30-day rolling average, excluding periods of startup and shutdown.

These proposed limits are consistent with determinations found in the RBLC for CCCTs of similar models and will be demonstrated via NO_x CEMS.

During periods of startup and shutdown, the CCCTs are not able to achieve maximum combustion efficiency and DLN and SCR cannot be operated. An alternative NO_x LAER is proposed for these scenarios as follows:

- Cold start: 200 lb NO_x per event, not to exceed 70 minutes,
- Warm start: 160 lb NO_x per event, not to exceed 60 minutes,
- Hot start: 110 lb NO_x per event, not to exceed 30 minutes,
- Shutdown: 16 lb NO_x per event, not to exceed 12 minutes.

5.3 PM BACT Assessment for CCCT

The following sections present a review of possible control technologies for PM emissions from the natural gas-fired CCCTs. This section addresses PM emissions including PM₁₀ and PM_{2.5}. Air pollution control strategies are evaluated using the top-down BACT approach.

5.3.1 Step 1: Identify All Control Technologies for PM

Based on a review of the U.S. Environmental Protection Agency’s (EPA’s) RACT/BACT/LAER Clearinghouse (RBLC) database and knowledge of the industry, Table 5-4 contains a list of the various technologies that were identified as being theoretically available to CCCT. The results of the RBLC searches can be found in Appendix D. This table also contains a list of control technologies that have been demonstrated in the past for PM control on other combustion unit types.

Table 5-4. Potentially Available PM Control Technologies for Natural Gas CCCT

Potentially Available PM Control Technologies
Wet Scrubber
Filter fabric/Baghouse
Low Sulfur Fuel
Inlet Air Filter
Good Combustion Practices

Wet scrubbers and baghouses are available control technologies for the reduction of PM. However, neither of these technologies have ever been installed on a commercial combustion turbine. Therefore, these technologies will not be evaluated further in the BACT analyses.

The following section provides a discussion of each potentially available technology identified above as it might be applied to the new CCCTs at the Facility.

5.3.1.1 Low Sulfur Fuels

Combusting pipeline-quality natural gas with an inherently low sulfur content reduces particulate emissions compared to other available fuels as there is less potential to form solid sulfates and other sulfur byproducts.

5.3.1.2 Inlet Air Filters

Inlet air filters reduce the amount of solid particulate matter entering the turbine combustion chamber. Given that a portion of the PM emissions from the CCCTs are generated from solids entrained in the

combustion air, the use of inlet air filters can reduce PM emissions. As inlet air filters are standard equipment for CCCTs, the use of inlet air filters is considered part of the base case for the Montour CT.

5.3.1.3 Good Combustion Practices

Good combustion and operating practices will minimize the formation of PM emissions due to incomplete combustion. Good operating practices typically consist of controlling parameters such as fuel feed rates and air/fuel ratios and periodic tuning.

5.3.2 Step 2: Eliminate Technically Infeasible Options for PM Control

Due to the low particulate concentration in the exhaust gas, add-on PM controls would not provide any significant degree of emission reduction for the CCCTs and are therefore not considered further in this analysis. The remaining control options (inlet air filters, low sulfur fuels, and good combustion practices) are technically feasible for the CCCTs and are evaluated further in the BACT analysis.

5.3.3 Step 3: Rank Remaining Control Technologies by Control Effectiveness

Montour CT will employ the top-ranked PM control technologies for new CCCTs including: low sulfur fuels, inlet air filters and good combustion practices. Typical control efficiencies for the remaining control technologies are as follows:

Table 5-5. PM Control Efficiencies for Technically Feasible Controls

Technology	PM Control Efficiency
Low Sulfur Fuels	Reduction Varies
Inlet Air Filter	Reduction Varies
Good Combustion Practices	Reduction Varies

5.3.4 Step 4: Evaluate Most Effective Controls and Document Results

The CCCTs will utilize low sulfur fuel, inlet air filters and good combustion practices for PM control. As such, Montour CT is not providing a cost calculation for the technically feasible control devices outlined above.

5.3.5 Step 5: Select BACT

The proposed BACT for PM for the CCCTs will be the use of low sulfur fuels and good combustion practices. Based on this information, the following is being proposed as PM BACT for each of the proposed CCCTs:

- PM, PM₁₀, PM_{2.5} (including filterable and condensable emissions) of 0.0054 lb/MMBtu (demonstrated via stack test).

During periods of startup and shutdown, CCCTs are not able to achieve maximum combustion efficiency. The alternative PM BACT is proposed for these scenarios as follows:

- Cold start: 14.2 lb PM per event, not to exceed 70 minutes,
- Warm start: 12.2 lb PM per event, not to exceed 60 minutes,
- Hot start: 6.1 lb PM per event, not to exceed 30 minutes,

- Shutdown: 2.4 lb PM per event, not to exceed 12 minutes.

5.4 CO BACT Assessment for CCCT

The following sections present a review of possible control technologies for CO emissions from natural gas fired CCCTs. Air pollution control strategies are evaluated using the top-down BACT approach. An oxidation catalyst system will be installed and operated to control CO emissions from the CCCTs.

5.4.1 Step 1: Identify All Control Technologies for CO

Based on a review of the U.S. Environmental Protection Agency’s (EPA’s) RACT/BACT/LAER Clearinghouse (RBLC) database and knowledge of the industry, Table 5-6 contains a list of the various technologies that were identified as being theoretically available to CCCT. The results of the RBLC searches can be found in Appendix D.

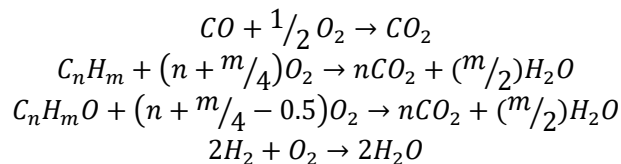
Table 5-6. Potentially Available CO Control Technologies for Natural Gas CCCT

Potentially Available CO Control Technologies
Oxidation Catalyst
Multi-Pollutant Catalyst (EM _x TM /SCONO _x TM / METEOR TM)
Good Combustion Practices

The following section provides a discussion of each potentially available technology identified above as it might be applied to the new CCCTs at the facility.

5.4.1.1 Oxidation Catalyst

The chemical reactions in the exhaust stream resulting from the application of an oxidation catalyst are as follows:



Oxidation catalysts are formulated with precious metals, such as platinum group metals, and are applied to flow-through monoliths to minimize backpressure and maintain a compact design. Various catalyst formulations provide the flexibility to target specific conversion requirements, exhaust temperatures, and low SO₂ to SO₃ and NO to NO₂ conversions. Oxidation catalysts can provide up to 90% destruction of CO, VOCs, formaldehyde, and other toxic compounds.⁴⁴

5.4.1.2 EM_xTM/SCONO_xTM / METEORTM

As discussed in Section 5.2.1.3, these multi-pollutant control systems use an oxidation catalyst that provides an equivalent level of control for CO emissions to other oxidation catalysts, and therefore, they do not separately need to be carried to the remaining steps of the turbine BACT analysis.

⁴⁴ https://www.murcal.com/pdf%20folder/15.johnson_turbine_lit2.pdf

5.4.1.3 Good Combustion Practices

This control technology minimizes incomplete combustion and the resulting formation of CO through proper equipment design and operation, and good combustion practices. Proper equipment design minimizes incomplete combustion by allowing for sufficient residence time at high temperatures and turbulence to increase mixing. Generally, the effect of combustion zone temperature and residence time on CO emissions is the opposite of their effect on NO_x emissions. Accordingly, oxygen availability is also optimized with air input, while controlling temperature to minimize NO_x formation. Modern turbine control systems enhance combustion efficiency by automatically adjusting operating parameters through computer-based technologies.

5.4.2 Step 2: Eliminate Technically Infeasible Options for CO Control

This next section reviews the technical feasibility of the control options for BACT listed in Step 1. The following subsections identify which technologies will be considered in the next step of the analysis due to being technically feasible.

5.4.2.1 Oxidation Catalyst

Oxidation catalysts typically operate within a temperature range between 600 to 800°F.⁴⁵ The exhaust temperature from the CCCTs fall well within the operating temperature of typical oxidation catalyst systems. An oxidation catalyst is technically feasible for the proposed CCCTs and will be utilized.

5.4.2.2 Good Combustion Practices

This represents the base case for design and operation of the turbines.

5.4.3 Step 3: Rank Remaining Control Technologies by Control Effectiveness

There is only one option from the control technology review that could reduce emissions below the base case values: oxidation catalyst. Typical control efficiencies for the remaining control technologies are as follows:

Table 5-7. CO Control Efficiencies for Technically Feasible Controls

Technology	CO Control Efficiency
Oxidation Catalyst	90%
Good Combustion Practices	--

5.4.4 Step 4: Evaluate Most Effective Controls and Document Results

Similarly to the sections above for NO_x and PM, Montour CT is not providing an economic feasibility study on the technologies listed in Table 5-7 as these controls will be installed on the CCCTs.

⁴⁵ U.S. EPA, CATC Fact Sheet for Catalytic Incineration , EPA-452/F-03-018. Available at:

www.epa.gov/ttn/catc/dir1/fcataly.pdf

5.4.5 Step 5: Select BACT

CO BACT for the proposed CCCTs is based on oxidation catalysts and good combustion practices. Based on the RBLC search results, CO emission limits for CCCTs with similar controls are set at 2.0 ppmvd when firing natural gas. Based on this information, the following is being proposed as CO BACT for each of the proposed CCCTs:

- 2.0 ppmvd CO or less, corrected to 15% O₂, on a 30-day rolling average, excluding periods of startup and shutdown.

These proposed limits are consistent with determinations found in the RBLC for CCCTs of similar models and will be demonstrated via CO CEMS.

During periods of startup and shutdown, the CCCTs are not able to achieve maximum combustion efficiency and the oxidation catalysts cannot be operated. An alternative CO BACT is proposed for these scenarios as follows:

- Cold start: 830 lb CO per event, not to exceed 70 minutes,
- Warm start: 235 lb CO per event, not to exceed 60 minutes,
- Hot start: 215 lb CO per event, not to exceed 30 minutes,
- Shutdown: 185 lb CO per event, not to exceed 12 minutes.

5.5 VOC LAER Assessment for CCCT

The following sections present a review of possible control technologies for VOC emissions from natural gas fired CCCTs. Air pollution control strategies are evaluated for LAER. An oxidation catalyst system will be installed and operated to control VOC emissions from the CCCTs.

5.5.1 Step 1: Identify All Control Technologies for VOC

Based on a review of the U.S. Environmental Protection Agency's (EPA's) RACT/BACT/LAER Clearinghouse (RBLC) database and knowledge of the industry, Table 5-8 contains a list of the various technologies that were identified as being theoretically available to CCCT. The results of the RBLC searches can be found in Appendix D.

Table 5-8. Potentially Available VOC Control Technologies for Natural Gas CCCT

Potentially Available VOC Control Technologies
Oxidation Catalyst
Multi-Pollutant Catalyst (EM _x TM /SCONO _x TM / METEOR TM)
Good Combustion Practices

The following section provides a discussion of each potentially available technology identified above as it might be applied to the new CCCTs at the Facility.

5.5.1.1 Oxidation Catalyst

Oxidation catalyst control technology is discussed in detail in Section 5.4.1.1.

5.5.1.2 *EM_xTM/SCONOXTM / METEORTM*

As discussed in Section 5.2.1.3, these multi-pollutant control systems use an oxidation catalyst that provides an equivalent level of control for VOC emissions to other oxidation catalysts, and therefore, they do not separately need to be carried to the remaining steps of the turbine LAER analysis.

5.5.1.3 *Good Combustion Practices*

As discussed in Section 5.4.1.3, good combustion practices are utilized to reduce potential emissions from a turbine.

5.5.2 Step 2: Eliminate Technically Infeasible Options for CO Control

This next section reviews the technical feasibility of the control options for LAER listed in Step 1. The following subsections identify which technologies will be considered in the next step of the analysis due to being technically feasible.

5.5.2.1 *Oxidation Catalyst*

Oxidation catalysts typically operate within a temperature range between 600 to 800°F. The exhaust temperature from the CCCTs fall well within the operating temperature of typical oxidation catalyst systems. An oxidation catalyst is technically feasible for the proposed CCCTs and will be utilized.

5.5.2.2 *Good Combustion Practices*

This represents the base case for design and operation of the turbines.

5.5.3 Step 3: Rank Remaining Control Technologies by Control Effectiveness

There is only one option from the control technology review that could reduce emissions below the base case values: oxidation catalyst. Typical control efficiencies for the remaining control technologies are as follows:

Table 5-9. VOC Control Efficiencies for Technically Feasible Controls

Technology	VOC Control Efficiency
Oxidation Catalyst	~ 50%
Good Combustion Practices	--

5.5.4 Step 4: Evaluate Most Effective Controls and Document Results

Oxidation catalyst is the highest ranking potentially feasible control technology. As required by LAER, the CCCTs will utilize oxidation catalysts and good combustion practices for VOC control.

5.5.5 Step 5: Select LAER

VOC LAER for the proposed CCCTs is based on oxidation catalysts and good combustion practices. Based on the RBLC search results, VOC emission limits for CCCT with similar controls range between 0.7 to 4.0 ppmvd

when firing natural gas. The majority of RBLC entries for CCCTs utilize oxidation catalysts and good combustion practices to achieve a BACT limit of 1 to 2 ppmvd when not firing duct burners and 2 ppmvd when firing duct burners, including several recently permitted sites. Based on this information, the following limits are being proposed as VOC LAER for each of the proposed CCCT:

- 1.5 ppmvd VOC or less, corrected to 15% O₂, when duct burners are fired, excluding periods of startup and shutdown, and
- 1.0 ppmvd VOC or less, corrected to 15% O₂, when duct burners are not fired, excluding periods of startup and shutdown.

These proposed limits are consistent with vendor emission guarantees and determinations found in the RBLC for CCCTs of similar models based on stack testing. Stack testing will be conducted after initial startup followed by subsequent stack tests every five years.

During periods of startup and shutdown, the CCCTs are not able to achieve maximum combustion efficiency and the oxidation catalyst cannot be operated. An alternative VOC LAER is proposed for these scenarios as follows:

- Cold start: 105 lb VOC (as methane) per event, not to exceed 70 minutes,
- Warm start: 70 lb VOC (as methane) per event, not to exceed 60 minutes,
- Hot start: 66 lb VOC (as methane) per event, not to exceed 30 minutes,
- Shutdown: 55 lb VOC (as methane) per event, not to exceed 12 minutes.

5.6 SO₂ BAT Assessment for CCCT

The following sections present a review of possible control technologies for Sulfur Dioxide (SO₂) emissions from the CCCTs. Air pollution control strategies are evaluated using the top-down BAT approach.

5.6.1 Step 1: Identify All Control Technologies for SO₂

Based on a review of the U.S. Environmental Protection Agency’s (EPA’s) RACT/BACT/LAER Clearinghouse (RBLC) database and knowledge of the industry, Table 5-10 contains a list of the various technologies that were identified as being theoretically available to CCCTs. The results of the RBLC searches can be found in Appendix D. This table also contains a list of control technologies that have been demonstrated in the past for PM control on other combustion unit types.

Table 5-10. Potentially Available SO₂ Control Technologies for Natural Gas CCCT

Potentially Available SO₂ Control Technologies
FGD Scrubber
Dry Sorbent Injection
Low Sulfur Fuel
Good Combustion Practices

Flue Gas Desulfurization scrubbers and Dry Sorbent Injection are available control technologies for the reduction of SO₂. However, neither of these technologies have ever been installed on a commercial combustion turbine. Therefore, these technologies will not be evaluated further in the BAT analyses.

The following section provides a discussion of each potentially available technology identified above as it might be applied to the new CCCTs at the Facility.

5.6.1.1 Low Sulfur Fuels

Burning low sulfur fuels in a turbine is a method of controlling SO₂ emissions as the low sulfur content limits the potential amount of sulfur compounds that can be produced through combustion.

5.6.1.2 Good Combustion Practices

Operation and maintenance of the equipment in accordance with good air pollution control practices and with good combustion practices results in efficient combustion of fuel, which in turn results in reduced usage of fuel and associated emissions of SO₂.

5.6.2 Step 2: Eliminate Technically Infeasible Options for SO₂ Control

This next section reviews the technical feasibility of the control options listed in Step 1. The following subsections identify which technologies will be considered in the next step of the analysis due to being technically feasible.

5.6.2.1 Low Sulfur Fuels

As these units will be running on natural gas, an inherently low sulfur fuel, this control method is both feasible and will be implemented.

5.6.2.2 Good Combustion Practices

This is an inherent method of lowering emissions from combustion units and, therefore, will be technically feasible for these units.

5.6.3 Step 3: Rank Remaining Control Technologies by Control Effectiveness

Add-on controls are not available for the reduction of SO₂ emissions from the CCCTs. The use of low-sulfur fuels and good combustion practices are technically feasible.

5.6.4 Step 4: Evaluate Most Effective Controls and Document Results

Montour CT will implement low sulfur fuels and good combustion practices to reduce SO₂ emissions from the CCCTs.

5.6.5 Step 5: Select BAT

Based on the above analysis, Montour CT is proposing to implement the most efficient and effective control methods for SO₂. The proposed BAT for the CCCT Project will be the use of low sulfur fuels and good combustion practices.

5.7 H₂SO₄ BACT Assessment for CCCT

The following sections present a review of possible control technologies for H₂SO₄ emissions from the CCCTs. Air pollution control strategies are evaluated using the top-down BACT approach.

5.7.1 Step 1: Identify All Control Technologies for H₂SO₄

Based on a review of the U.S. Environmental Protection Agency's (EPA's) RACT/BACT/LAER Clearinghouse (RBLC) database and knowledge of the industry, Table 5-11 contains a list of the various technologies that were identified as being theoretically available to CCCT. The results of the RBLC searches can be found in Appendix D.

Table 5-11. Potentially Available H₂SO₄ Control Technologies for Natural Gas CCCT

Potentially Available H ₂ SO ₄ Control Technologies
FGD Scrubber
Dry Sorbent Injection
Low Sulfur Fuels
Good Combustion Practices

Similar to the SO₂ BAT analysis, Flue Gas Desulfurization scrubbers and Dry Sorbent Injection are available control technologies for the reduction of H₂SO₄. However, neither of these technologies have ever been installed on a commercial combustion turbine. Therefore, these technologies will not be evaluated further in the BACT analyses.

The following section provides a discussion of each potentially available technology identified above as it might be applied to the new CCCTs at the Facility.

5.7.1.1 Low Sulfur Fuels

Burning low sulfur fuels in a turbine is a method of controlling H₂SO₄ emissions as the low sulfur content limits the potential amount of sulfur compounds that can be produced through combustion.

5.7.1.2 Good Combustion Practices

Operation and maintenance of the equipment in accordance with good air pollution control practices and with good combustion practices results in efficient combustion of fuel, which in turn results in reduced usage of fuel and associated emissions of H₂SO₄.

5.7.2 Step 2: Eliminate Technically Infeasible Options for H₂SO₄ Control

This next section reviews the technical feasibility of the control options for BACT listed in Step 1. The following subsections identify which technologies will be considered in the next step of the analysis due to being technically feasible.

5.7.2.1 Low Sulfur Fuels

As these units will be running on natural gas, an inherently low sulfur fuel, this control method is both feasible and will be implemented.

5.7.2.2 Good Combustion Practices

This is an inherent method of lowering emissions from combustion units and, therefore, will be technically feasible for these units.

5.7.3 Step 3: Rank Remaining Control Technologies by Control Effectiveness

Add-on controls are not available for the reduction of H₂SO₄ emissions from the CCCTs. The use of low-sulfur fuels and good combustion practices are technically feasible.

5.7.4 Step 4: Evaluate Most Effective Controls and Document Results

Montour CT will implement low sulfur fuels and good combustion practices to reduce H₂SO₄ emissions from the CCCTs.

5.7.5 Step 5: Select BACT

Based on the above analysis, Montour CT is proposing to implement the most efficient and effective control methods for H₂SO₄. The proposed BACT for Montour will be the use of low sulfur fuels and good combustion practices.

5.8 Ammonia (NH₃) BAT Assessment for CCCT

The following sections present a review of ammonia emissions and possible control technologies for the CCCTs. Ammonia emissions from the CCCTs are not a direct product of combustion but result from ammonia slip associated with the operation of SCR systems used for NO_x control. While ammonia is not a criteria pollutant under the Clean Air Act and is not listed as a HAP, it is considered an air contaminant under Pennsylvania regulations and can contribute to secondary particulate matter formation. Therefore, a Best Available Technology (BAT) evaluation is provided.

5.8.1 Step 1: Identify All Control Technologies for Ammonia

Based on a review of the U.S. Environmental Protection Agency's (EPA's) RACT/BACT/LAER Clearinghouse (RBLC) database and knowledge of the industry, Table 5-12 contains a list of the various technologies that were identified as being theoretically available to CCCTs. The results of the RBLC searches can be found in Appendix D.

Table 5-12. Potentially Available Ammonia Control Technologies for Natural Gas CCCT

Potentially Available H ₂ SO ₄ Control Technologies
SCR Optimization
Good Combustion Practices

The following section provides a discussion of each potentially available technology identified above as it might be applied to the new CCCTs at the Facility.

5.8.1.1.1 SCR Optimization

Proper SCR design is used to ensure proper mixing of ammonia with the flue gas. Modern SCRs utilize control systems that enhance control and reduce ammonia slip by automatically adjusting operating parameters through computer-based technology.

5.8.1.2 Good Combustion Practices

Operation and maintenance of the equipment in accordance with good air pollution control practices and with good combustion practices results in efficient combustion of fuel, which in turn results in reduced ammonia usage and associated ammonia slip emissions.

5.8.2 Step 2: Eliminate Technically Infeasible Options for SO₂ Control

This next section reviews the technical feasibility of the control options listed in Step 1. The following subsections identify which technologies will be considered in the next step of the analysis due to being technically feasible.

5.8.2.1 SCR Optimization

The SCRs on the CCCTs will be designed for the proposed turbines and will be optimized to limit ammonia slip.

5.8.2.2 Good Combustion Practices

This is an inherent method of lowering emissions from combustion units and, therefore, will be technically feasible for these units.

5.8.3 Step 3: Rank Remaining Control Technologies by Control Effectiveness

Add-on controls are not available for the reduction of ammonia emissions from the CCCTs. The use of SCR optimization and good combustion practices are technically feasible.

5.8.4 Step 4: Evaluate Most Effective Controls and Document Results

Montour CT will implement SCR optimization and good combustion practices to reduce ammonia emissions from the CCCTs.

5.8.5 Step 5: Select BAT

Based on the above analysis, Montour CT is proposing to implement the most efficient and effective control methods for ammonia. The proposed BAT for Montour CT will be the use of SCR optimization and good combustion practices. Ammonia slip from the SCRs will be limited to 5 ppmvd at 15% O₂ during steady-state operation, a limit previously demonstrated by the turbine vendor as continuously achievable while meeting the more stringent 2.0 ppmvd NO_x limit across the range of operating loads during steady-state operation.

5.9 GHG BACT Evaluation for CCCT

This section contains a high-level review of pollutant formation and possible control technologies for the turbines. The vast majority of GHG emissions, on a CO₂e, from combustion turbines are CO₂. Emissions of CH₄ from turbines are typically extremely low.⁴⁶ N₂O emissions in the turbine exhaust are generally less than 1 ppm during startup, potentially rising to several ppm during transient operation, which is insignificant compared to the CO₂ emissions from the turbine, even on a CO₂e basis. Therefore, given that CO₂e emissions from the turbine are made up of almost entirely CO₂, Montour CT is presenting a GHG BACT analysis for CO₂ only.

CO₂ production from combustion occurs by a reaction between carbon and oxygen in the air and proceeds stoichiometrically (for every 12 pounds of carbon burned, 44 pounds of CO₂ is emitted).⁴⁷ CH₄ can be emitted when a fossil fuel is not burned completely in combustion.⁴⁸ The last primary component for calculating GHG emissions (in addition to CO₂ and CH₄) is N₂O. N₂O formation is limited during complete gas combustion, as most oxides of nitrogen will tend to oxidize completely to NO₂, which is not a GHG.⁴⁹

5.9.1 Step 1: Identify Potential Control Technologies for GHG

Montour CT reviewed the large body of information on GHG emissions from combustion turbines compiled from various rulemakings, such as the NSPS Subpart TTTT and TTTTa preambles. The RBLC lists technologies and corresponding emission limits that have been approved by regulatory agencies in permit actions. Montour CT evaluated CCCTs of the same model or similar build and capacity permitted within the last ten years - these results are included in Appendix D, detailing emission levels proposed for similar types of emissions units.

Based on the RBLC search, no add-on control methods for GHGs have been deemed BACT for similar units. Many of the RBLC entries list a variant of good combustion practices, efficient operation, state-of-the-art technology, or low emitting fuels (e.g., pipeline-quality natural gas). All of these good combustion practices variations are evaluated collectively as "Efficient Turbine Operation and Good Combustion, Operating, and Maintenance Practices".

Error! Reference source not found. 5-13 lists potential CO₂ control strategies that were considered as part of this BACT analysis.

⁴⁶ *White Paper: Available and Emerging Technologies for Reducing Greenhouse Gas Emissions from Combustion Turbine Electric Generating Units, April 21, 2022.* Prepared by U.S. EPA. [Draft White Paper: Available and Emerging Technologies for Reducing Greenhouse Gas Emissions From Combustion Turbine Electric Generating Units](#)

⁴⁷ *NC Greenhouse Gas (GHG) Inventory Instructions for Voluntary Reporting, November 2009.* Prepared by the North Carolina Division of Air Quality. https://files.nc.gov/ncdeq/Air%20Quality/inventory/forms/GHG_Emission_Inventory_Instructions_Nov2009_Voluntary.pdf

⁴⁸ AP-42, Chapter 1, Section 4, *Natural Gas Combustion, July 1998.*

⁴⁹ *NC Greenhouse Gas (GHG) Inventory Instructions for Voluntary Reporting, November 2009.* Prepared by the North Carolina Division of Air Quality. https://files.nc.gov/ncdeq/Air%20Quality/inventory/forms/GHG_Emission_Inventory_Instructions_Nov2009_Voluntary.pdf

Table 5-13. Potentially Available GHG Control Technologies for Natural Gas CCCT

Potentially Available GHG Control Technologies
Carbon Capture and Sequestration/Storage
Efficient Turbine Operation and Good Combustion, Operating, and Maintenance Practices

These control technologies are discussed in the following sections.

5.9.1.1 Carbon Capture and Sequestration (CCS)/Storage

CCS involves (1) “capturing” and separating the CO₂ from the exhaust of the emission source; (2) transferring the CO₂ to an appropriate injection site; and (3) sequestering/storing the CO₂ at a suitable site.

The first phase in CCS is to separate and capture the CO₂ gas from the exhaust stream, and then to compress the CO₂ to a supercritical condition.⁵⁰ Since most storage locations for CO₂ are greater than 800 meters deep, where the natural temperatures and pressures are greater than the critical point for CO₂, to inject CO₂ to those depths requires pressurizing the captured CO₂ to a supercritical state.

CO₂ capture can be performed via four main methods: absorption, adsorption, membranes, and cryogenic separation. The choice of the precise process varies with the properties of the exhaust stream. CO₂ separation has been well demonstrated in the oil and gas industries, but the characteristics of those streams are very different from a combustion turbine system exhaust. Most combustion tests and projects have been on exhaust streams from coal combustion, which has more highly concentrated CO₂ than exhaust from natural gas combustion, or on natural gas combined cycle systems.

Once separated, CO₂ must be compressed to supercritical conditions for transport and storage. The CO₂ could be compressed to supercritical either before or after transport. The technology needed to compress CO₂ to supercritical conditions is available; however, specialized technologies require high operating energy requirements. It is important to understand that there are technical challenges with compressing the expected volume of CO₂ generated from the CT. To complete this step, Montour CT would be required to co-locate a new chemical manufacturing facility.

For phase two, CO₂ would be transported to a repository. Transport options could include pipeline or truck. Specialized designs may be required for CO₂ pipelines, particularly if supercritical CO₂ is being transported. Transport of CO₂ by pipeline is a demonstrated technology, but currently most CO₂ pipelines are in rural areas. Obtaining right-of-way in developed areas is difficult.

Various CO₂ storage methods have been proposed, though only geologic storage is achievable currently. Geologic storage involves injecting CO₂ into deep subsurface formations for permanent storage. Typical storage locations would be deep saline aquifers as well as depleted or un-mineable coal seams. Captured CO₂ could also potentially be used for enhanced oil recovery via injection into oil fields.

⁵⁰ Supercritical means that the CO₂ has properties of both a liquid and a gas. Supercritical CO₂ is dense like a liquid but has a viscosity like a gas. For additional details see <https://www.netl.doe.gov/coal/carbon-storage/faqs/carbon-storage-faqs>

5.9.1.2 *Efficient Turbine Operation and Good Combustion, Operating, and Maintenance Practices*

As the baseline of most analyses, pollutant formation can be most cost-effectively minimized by efficient turbine design and good combustion, operating, and maintenance practices.

Within combustion units, operators can control the localized peak combustion temperature and combustion stoichiometry to achieve efficient fuel combustion. Outside of the unit, energy loss can be minimized by providing sufficient insulation to the combustion units and associated duct work.

For the purposes of this GHG control technology assessment, it is important to note that good operating practices include periodic maintenance by abiding by an O&M plan. Maintaining the combustion units to the designed combustion efficiency and operating parameters is important for energy efficiency related requirements and efficient operation.

5.9.2 **Step 2: Elimination of Technically Infeasible Control Options**

5.9.2.1 *Carbon Capture, Transport, and Storage*

CCS involves cooling, separation and capture of CO₂ from the flue gas prior to the flue gas being emitted from the stack, compression of the captured CO₂, transportation of the compressed CO₂ via pipeline, and finally injection and long-term geologic storage of the captured CO₂. For CCS to be technically feasible, all three components (carbon capture and compression, transport, and storage) must be technically feasible.

Carbon Capture

In the Interagency Task Force report on CCS technologies, a number of pre- and post-combustion CCS projects are discussed in detail; however, many of these projects are in formative stages of development and are predominantly power plant demonstration projects (and mainly slip stream projects).⁵¹ Currently, only two options appear to be feasible for capture of CO₂ from the flue gas from the turbine system: Post-Combustion Solvent Capture and Stripping and Post-Combustion Membranes. In one 2009 M.I.T. study conducted for the Clean Air Task Force, it was noted that "To date, all commercial post-combustion CO₂ capture plants use chemical absorption processes with monoethanolamine (MEA)-based solvents."⁵²

A review of the U.S. Department of Energy's (DOE) National Energy Technology Laboratory's (NETL) research and development awards related to post-combustion capture of CO₂ indicates that moving from pilot scale tests at coal-fired power plants to large-scale commercial operations remains a focus; however, the existence of several Front End Engineering Design (FEED) studies indicates that commercial implementation is beginning to move forward.⁵³ For example, a FEED study is underway for a commercial-scale carbon capture facility retrofitted at the Delta Energy Center in Pittsburg, CA, capable of capturing 2.4MM tons of CO₂ per year.⁵⁴

⁵¹ *Report of the Interagency Task Force on Carbon Capture and Storage*, August 2010, Section III, pages. 27-52.
https://www.energy.gov/sites/prod/files/2013/04/f0/CCSTaskForceReport2010_0.pdf

⁵² Herzog, Meldon, Hatton, *Advanced Post-Combustion CO₂ Capture*, April 2009, page 7.
https://sequestration.mit.edu/pdf/Advanced_Post_Combustion_CO2_Capture.pdf

⁵³ Website reviewed June 2024: <https://netl.doe.gov/node/2476?list=Post-Combustion%20Capture>

⁵⁴ *Front-End Engineering Design for a CO₂ Capture System at Calpine's Delta Energy Center*, U.S. Department of Energy, National Energy Technology Laboratory, Project Review Meeting Presentation for Project Number FE0032149, start date February 1, 2022.

Another pilot-scale study is underway for a 1.7 MM ton/yr CO₂ capture project at the Louisville Gas and Electric Kentucky Utilities Cane Run #7.⁵⁵ That project is planned to study methods for collecting CO₂ from the flue gas stream; however, there are no plans to "transport" in the traditional pipeline sense. The plan is to see if some of the captured CO₂ can be made commercial grade and potentially sold to interested parties. If none are available, the slip stream would be re-released.

Although FEED studies indicate heightened interest in exploring potential implementation opportunities for CCS, Montour CT is aware of only one successful CCS deployment on a CCCT facility. The Bellingham Energy Center captured CO₂ from a slipstream (i.e., a portion of the turbine exhaust stream) for use in the food industry and operated from 1991 to 2005.⁵⁶ Additionally, a planned 2,000 MW NG combined cycle power plant with CCS is expected to come online towards the end of the 2020s, but construction is not expected to start for several years at least.⁵⁷

Presuming carbon capture is feasible, prior to sending the CO₂ stream to the appropriate storage site, it is necessary to compress the CO₂ from near atmospheric pressure to pipeline pressure (around 2,000 psia). The compression of the CO₂ would require a large auxiliary power load, resulting in additional fuel (and CO₂ emissions) to generate the same amount of power.⁵⁸ The auxiliary power load could be handled by installation of a separate system to solely support CO₂ compression, or alternatively be supported by reducing the available energy for sale, relying on the energy generating systems to instead meet the power needs of the compression system. This is often referred to as an "energy penalty" for operation of the CO₂ compression system, and in effect can reduce the net CO₂ reduction of the CCS system.

Carbon Transport

The next step in CCS is the transport of the captured and compressed CO₂ to a suitable location for storage. This would typically be via pipeline. Pipeline transport is an available and demonstrated, although costly, technology. Short CO₂ pipelines have been constructed from power plants to proposed injection wells. However, these pipelines are dedicated use for the power plants and are unavailable for other industrial sites.

Since there are no other CO₂ pipelines in the area, as shown in Figure 5-1, Montour CT would need to construct a CO₂ pipeline to a storage location if it were to pursue carbon sequestration as a CO₂ control option.⁵⁹ While it may be technically feasible to construct a CO₂ pipeline, considerations regarding the land use and availability need to be made. For the purposes of this analysis, it is conservatively assumed that a shortest distance pipeline can be built from a potential sequestration site to a potential carbon storage

⁵⁵ *CO₂ Capture at Louisville Gas & Electric Cane Run Natural Gas Combined Cycle Power Plant*, U.S. Department of Energy, National Energy Technology Laboratory, Project Review Meeting Presentation for Project Number FE0032223, start date December 22, 2022. https://netl.doe.gov/sites/default/files/netl-file/24CM/24CM_PSCC_5_Berger.pdf

⁵⁶ *Greenhouse Gas Mitigation Measures: Carbon Capture and Storage for Combustion Turbines Technical Support Document*, U.S. Environmental Protection Agency, Office of Air and Radiation, May 23, 2023. (pp. 23)

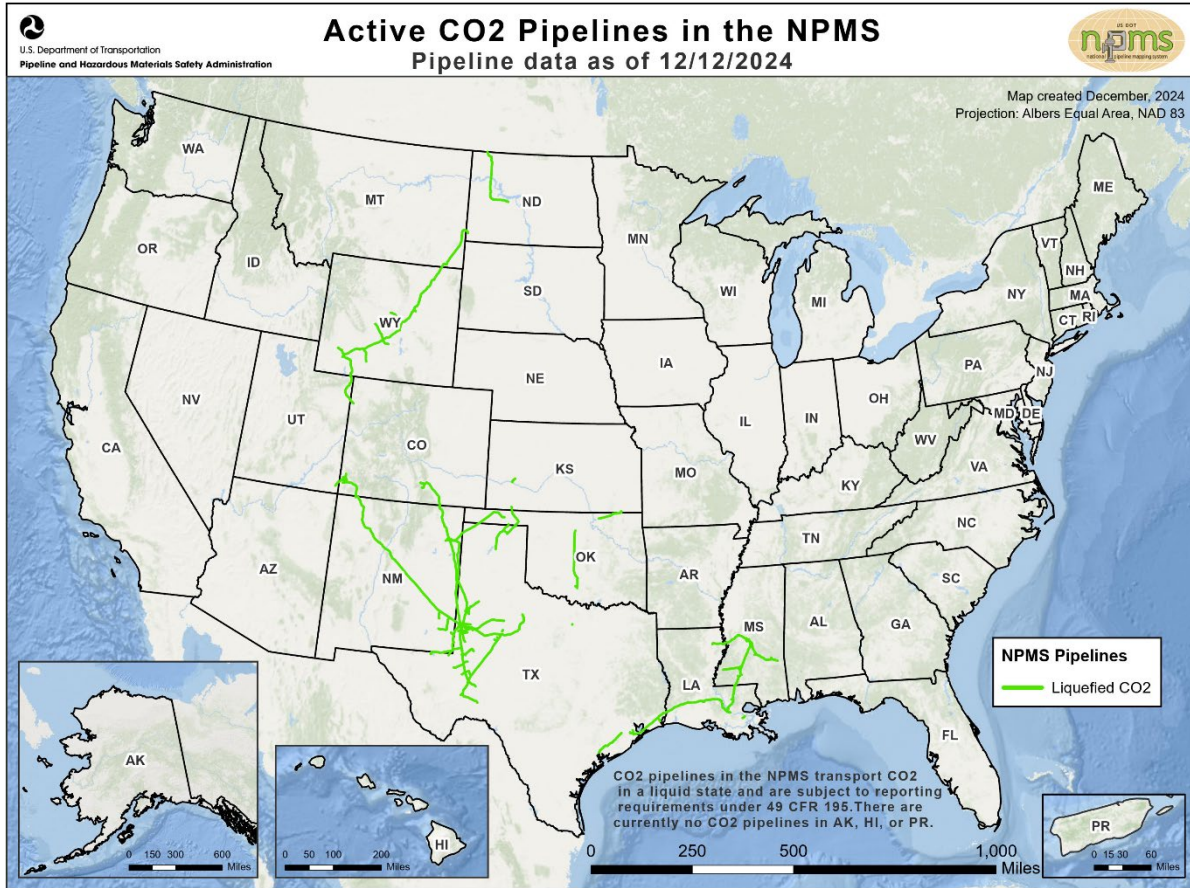
⁵⁷ *Company Responds as PSC green lights siting for future plant in Doddridge County*, West Virginia Metro News, May 5, 2024. <https://wvmetronews.com/2024/05/05/psc-green-lights-siting-certificate-for-cpvs-future-plant-in-doddridge-county/>

⁵⁸ *Report of the Interagency Task Force on Carbon Capture and Storage*, August 2010, page 29. https://www.energy.gov/sites/prod/files/2013/04/f0/CCSTaskForceReport2010_0.pdf

⁵⁹ *Active CO₂ Pipelines in the NPMS*, U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration National Pipeline Mapping System, March 11, 2024. https://www.npms.phmsa.dot.gov/Documents/NPMS_CO2_Pipelines_Map.pdf

location. Realistically, a longer pipeline would be required to address land use and right-of-way considerations.

Figure 5-1. NPMS Active CO₂ Pipelines



Carbon Storage

Capture of the CO₂ stream and transport are not sufficient control technologies by themselves but require the additional step of permanent storage. After separation and transport, storage could involve sequestering the CO₂ through various means such as enhanced oil recovery, injection into saline aquifers, and sequestration in un-minable coal seams, each of which are discussed as follows:

- ▶ **Enhanced Oil Recovery (EOR):** EOR involves injecting CO₂ into a depleted oil field underground, which increases the reservoir pressure, dissolves the CO₂ in the crude oil (thus reducing its viscosity) and enables the oil to flow more freely through the formation with the decreased viscosity and increased pressure. A portion of the injected CO₂ would flow to the surface with the oil and be captured, separated, and then re-injected. At the end of EOR, the CO₂ would be stored in the depleted oil field.
- ▶ **Saline Aquifers:** Deep saline aquifers have the potential to store post-capture CO₂ deep underground below impermeable cap rock.
- ▶ **Un-Mineable Coal Seams:** Additional storage is possible by injecting the CO₂ into un-mineable coal seams. This has been used successfully to recover coal bed methane. Recovering methane is enhanced by injecting CO₂ or nitrogen into the coal bed, which adsorbs onto the coal surface thereby releasing methane.

There are additional methods of sequestration such as direct ocean injection of CO₂ and algae capture and sequestration (and subsequent conversion to fuel); however, these methods are not as widely documented in the literature for industrial scale applications. As such, while capture-only technologies may be technologically available at a small-scale, the limiting factor is the availability of a mechanism for Montour CT to permanently store the captured CO₂.

NETL's CCS Database identifies several potential storage formations across Pennsylvania⁶⁰, though no test wells have been drilled near north-central PA. In contrast, databases report that western and northern Pennsylvania contain deep saline formations (e.g. Knox, Lockport, Oriskany) that could theoretically store hundreds of millions of tons of CO₂.

Pennsylvania has not yet received primacy from EPA to administer permits through a UIC program for Class VI wells designated for long-term geologic sequestration. However, under Pennsylvania's newly enacted Carbon Capture and Sequestration Act of 2024, PADEP is authorized to seek Class VI primacy and is actively pursuing EPA grant funding to develop the regulatory framework. Until primacy is granted, commercial-scale CCS injection in PA would require federal permits issued directly by EPA under Class VI UIC regulations.⁶¹

Elimination of CCS as Technically Feasible

Montour CT has concluded that CCS technology is not technically feasible at this time, based on the following key considerations:

- ▶ Solvent-based carbon capture systems have not been demonstrated for a large CCCT;
- ▶ There are no existing or planned CO₂ pipelines within a reasonable distance from the proposed project; and
- ▶ There are no existing or planned commercially available sequestration sites within a reasonable distance from the proposed project.

5.9.2.2 Efficient Turbine Operation and Good Combustion, Operating, and Maintenance Practices

Efficient turbine operation coupled with good combustion, operating, and maintenance practices are a potential control option for optimizing the fuel efficiency of the combustion turbines. Combustion turbines typically operate in a lean pre-mix mode to ensure an effective staging of air/fuel ratios in the turbine to maximize fuel efficiency and minimize incomplete combustion. Furthermore, the turbine systems are sufficiently automated to ensure optimal fuel combustion and efficient operation leaving virtually no need for operator tuning of these aspects of operation.

Another option for efficiently generating electricity is to deploy an aeroderivative combustion turbine in place of a heavy-duty frame-class combustion turbine. Aeroderivative units offer improved efficiency and lower maintenance costs. However, as discussed previously, many of the historical disadvantages of frame-class turbines have been improved in recent years, and the much higher single-unit generating capacity offered by frame-class turbines is necessary to meet the electricity demand and make the proposed project economically feasible. Mandating the use of multiple smaller aeroderivative turbines in place of the proposed frame-class turbine would require a complete redesign of the proposed facility and would require Montour

⁶⁰ Carbon Capture and Storage Database maintained by the NETL, accessed July 2021 at <https://www.netl.doe.gov/coal/carbon-storage/worldwide-ccs-database>

⁶¹ <https://www.epa.gov/uic/primary-enforcement-authority-underground-injection-control-program-0>

CT to reexamine the goals, objectives, and purpose of the facility. Consequently, the use of aeroderivative turbines is not considered as a component of BACT.

Therefore, efficient turbine operation coupled with good combustion, operating, and maintenance practices is evaluated further for CO₂ BACT purposes.

5.9.3 Step 3: Rank Remaining Control Technologies

Efficient turbine operation and good combustion, operating, and maintenance practices are the only remaining control methods. Reduction efficiency is not applicable for this control method.

5.9.4 Step 4: Evaluation of Most Stringent Control Technologies

As efficient turbine operation and good combustion, operating, and maintenance practices are the only remaining control method, no ranking of control methods is required.

5.9.5 Step 5: Selection of BACT

As summarized in detail in Section 4.2.5 of this application, the proposed CCCTs will be subject to Subpart TTTTa. The NSPS includes CO₂ emission limits for combustion turbines based on the annual capacity factor of the turbines, where capacity factor in this case means net electric sales as a percentage of potential electric output. The CO₂ emission limits are as follows:

- ▶ Base load CT:
 - Phase 1 (prior to January 2032): 800 to 1,120 lb CO₂/MWh-g energy output,⁶² based on combined cycle operation
 - Phase 2 (after December 2031): 100 to 150 lb CO₂/MWh-g energy output, as determined by 40 CFR §63.5525a, based on CCS
- ▶ Intermediate load CT:
 - 1,170 - 1560 lb CO₂/MWh-g energy output, as determined by 40 CFR §63.5525a, based on highly efficient simple-cycle generation

On June 17, 2025, EPA issued a proposal to repeal all GHG emission standards for fossil fuel power plants including NSPS Subpart TTTTa.

5.9.5.1 Summary of RBLC Review

BACT determinations for similar combined cycle generating units denote energy efficiency, good design and good combustion practices as BACT. Post-combustion capture and sequestration of CO₂ is not considered technically feasible. BACT limits for turbine units can be found expressed in terms of lb/MMBtu (i.e., the basis of the NSPS Subparts TTTTa CO₂ emission limit), lb CO₂/MWh-n, lb CO₂/MWh-g, Btu/kWh, lb/hr, or tons, typically with a 12-month rolling averaging period. The following RBLC search results include limits that are lower than the proposed BACT limit of 815 and 925 lb/MWh-g with and without duct burner firing, respectively. Although some limits in the table below are lower than the proposed limits, there are several other recently permitted CCCT units with limits that are equivalent to or greater than the proposed BACT limits.

⁶² In accordance with 40 CFR 60.5520a(c), the emission limits should be based on gross energy output unless the owner or operator of a stationary combustion turbine petitions the Administrator in writing to comply with the alternate applicable net energy output standard. If the Administrator grants the petition, beginning on the date the Administrator grants the petition, the affected EGU must comply with the applicable net energy output-based standard.

Table 5-14. CO₂ RBLC Entries for Proposed NG-Fired CCCT

RBLC ID	Facility	Permit Date	Permitted CO₂ Limit (w/o DB)	Permitted CO₂ Limit (w/ DB)	Units	Averaging Period
FL-0371	SHADY HILLS ENERGY CENTER, LLC	6/7/2021	875	1,000	lb/MWh	12-month rolling average
FL-0367	SHADY HILLS ENERGY CENTER, LLC	7/27/2018	875	1,000	lb/MWh	12-month rolling average
TX-0791	ROCKWOOD ENERGY CENTER, LLC	3/18/2016	901	-	lb/MWh	Corrected to ISO conditions
OH-0377	HARRISON POWER	4/19/2018	1,000	1,012.4	lb/MWh	Not indicated
FL-0363	FLORIDA POWER AND LIGHT COMPANY	12/4/2017	850	1,210	lb/MWh	12-month rolling average
OH-0375	LONG RIDGE ENERGY GENERATION LLC - HANNIBAL POWER	11/7/2017	775	-	lb/MWh	Not indicated
OH-0374	GUERNSEY POWER STATION LLC	10/23/2017	846	1,000	lb/MWh	Not indicated
TX-0791	ROCKWOOD ENERGY CENTER, LLC	3/18/2016	865	-	lb/MWh	Not indicated
VA-0328	NOVI ENERGY	4/26/2018	883	-	lb/MWh	12-month rolling average
IN-0365	MAPLE CREEK ENERGY LLC	6/19/2023	726	-	lb/MWh-g	Corrected to ISO conditions
IL-0133	LINCOLN LAND ENERGY CENTER (aka EMBERCLEAR)	7/29/2022	850	-	lb/MWh-g	12-month rolling average
WV-0033	MOUNTAIN STATE CLEAN ENERGY, LLC	1/5/2022	852	1,000	lb/MWh-g	12-month rolling average
WV-0033	MOUNTAIN STATE CLEAN ENERGY, LLC	1/5/2022	852	1,000	lb/MWh-g	12-month rolling average

5.9.5.2 CO₂ BACT Limit Selection

Montour CT is proposing BACT for CO₂ for the CCCTs as efficient turbine operation and good combustion, operating, and maintenance practices to achieve a BACT emission limit of 829 lb/MW-g, demonstrated on a 12-month rolling basis with DB Firing and 911 lb/MW-g, demonstrated on a 12-month rolling basis without DB Firing. Vendor specifications indicate the limit is achievable under steady-state operation. Compliance will be demonstrated through the use of CEMS and Part 75 procedures.

6. ALTERNATIVE SITES ANALYSIS

In accordance with 25 Pa. Code §127.205(5), applications for new or modified sources must include an evaluation of alternative locations, facility sizes, production methods, and emission control strategies. For this project, an analysis of alternative sites was considered, though ultimately no alternative sites were selected due to the results of the analysis for the reasons outlined in the sections below.

6.1 Alternative Site Location

The intent of the project is to expand generation capacity in conjunction with existing assets at Montour SES. The project is being developed in response to the anticipated electric load growth caused by a variety of factors, including onshoring of manufacturing, new data center construction, and electrification. Any potential project is independent of the CCCT Project. The existing site offers critical infrastructure advantages, including access to natural gas pipeline, high-voltage transmission lines and a nearby, reliable water supply for cooling. The property is already zoned for power generation, making it significantly more suitable than a greenfield or a different brownfield site not previously used for power generation, either of which could require extensive transmission development, land/wetland disturbances, and other environmental impacts. Additionally, the Montour CT location lies within a region where natural gas supply and electricity demand overlap, allowing the facility to utilize locally available gas without major infrastructure expansion while serving PJM Interconnection market needs.

Montour County ambient air quality monitors indicate attainment with all NAAQS. The only non-attainment area (ozone) for the area is due to Pennsylvania's location in the OTR. Given the need for additional power generation in the region, locating the project outside the OTR is not considered feasible. In addition, the facility is not located in an Environmental Justice Area (per PADEP's PennEnviroScreen Tool). The nearest Environmental Justice area is greater than 9 miles away, ensuring the project will not adversely impact any overburdened communities.

The CCCT project brings economic benefits to the surrounding community. Construction activities will generate local employment and spending. Montour CT's operations would be collocated at a site that is currently engaged in power generation. Supplying electricity to the local market increases the potential for other economic developments while minimizing the impact to residential users.

6.2 Alternative Fuels

Alternative production technologies or fuels were considered but determined impractical. Substituting oil or coal for natural gas would substantially increase emissions of regulated pollutants compared to the proposed design. Renewable options such as wind or solar would reduce emissions but cannot provide continuous baseload capacity without large-scale energy storage and would require far more land area to match the proposed output.

6.3 Alternative Technology

Various turbine sizes were reviewed for the combined-cycle configuration. The selected turbine size provides the capacity to better meet the projected PJM market requirements with timely deployment. Simple-cycle turbines were also considered but rejected due to lower thermal efficiency compared to CCCTs units.

Emission control alternatives are addressed in Section 5 under LAER, BACT, and BAT. The project will incorporate DLN burners, SCR, and oxidation catalyst technology, along with following good combustion practices in operation of the CCCT. These controls significantly reduce the emissions of non-attainment pollutants (NO_x and VOC). No technically feasible alternatives were identified that would achieve superior emission reductions.

APPENDIX A. SITE MAP AND PROCESS FLOW DIAGRAM

Figure A.1. Map of Property



Figure A.2.
Proposed Project Site Map

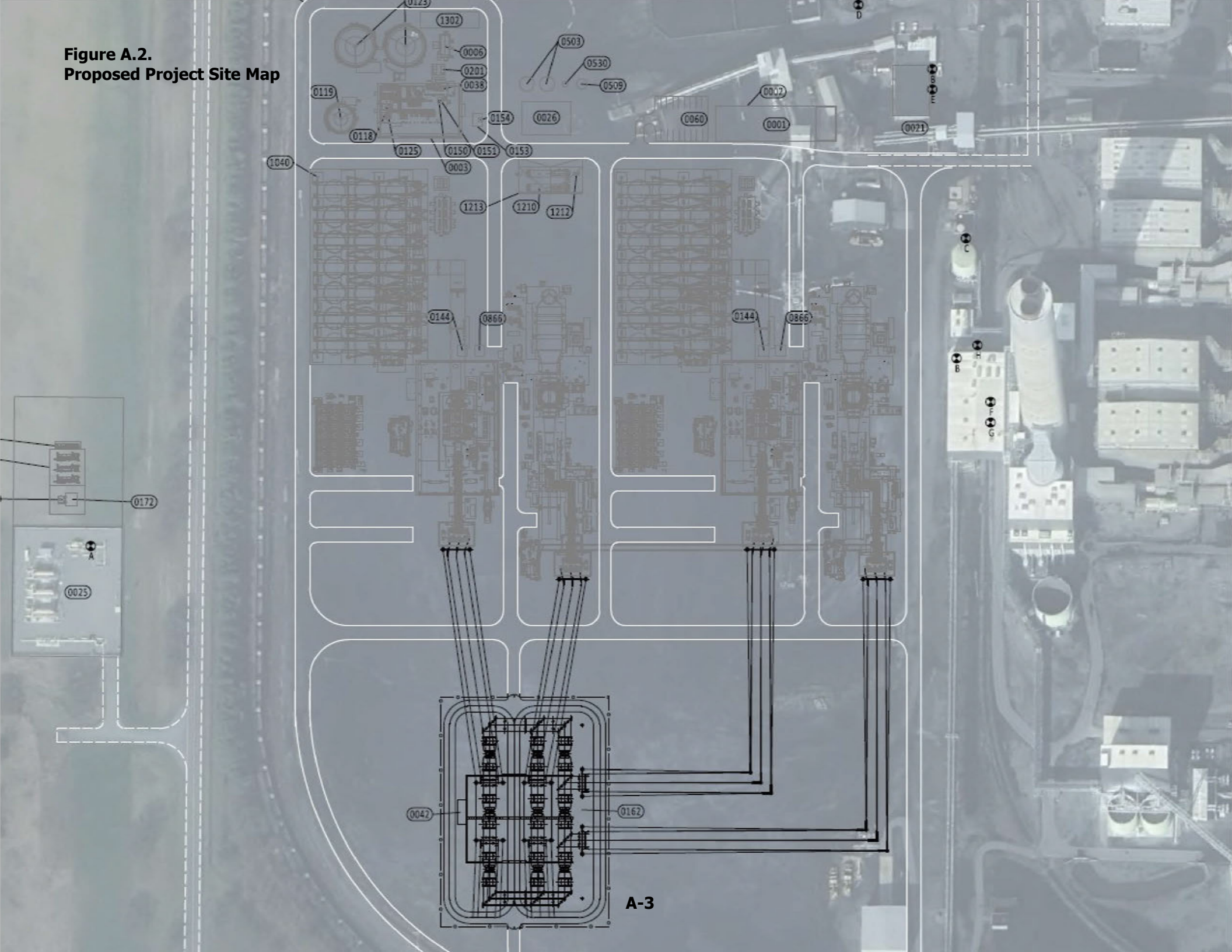
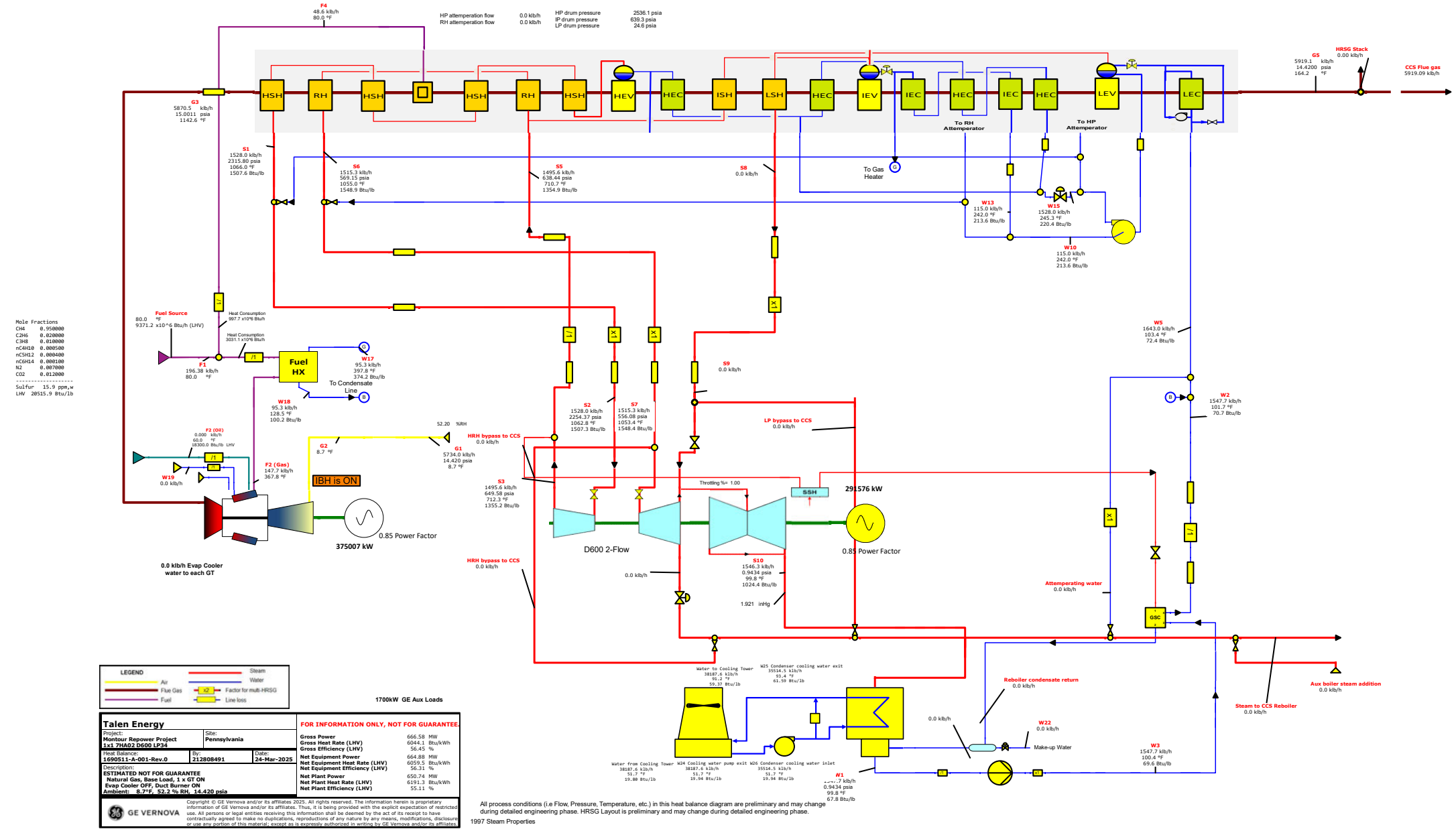


Figure A.3. Proposed Project PFDe Map



APPENDIX B. EMISSION CALCULATIONS

Talen Energy, Montour CT

CCCT Project

Summary of the Potential to Emit (PTE) for each individual GE CCCT

The table below summarizes the PTE from each proposed unit operation. The worst-case emissions are based on three scenarios:

-Scenario 1 includes 8,760 hours at "normal" or steady state operations of GT and DB.

-Scenario 2 includes 8,760 hours at "normal" or steady state operations of GT only.

-Scenario 3 includes 5,625 hours of SS operations and the worst-case emissions from SUSL events.

Table 1. Individual GE CCCT Unit PTE Summary

Pollutant	Max PTE	PTE Scenario 1 (GT + DB Steady State 8,760 Hours)	PTE Scenario 2 (GT Steady State 8,760 Hours)	PTE Scenario 3 (Maximum SUSL and Steady State 5625 hr/yr)	Worst-Case Scenario
	(tpy)	(tpy)	(tpy)	(tpy)	
NOX	145	145	113	111	Scenario 1
CO	112	88	69	112	Scenario 3
VOC	40	38	20	40	Scenario 3
PM	106	106	83	69	Scenario 1
PM10	106	106	83	69	Scenario 1
PM2.5	106	106	83	69	Scenario 1
SO2	28	28	22	19	Scenario 1
H2SO4	20	20	15	13	Scenario 1
NH3	134	134	103	90	Scenario 1
CO2e	2349676	2349676	1833358	1562728	Scenario 1
Lead	2.12E-03	2.12E-03	N/A	1.41E-03	Scenario 1
Total HAP	10.60	10.60	5.80	7.05	Scenario 1

Talen Energy, Montour CT
 CCCT Project
 Prevention of Significant Deterioration (PSD) Calculation Summary

Project Emission Increase (Step 1)

Table 2. PSD Project Emission Increase (Step 1) - Project Emissions Increases by Unit

Unit Description	Basis ¹	PM Emissions	PM ₁₀ Emissions	PM _{2.5} Emissions	SO ₂ Emissions	CO Emissions	NO ₂ Emissions	Pb Emissions	CO ₂ e Emissions	H ₂ SO ₄ Emissions	
New Sources:	Combined Cycle Turbine 1	PTE	106	106	106	28	112	145	2.12E-03	2349676	20
	Combined Cycle Turbine 2	PTE	106	106	106	28	112	145	2.12E-03	2349676	20
Overall Project Project Emissions Increase (PEI)			211	211	211	57	225	291	4.24E-03	4699352	40

1. Project emissions increases for new sources are equal to their PTE.

Table 3. PSD Project Emission Increase (Step 1) - PEI Comparison to Significant Project Thresholds

Pollutant	Project Emissions Increase (PEI)	Significant Emission	Significant
PM	211	25	Yes
PM ₁₀	211	15	Yes
PM _{2.5}	211	10	Yes
SO ₂	57	40	Yes
CO	225	100	Yes
NO ₂	291	40	Yes
Pb	4.24E-03	0.6	No
CO ₂ e	4,699,352	75,000	Yes
H ₂ SO ₄	40	7	Yes

1. Significant project thresholds for criteria pollutants per 40 CFR 52.21(b)(23). Significant project threshold for CO₂e per 40 CFR 52.21(b)(49)(iii).

Contemporaneous Increases & Decreases (Step 2)

Table 4. PSD Contemporaneous Increases & Decreases (Step 2) - Contemporaneous Period

Construction Commences	Jan-27
Major NSR Start of Contemporaneous Period ¹	Jan-22

1. Per 40 CFR 52.21(b)(3)(ii), the contemporaneous period is the date five years before construction on the particular change commences.

Table 5. PSD Contemporaneous Increases & Decreases (Step 2) - Emissions Increases and Decreases from Contemporaneous Period Projects

Unit Description	Date of Project Start	PM (tpy)	PM ₁₀ (tpy)	PM _{2.5} (tpy)	SO ₂ (tpy)	CO (tpy)	NO ₂ (tpy)	Pb (tpy)	CO ₂ e (tpy)	H ₂ SO ₄ (tpy)
<u>New/Modified Units:</u>										
Gas Project - PA 47-00001G,H, I ¹	May-23	1.11	1.11	1.11	6.44	46.74	2.31	0.12	36013.24	0.00
Coal Cessation ²	Sep-24				-2043					
Estimated Contemporaneous Increases/Decreases		1.11	1.11	1.11	-2,036.56	46.74	2.31	0.12	36,013.24	0.00

1. From Table C-12, of the August 19, 2019, Plan Approval Application for the Fuel Gas Heaters and Natural Gas Pipeline Project.

2. On September 5, 2024, Montour LLC notified PADEP of the permanent cessation of coal in Units 1 and 2. On September 24, 2025, Montour submitted Revised Emission Reduction Credit Registry Application for the Cessation of Coal in Units 1 and 2. ERCs were only applied for SO₂.

Table 6. PSD Net Emission Increase (Step 2) - Net Emission Increases and Comparison to Significant Emission Rates

Pollutant	Project Emissions Increase (PEI) (tpy)	Contemporaneous Increases (tpy)	Net Emission Increase (NEI) ² (tpy)	Significant Emission Rate (tpy) ¹	Significant Project (Yes/No)?
PM	211	1.11	212	25	Yes
PM ₁₀	211	1.11	212	15	Yes
PM _{2.5}	211	1.11	212	10	Yes
SO ₂	57	-2,037	-1980	40	No
CO	225	46.7	271	100	Yes
NO ₂	291	2.31	293	40	Yes
Lead	4.24E-03	0.12	0.12	0.6	No
CO ₂ e	4,699,352	36,013	4,735,365	75,000	Yes
H ₂ SO ₄	40	0	40	7	Yes

1. Significant project thresholds per 40 CFR 52.21(b)(23).

2. Net Emission Increase (NEI) is the sum of the Project Emissions Increase (PEI) and the contemporaneous increases.

Talen Energy, Montour CT
 CCCT Project
 Non-attainment New Source Review (NNSR) Calculation Summary

Project Emission Increase (Step 1)

Table 7. NNSR Project Emission Increase (Step 1) - Project Emissions Increases by Unit

Unit Description		Basis ¹	NO _x Emissions (tpy)	VOC Emissions (tpy)
New Sources:	Combined Cycle Turbine 1	PTE	145	40
	Combined Cycle Turbine 2	PTE	145	40
Overall Project Project Emissions Increase (PEI)			291	80

1. Project emissions increases for new sources are equal to their PTE

Table 8. NNSR Project Emission Increase (Step 1) - PEI Comparison to Significant Project Thresholds

Pollutant	Overall Project PEI (tpy)	Significant Project Emission Rate (tpy) ¹	Major or De Minimis NNSR?
NO _x	291	40	Major
VOC	80	40	Major

1. Significant emissions as defined in 25 PA Code 121.1 for NO_x and VOC.

**Talen Energy, Montour CT
CCCT Project
Non-attainment New Source Review (NNSR) Calculation Summary**

Contemporaneous Increases & Decreases (Step 2)

Table 9. NNSR Contemporaneous Increases & Decreases (Step 2) - Contemporaneous Period

Construction Commences	Jan-27
Major NSR Start of Contemporaneous Period ¹	Jan-22

1. Per 25 Pa Code 127.203a(a)(1)(ii), under major NNSR, an increase or decrease is contemporaneous if it occurred within 5 five years before construction on the particular change commences. Note that 25 Pa Code 127.203a(a)(2) is not applicable since the project is not a de minimis increase.

Table 10. NNSR Contemporaneous Increases & Decreases (Step 2) - Emissions Increases and Decreases from Contemporaneous Period Projects

Unit Description	Date of Project Permitting Submittal	Date of Project Start	NO _x (tpy)	VOC (tpy)
New/Modified Units:				
Gas Project - PA 47-00001G,H,I ¹	Aug-19	May-23	2.31	39.30
Total Emission Reduction Credits Obtained for PA 47-00001G,H,I			-	-50.96
Net Emission Reduction Credits for PA 47-00001G,H,I ²			-	0.00
Coal Cessation ³		Sep-24	0.00	0.00
Estimated Contemporaneous Increases/Decreases			2.3	0.0

1. From Table C-12, of the August 19, 2019 Plan Approval Application for the Fuel Gas Heaters and Natural Gas Pipeline Project.

2. PA 47-0000G,H,I only required emission credits for VOC. This obtainment reset the contemporaneous VOC tonnage to zero.

3. September 5, 2024 Montour LLC notified PADEP of the permanent cessation of coal in Units 1 and 2. September 24, 2025, Montour submitted Revised Emission Reduction Credit Registry Application for the Cessation of Coal in Units 1 and 2. ERCs were only applied for SO₂.

Table 11. NNSR Net Emission Increase (Step 2) - Net Emission Increases and Comparison to Significant Emission Rates

Pollutant	Project Emissions Increase (PEI) (tpy)	Contemporaneous Increases (tpy)	Net Emission Increase (NEI) ² (tpy)	Significant Net Emission Increase Threshold ¹ (tpy)	NEI > SER (Yes/No)?	Offsets Required ³
NO _x	291	2.3	293	40	Yes	338.0
VOC	80	0.0	80	40	Yes	93.0

1. Significant emissions as defined in 25 PA Code 121.1 for NO_x and VOC.

2. Net Emission Increase (NEI) is the sum of the Project Emissions Increase (PEI) and the contemporaneous increases.

3. Offsets required calculated by multiplying the NEI by the offset ratio of 1.15 per 25 PA Code 127.210 for the transport region.

Talen Energy, Montour CT
 CCCT Project
 Fuel Usage and Spec Information

> The following provides the gas specs and capacity information for the GT/DB, as well as other relevant information used in the emissions estimates. The term "unfired" means without DB, and "fired" means both GT + DB.

Table 12 - Fuel and Unit Specifications

Natural Gas Higher Heating Value (HHV)	1,028	Btu/scf
Natural Gas HHV used for AP-42 1.4 & 3-1	1,020	Btu/scf
Natural Gas HHV used for 40 CFR 98, Subpart C	1,026	Btu/scf
Maximum operating hours/yr used in Permitting	8,760	hr/yr
Steady State operating hours/yr accounting for Startup and Shutdown (SUSD) Events	5625	hr/yr

Table 13 - Fuel Usage and Unit Specifications in "Fired" Mode

Hourly Maximum Operating Case		6	
GT	Maximum Hourly Heat Input Capacity Used for Emission Calculations	3,515	MMBtu/hr
	Maximum Hourly Fuel Consumption	3.419	MMscf/hr
	Maximum Annual Fuel Consumption	29,952	MMscf/yr
DB	Maximum Hourly Heat Input Capacity of DB only	994.0	MMBtu/hr
	Maximum Hourly Fuel Consumption	0.967	MMscf/hr
	Maximum Annual Fuel Consumption	8,470	MMscf/yr
Combined	Maximum Hourly Heat Input Capacity Used for Emission Calculations	4,509	MMBtu/hr
	Maximum Hourly Fuel Consumption	4.386	MMscf/hr
	Maximum Annual Fuel Consumption	38,422	MMscf/yr

Table 14 - Fuel Usage and Unit Specifications in "Unfired" Mode

Hourly Maximum Operating Case		5	
GT	Maximum Hourly Heat Input Capacity Used for Emission Calculations	3,518	MMBtu/hr
	Maximum Hourly Fuel Consumption	3.422	MMscf/hr
	Maximum Annual Fuel Consumption	29,979	MMscf/yr

Talen Energy, Montour CT

CCCT Project

Scenario 1 Derivation and Documentation of Steady-State Operation Emission Factors for Natural Gas Firing in GT & DB

NSR-Regulated Pollutants

- > Controlled emission factors (EFs) for all NSR-regulated pollutants have been calculated for the worst-case annual operating profile while the GT is operating and duct burners are fired as provided by the vendor, labeled herein as "fired". Any deviations from the vendor estimates are noted below. Lead emissions are discussed in the HAP subsection below.

NO_x	Hourly Max.	Units
Concentration in stack exhaust after SCR	2.0	ppmvd @ 15% O ₂
Controlled Emission Factor	7.569	lb/MMscf
Controlled Emission Rate	33.2	lb/hr

CO	Hourly Max.	Units
Concentration in stack exhaust after oxidation catalyst	2.0	ppmvd @ 15% O ₂
Controlled Emission Factor	4.605	lb/MMscf
Controlled Emission Rate	20.2	lb/hr

VOC	Hourly Max.	Units
Concentration in Stack Exhaust (as methane)	1.5	ppmvd @ 15% O ₂
Controlled Emission Factor	1.984	lb/MMscf
Controlled Emission Rate	8.7	lb/hr

SO₂	Hourly Max.	Units
Emission Rate	6.50	lb/hr
Emission Factor	1.482	lb/MMscf
Emission Factor	0.00144	lb/MMBtu

H₂SO₄	Hourly Max.	Units
Emission Rate	4.60	lb/hr
Emission Factor	1.049	lb/MMscf
Emission Factor	0.0010	lb/MMBtu

PM/PM₁₀/PM_{2.5}	Hourly Max.	Units
Emission Rate	24.1	lb/hr
Emission Factor	5.495	lb/MMscf
Emission Factor	0.0054	lb/MMBtu

Greenhouse Gases

- > Emission rates based on vendor specifications which calculated CO₂ based on Part 75, Appendix G, Equation G-4. Emission factors based on maximum hourly fuel combustion from vendor specifications.
- > The global warming multiplying factors for CH₄ and N₂O are those specified in 40 CFR 98 Subpart A. These are used to calculate the overall CO₂e emissions.

CO₂		Hourly Max.	Units
Emission Factor		122,185	lb/MMscf
Emission Rate		535915	lb/hr

CH₄		Hourly Max.	Units
Emission Factor		2.27	lb/MMscf
Emission Rate		9.94	lb/hr

N₂O		Hourly Max.	Units
Emission Factor		0.23	lb/MMscf
Emission Rate		0.99	lb/hr

CO₂e			
Global Warming Potentials of GHGs per amendment to 40 CFR 98, Subpart A (89 FR 31894, published April 25, 2024)			
CO ₂	1		89 FR 42218, May 14, 2024
CH ₄	28		89 FR 42218, May 14, 2024
N ₂ O	265		89 FR 42218, May 14, 2024

		Hourly Max.	Units	
Emission Factor		122,308	lb/MMscf	(CO ₂ EF) + (CH ₄ EF x CH ₄ GWP) + (N ₂ O EF x N ₂ O GWP)
Emission Rate		536456	lb/hr	

Ammonia (from Ammonia Slip in SCR)

NH₃		Hourly Max.	Units
Concentration in stack exhaust		5.00	ppmvd @ 15% O ₂
Molecular Weight of NH ₃		17.03	lb/lbmol
Emission Rate		30.70	lb/hr
Emission Factor		0.0068	lb/MMBtu
Emission Factor		7.00	lb/MMscf

Steady-State Operation GTs with DBs

Table 15 - Steady-State Operation PTE in "Fired" Mode

Regulated Pollutants	Emission Factor (lb/MMscf)		Controlled Emissions	
	Hourly Max	Basis	(lb/hr)	(tpy)
NOx	7.57	Vendor Estimate	33.2	145
CO	4.61	Vendor Estimate	20.2	88
VOC	1.98	Vendor Estimate	8.7	38
PM	5.49	Vendor Estimate	24.1	106
PM10	5.49	Vendor Estimate	24.1	106
PM2.5	5.49	Vendor Estimate	24.1	106
SO2	1.48	Vendor Estimate	6.5	28
H2SO4	1.05	Vendor Estimate	4.6	20
NH3	7.0	Vendor Estimate	30.7	134
CO2	122,185	Vendor Estimate	535,915	2,347,308
CH4	2.27	Vendor Estimate	9.94	44
N2O	0.23	Vendor Estimate	0.99	4.34
CO2e	122,308	40 CFR 98 Subpart A	536,456	2,349,676

Hazardous Air Pollutants for GT

Formaldehyde

	Hourly Max.	Units	
Concentration in stack exhaust	0.091	ppmvd @ 15% O2	Formaldehyde standard congruent with below F-Factor
Molecular weight of HCHO	30.031	lb/lbmol	
F-Factor	8,710	dscf/MMBtu	Natural Gas F-factor from Table 1 of Part 75 Appendix F.
Controlled Emission Rate	0.99	lb/hr	
Controlled Emission Factor	0.000219	lb/MMBtu	Part 75 Equation F-5
Controlled Emission Factor	0.225	lb/MMscf	

Hazardous Air Pollutants for GT

- > Other than for formaldehyde (described above), emission factors for organic and metallic HAP emissions from natural gas-fired turbines published in AP-42, Section 3.1 are used to estimate potential emissions.

Table 16 - Steady-State Operation GT HAP PTE in "Fired" Mode

Pollutant	CAS No.	CT Uncontrolled EF (lb/MMBtu)	CT Uncontrolled EF (lb/MMscf)	Oxidation Catalyst CE ⁴ (%)	CT After Oxidation Catalyst EF (lb/MMBtu)	CT After Oxidation Catalyst EF (lb/MMscf)	Emission Factor Basis	Note(s)	Controlled (lb/hr)	Emissions (tpy)
1,3-Butadiene	106-99-0	4.3E-07	4.39E-04	50%	2.2E-07	2.2E-04	AP-42 3.1, Table 3.1-3	2	7.5E-04	3.28E-03
Acetaldehyde	75-07-0	4.0E-05	4.08E-02	50%	2.0E-05	2.0E-02	AP-42 3.1, Table 3.1-3	1, 2	7.0E-02	3.06E-01
Acrolein	107-02-8	6.4E-06	6.53E-03	50%	3.2E-06	3.3E-03	AP-42 3.1, Table 3.1-3	1	1.1E-02	4.89E-02
Benzene	71-43-2	1.2E-05	1.22E-02	50%	6.0E-06	6.1E-03	AP-42 3.1, Table 3.1-3	1	2.1E-02	9.17E-02
Ethylbenzene	100-41-4	3.2E-05	3.26E-02	50%	1.6E-05	1.6E-02	AP-42 3.1, Table 3.1-3	2	5.6E-02	2.44E-01
Formaldehyde	50-00-0	7.1E-04	7.24E-01	69%	2.2E-04	2.2E-01	Method 19 0.091 ppmvd	3	7.7E-01	3.37
Naphthalene	91-20-3	1.3E-06	1.33E-03	50%	6.5E-07	6.6E-04	AP-42 3.1, Table 3.1-3	2	2.3E-03	9.93E-03
PAH		2.2E-06	2.24E-03	50%	1.1E-06	1.1E-03	AP-42 3.1, Table 3.1-3	2	3.8E-03	1.68E-02
Propylene Oxide	75-56-9	2.9E-05	2.96E-02	50%	1.5E-05	1.5E-02	AP-42 3.1, Table 3.1-3	2	5.1E-02	2.21E-01
Toluene	108-88-3	1.3E-04	1.33E-01	50%	6.5E-05	6.6E-02	AP-42 3.1, Table 3.1-3	2	2.3E-01	9.93E-01
Xylenes	1330-20-7	6.4E-05	6.53E-02	50%	3.2E-05	3.3E-02	AP-42 3.1, Table 3.1-3	2	1.1E-01	4.89E-01

1. Controlled emission factors (Oxidation Catalyst) for Acetaldehyde, Acrolein and Benzene are obtained from U.S. EPA's Emission Factor Documentation for AP-42 Section 3.1 Stationary Gas Turbines.

2. Emission factors for 1,3- Butadiene, Acetaldehyde, Ethylbenzene, Propylene Oxide, Toluene, Xylenes, Naphthalene and PAH are obtained from AP-42 Chapter 3.1, Table 3.1-3 (Stationary Gas Turbines, April, 2000). A control efficiency of 50% was applied to these uncontrolled/controlled emission factors based on expected VOM control efficiency from catalytic oxidation.

3. See EPA requirement above for formaldehyde that sets the CT post-oxidation catalyst EF.

4. The control efficiencies are estimates and should not be construed as guarantees.

Hazardous Air Pollutants for DB

- > Emission factors from DBs are obtained from AP-42, Chapter 1.4, Table 1.4-2, 1.4-3, 1.4-4 (Emission Factors for Natural Gas Fired External Combustion Sources, July, 1998). Polycyclic aromatic hydrocarbons were omitted from the DB emission factor list since they are accounted for with the GT.

Table 17 - Steady-State Operation DB HAP PTE in "Fired" Mode

Pollutant	CAS No.	DB Uncontrolled EF (lb/MMBtu)	DB Uncontrolled EF (lb/MMscf)	Oxidation Catalyst CE ⁵ (%)	DB After Oxidation Catalyst EF (lb/MMBtu)	DB After Oxidation Catalyst EF (lb/MMscf)	Emission Factor Basis	Note(s)	Controlled (lb/hr)	Emissions (tpy)
Benzene	71-43-2	2.1E-06	2.1E-03	50%	1.0E-06	1.1E-03	AP-42 Table 1.4-3	1, 2, 4	1.0E-03	4.45E-03
Dichlorobenzene	25321-22-6	1.2E-06	1.2E-03	50%	5.9E-07	6.0E-04	AP-42 Table 1.4-3	1, 2	5.8E-04	2.54E-03
Formaldehyde	50-00-0	2.2E-04	2.25E-01	-	2.2E-04	2.2E-01	Method 19 0.091 ppmvd	3	2.2E-01	9.52E-01
Naphthalene	91-20-3	6.0E-07	6.1E-04	50%	3.0E-07	3.1E-04	AP-42 Table 1.4-3	1, 2, 4	2.9E-04	1.29E-03
Hexane	110-54-3	1.8E-03	1.8E+00	50%	8.8E-04	9.0E-01	AP-42 Table 1.4-3	1, 2	8.7E-01	3.81E+00
Toluene	108-88-3	3.3E-06	3.4E-03	50%	1.7E-06	1.7E-03	AP-42 Table 1.4-3	1, 2, 4	1.6E-03	7.20E-03
Arsenic	7440-38-2	1.96E-07	2.0E-04	-	2.0E-07	2.0E-04	AP-42 Table 1.4-4	1	1.9E-04	8.47E-04
Beryllium	7440-41-7	1.18E-08	1.2E-05	-	1.2E-08	1.2E-05	AP-42 Table 1.4-4	1	1.2E-05	5.08E-05
Cadmium	7440-43-9	1.08E-06	1.1E-03	-	1.1E-06	1.1E-03	AP-42 Table 1.4-4	1	1.1E-03	4.66E-03
Chromium	7440-47-3	1.37E-06	1.4E-03	-	1.4E-06	1.4E-03	AP-42 Table 1.4-4	1	1.4E-03	5.93E-03
Cobalt	7440-48-4	8.24E-08	8.4E-05	-	8.2E-08	8.4E-05	AP-42 Table 1.4-4	1	8.1E-05	3.56E-04
Lead	7439-92-1	4.90E-07	5.0E-04	-	4.9E-07	5.0E-04	AP-42 Table 1.4-2	1	4.8E-04	2.12E-03
Manganese	7439-96-5	3.73E-07	3.8E-04	-	3.7E-07	3.8E-04	AP-42 Table 1.4-4	1	3.7E-04	1.61E-03
Mercury	7439-97-6	2.55E-07	2.6E-04	-	2.5E-07	2.6E-04	AP-42 Table 1.4-4	1	2.5E-04	1.10E-03
Nickel	7440-02-0	2.06E-06	2.1E-03	-	2.1E-06	2.1E-03	AP-42 Table 1.4-4	1	2.0E-03	8.89E-03
Selenium	7782-49-2	2.35E-08	2.4E-05	-	2.4E-08	2.4E-05	AP-42 Table 1.4-4	1	2.3E-05	1.02E-04

1. Emission factors are obtained from AP-42, Chapter 1.4, Table 1.4-2, 1.4-3, 1.4-4 (Emission Factors for Natural Gas Fired External Combustion Sources, July, 1998).
2. A control efficiency of 50% was applied to these uncontrolled emission factors based on expected VOM control efficiency from catalytic oxidation.
3. See EPA requirement above for formaldehyde that sets the CT post-oxidation catalyst EF.
4. Not used in PTE analysis because CT EF is higher than DB.
5. The control efficiencies are estimates and should not be construed as guarantees.

Hazardous Air Pollutants for GT + DB

> The following derives the combined HAP emission factors when a GT uses duct burners.

Table 18 - Steady-State Operation Total HAP PTE in "Fired" Mode

Pollutant	CAS No.	Controlled Emissions (lb/hr)	Controlled Emissions (tpy)
1,3-Butadiene	106-99-0	7.50E-04	3.28E-03
Acetaldehyde	75-07-0	6.98E-02	3.06E-01
Acrolein	107-02-8	1.12E-02	4.89E-02
Benzene	71-43-2	2.19E-02	9.61E-02
Dichlorobenzene	25321-22-6	5.80E-04	2.54E-03
Ethylbenzene	100-41-4	5.58E-02	2.44E-01
Formaldehyde	50-00-0	9.86E-01	4.32
Naphthalene	91-20-3	2.56E-03	1.12E-02
Hexane	110-54-3	8.70E-01	3.81
PAH		3.84E-03	1.68E-02
Propylene Oxide	75-56-9	5.06E-02	2.21E-01
Toluene	108-88-3	2.28E-01	1.00
Xylenes	1330-20-7	1.12E-01	4.89E-01
Arsenic	7440-38-2	1.93E-04	8.47E-04
Beryllium	7440-41-7	1.16E-05	5.08E-05
Cadmium	7440-43-9	1.06E-03	4.66E-03
Chromium	7440-47-3	1.35E-03	5.93E-03
Cobalt	7440-48-4	8.12E-05	3.56E-04
Lead	7439-92-1	4.83E-04	2.12E-03
Manganese	7439-96-5	3.67E-04	1.61E-03
Mercury	7439-97-6	2.51E-04	1.10E-03
Nickel	7440-02-0	2.03E-03	8.89E-03
Selenium	7782-49-2	2.32E-05	1.02E-04
Total HAP		2.42	10.60

Talen Energy, Montour CT

CCCT Project

Scenario 2 Derivation and Documentation of Steady-State Operation Emission Factors for Natural Gas Firing in GT

NSR-Regulated Pollutants

> Controlled emission factors (EFs) for all NSR-regulated pollutants have been calculated for the worst-case annual operating profile while the GT is operating and duct burners are not fired as provided by the vendor, labeled herein as "unfired". Any deviations from the vendor estimates are noted below. Lead emissions are discussed in the HAP subsection below.

NO_x	Hourly Max.	Units
Concentration in stack exhaust after SCR	2.0	ppmvd @ 15% O ₂
Controlled Emission Factor	7.568	lb/MMscf
Controlled Emission Rate	25.9	lb/hr

CO	Hourly Max.	Units
Concentration in stack exhaust after oxidation catalyst	2.0	ppmvd @ 15% O ₂
Controlled Emission Factor	4.617	lb/MMscf
Controlled Emission Rate	15.8	lb/hr

VOC	Hourly Max.	Units
Concentration in Stack Exhaust (as methane)	1.0	ppmvd @ 15% O ₂
Controlled Emission Factor	1.315	lb/MMscf
Controlled Emission Rate	4.5	lb/hr

SO₂	Hourly Max.	Units
Emission Rate	5.00	lb/hr
Emission Factor	1.461	lb/MMscf
Emission Factor	0.0014	lb/MMBtu

H₂SO₄	Hourly Max.	Units
Emission Rate	3.40	lb/hr
Emission Factor	0.993	lb/MMscf
Emission Factor	0.0010	lb/MMBtu

PM/PM₁₀/PM_{2.5}	Hourly Max.	Units
Emission Rate	19.0	lb/hr
Emission Factor	5.552	lb/MMscf
Emission Factor	0.0054	lb/MMBtu

Greenhouse Gases

- > Emission rates based on vendor specifications which calculated CO₂ based on Part 75, Appendix G, Equation G-4. Emission factors based on maximum hourly fuel combustion from vendor specifications.
- > The global warming multiplying factors for CH₄ and N₂O are those specified in 40 CFR 98 Subpart A. These are used to calculate the overall CO₂e emissions.

CO₂	Hourly Max. Units	
	Emission Factor	122,185 lb/MMscf
	Emission Rate	418151 lb/hr

CH₄	Hourly Max. Units	
	Emission Factor	2.27 lb/MMscf
	Emission Rate	7.76 lb/hr

N₂O	Hourly Max. Units	
	Emission Factor	0.228 lb/MMscf
	Emission Rate	0.78 lb/hr

CO₂e

Global Warming Potentials of GHGs per amendment to 40 CFR 98, Subpart A (89 FR 31894, published April 25, 2024)

CO ₂	1	89 FR 42218, May 14, 2024
CH ₄	28	89 FR 42218, May 14, 2024
N ₂ O	265	89 FR 42218, May 14, 2024

	Hourly Max. Units	
Uncontrolled Emission Factor	122,309 lb/MMscf	(CO ₂ EF) + (CH ₄ EF x CH ₄ GWP) + (N ₂ O EF x N ₂ O GWP)
Uncontrolled Emission Rate	418575 lb/hr	

Ammonia (from Ammonia Slip in SCR)

NH₃	Hourly Max. Units	
Concentration in stack exhaust	5.00	ppmvd @ 15% O ₂
Molecular Weight of NH ₃	17.03	lb/lbmol
Emission Rate	23.60	lb/hr
Emission Factor	0.0067	lb/MMBtu
Emission Factor	6.90	lb/MMscf

Steady-State Operation GTs without DBs

Table 19 - Steady-State Operation PTE in "UnFired" Mode

Regulated Pollutants	Emission Factor (lb/MMscf)		Controlled Emissions	
	Hourly Max	Basis	(lb/hr)	(tpy)
NOX	7.57	Vendor Estimate	25.9	113
CO	4.62	Vendor Estimate	15.8	69
VOC	1.31	Vendor Estimate	4.5	20
PM	5.55	Vendor Estimate	19.0	83
PM10	5.55	Vendor Estimate	19.0	83
PM2.5	5.55	Vendor Estimate	19.0	83
SO2	1.46	Vendor Estimate	5.0	22
H2SO4	0.99	Vendor Estimate	3.4	15
NH3	6.90	Vendor Estimate	23.6	103
CO2	122,185	Vendor Estimate	418,151	1,831,501
CH4	2.27	Vendor Estimate	7.8	34
N2O	0.23	Vendor Estimate	0.8	3.42
CO2e	122,309	40 CFR 98 Subpart A	418,575	1,833,358

Hazardous Air Pollutants for CT

Formaldehyde	Hourly Max.	Units	
Concentration in stack exhaust	0.091	ppmvd @ 15% O2	
Molecular weight of HCHO	30.031	lb/lbmol	
F-Factor	8,710	dscf/MMBtu	Natural Gas F-factor from Table 1 of Part 75 Appendix F.
Controlled Emission Rate	0.77	lb/hr	
Controlled Emission Factor	0.000219	lb/MMBtu	Part 75 Equation F-5
Controlled Emission Factor	0.225	lb/MMscf	

- > Other than for formaldehyde (described above), emission factors for organic and metallic HAP emissions from natural gas-fired turbines published in AP-42, Section 3.1 are used to estimate potential emissions.

Steady-State Operation GTs without DBs

Table 20 - Steady-State Operation HAP PTE in "UnFired" Mode

Pollutant	CAS No.	CT Uncontrolled EF (lb/MMBtu)	CT Uncontrolled EF (lb/MMscf)	Oxidation Catalyst CE ⁴ (%)	CT After Oxidation Catalyst EF (lb/MMBtu)	CT After Oxidation Catalyst EF (lb/MMscf)	Emission Factor Basis	Note(s)	Controlled (lb/hr)	Emissions (tpy)
1,3-Butadiene	106-99-0	4.3E-07	4.386E-04	50%	2.2E-07	2.2E-04	AP-42 3.1, Table 3.1-3	2	7.51E-04	3.29E-03
Acetaldehyde	75-07-0	4.0E-05	4.080E-02	50%	2.0E-05	2.0E-02	AP-42 3.1, Table 3.1-3	1, 2	6.98E-02	3.06E-01
Acrolein	107-02-8	6.4E-06	6.528E-03	50%	3.2E-06	3.3E-03	AP-42 3.1, Table 3.1-3	1	1.12E-02	4.89E-02
Benzene	71-43-2	1.2E-05	1.224E-02	50%	6.0E-06	6.1E-03	AP-42 3.1, Table 3.1-3	1	2.09E-02	9.17E-02
Ethylbenzene	100-41-4	3.2E-05	3.264E-02	50%	1.6E-05	1.6E-02	AP-42 3.1, Table 3.1-3	2	5.59E-02	2.45E-01
Formaldehyde	50-00-0	7.1E-04	7.242E-01	69%	2.2E-04	2.2E-01	Method 19 0.091 ppmvd	3	7.69E-01	3.37
Naphthalene	91-20-3	1.3E-06	1.326E-03	50%	6.5E-07	6.6E-04	AP-42 3.1, Table 3.1-3	2	2.27E-03	9.94E-03
PAH		2.2E-06	2.244E-03	50%	1.1E-06	1.1E-03	AP-42 3.1, Table 3.1-3	2	3.84E-03	1.68E-02
Propylene Oxide	75-56-9	2.9E-05	2.958E-02	50%	1.5E-05	1.5E-02	AP-42 3.1, Table 3.1-3	2	5.06E-02	2.22E-01
Toluene	108-88-3	1.3E-04	1.326E-01	50%	6.5E-05	6.6E-02	AP-42 3.1, Table 3.1-3	2	2.27E-01	9.94E-01
Xylenes	1330-20-7	6.4E-05	6.528E-02	50%	3.2E-05	3.3E-02	AP-42 3.1, Table 3.1-3	2	1.12E-01	4.89E-01
Total HAP									1.32	5.80

1. Controlled emission factors (Oxidation Catalyst) for Acetaldehyde, Acrolein and Benzene are obtained from U.S. EPA's Emission Factor Documentation for AP-42 Section 3.1 Stationary Gas Turbines.
2. Emission factors for 1,3- Butadiene, Acetaldehyde, Ethylbenzene, Propylene Oxide, Toluene, Xylenes, Naphthalene and PAH are obtained from AP-42 Chapter 3.1, Table 3.1-3 (Stationary Gas Turbines, April, 2000). A control efficiency of 50% was applied to these uncontrolled/controlled emission factors based on expected VOM control efficiency from catalytic oxidation.
3. See EPA requirement above for formaldehyde that sets the CT post-oxidation catalyst EF.
4. The control efficiencies are estimates and should not be construed as guarantees.

Talen Energy, Montour CT

CCCT Project

Scenario 3 Capacity and Underlying Assumptions for Cold, Non-Cold, and Shutdown Events

> The following are estimates provided by the selected vendor:

			Maximum Event Duration	Downtime w each event (hrs)
>	<u>Cold Starts</u>			
	Maximum Annual Cold Start Events	14 events/yr	1.17 hr	72 hr
>	<u>Warm Starts</u>			
	Maximum Annual Warm Start Events	40 events/yr	1.00 hr	48 hr
>	<u>Hot Starts</u>			
	Maximum Annual Warm Start Events	200 events/yr	0.50 hr	0 hr
>	<u>Shutdowns</u>			
	Maximum Annual Shutdown Events	254 events/yr	0.20 hr	0

Startup and Shutdown Event Emission Factors

> The EFs presented below for emissions of NSR-regulated pollutants from startup and shutdown events are based on vendor-specifications in units of lb/event.

Table 21. SUSD Event Emission Factors

Event Type	NO _x EF (lb/event)	CO EF (lb/event)	VOC EF (lb/event)	PM/PM ₁₀ /PM _{2.5} EF (lb/event)
Cold Start	200	830	105	14.2
Warm Start	160	235	70	12.2
Hot Start	110	215	66	6.1
Shutdown	16	185	55	2.4

GT Cold & Non-Cold Startups, and Shutdown Potential Emissions Summary

> The following potential emissions represent the maximum pounds per SUSD event by pollutant.

Table 22. SUSD Events Emissions Summary

Pollutant	Uncontrolled EF		Uncontrolled Emissions		Control Efficiency	Controlled Emissions		Percent of Event Achieved per Hour
	(lb/event)	Basis	(lb/yr)	(tpy)		(lb/yr)	(tpy)	
Cold Startups								
NOX	200	Vendor Data	2,800	1.40	N/A	2,800	1.40	86% of a Cold Start Event can be achieved in 1 hour (1.17 hours per cold start/1 hour = 0.86 cold starts).
CO	830	Vendor Data	11,620	5.81	N/A	11,620	5.81	
VOC	105	Vendor Data	1,470	0.74	N/A	1,470	0.74	
PM	14.2	Vendor Data	199	0.10	N/A	199	0.10	
PM10	14.2	Vendor Data	199	0.10	N/A	199	0.10	
PM2.5	14.2	Vendor Data	199	0.10	N/A	199	0.10	
Warm Startups								
NOX	160	Vendor Data	6,400	3.20	N/A	6,400	3.20	100% of a Warm Start Event can be achieved in 1 hour.
CO	235	Vendor Data	9,400	4.70	N/A	9,400	4.70	
VOC	70	Vendor Data	2,800	1.40	N/A	2,800	1.40	
PM	12.2	Vendor Data	488	0.24	N/A	488	0.24	
PM10	12.2	Vendor Data	488	0.24	N/A	488	0.24	
PM2.5	12.2	Vendor Data	488	0.24	N/A	488	0.24	
Hot Startups								
NOX	110	Vendor Data	22,000	11.00	N/A	22,000	11.00	100% of a Hot Start Event can be achieved in 1 hour. Assume only one Hot Start will occur each hour.
CO	215	Vendor Data	43,000	21.50	N/A	43,000	21.50	
VOC	66	Vendor Data	13,200	6.60	N/A	13,200	6.60	
PM	6.1	Vendor Data	1,220	0.61	N/A	1,220	0.61	
PM10	6.1	Vendor Data	1,220	0.61	N/A	1,220	0.61	
PM2.5	6.1	Vendor Data	1,220	0.61	N/A	1,220	0.61	
Shutdowns								
NOX	16	Vendor Data	4,064	2.03	N/A	4,064	2.03	100% of a Shut Down Event can be achieved in 1 hour. Assume only one Shut Down will occur each hour.
CO	185	Vendor Data	46,990	23.50	N/A	46,990	23.50	
VOC	55	Vendor Data	13,970	6.99	N/A	13,970	6.99	
PM	2.4	Vendor Data	610	0.30	N/A	610	0.30	
PM10	2.4	Vendor Data	610	0.30	N/A	610	0.30	
PM2.5	2.4	Vendor Data	610	0.30	N/A	610	0.30	
Sum of SUSD Events								
NOX			35,264	18	N/A	35,264	18	
CO			111,010	56	N/A	111,010	56	
VOC			31,440	16	N/A	31,440	16	
PM			2,516.4	1.26	N/A	2,516.4	1.26	
PM10			2,516.4	1.26	N/A	2,516.4	1.26	
PM2.5			2,516.4	1.26	N/A	2,516.4	1.26	

Vendor Cases

Case No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Case Description	Units	-20°F, Gas fuel, 1 GT @ 100% load, DB 0%	-20°F, Gas fuel, 1 GT @ 100% load, DB 100%	-20°F, Gas fuel, 1 GT @ 75% load, DB 0%	-20°F, Gas fuel, 1 GT @ 45% load, DB 0%	20°F, Gas fuel, 1 GT @ 100% load, DB 0%	20°F, Gas fuel, 1 GT @ 75% load, DB 0%	20°F, Gas fuel, 1 GT @ 30% load, DB 0%	52°F, Gas fuel, 1 GT @ 100% load, DB 0%	52°F, Gas fuel, 1 GT @ 100% load, DB 92.145%	52°F, Gas fuel, 1 GT @ 75% load, DB 0%	52°F, Gas fuel, 1 GT @ 30% load, DB 0%	59°F, Gas fuel, 1 GT @ 100% load, DB 0%	59°F, Gas fuel, 1 GT @ 100% load, DB 90.58%	59°F, Gas fuel, 1 GT @ 30% load, DB 0%	59°F, Gas fuel, 1 GT @ 30% load, DB 0%
Ambient Conditions																
Ambient Temperature	F	-20	-20	-20	-20	20	20	20	52	52	52	52	59	59	59	59
Ambient Pressure	psia	14.085	14.085	14.085	14.085	14.085	14.085	14.085	14.085	14.085	14.085	14.085	14.085	14.085	14.085	14.085
Ambient Relative Humidity	%	80	80	80	80	60	60	60	80	80	80	80	60	60	60	60
Gas Turbines																
GT Fuel Type	-	Gas	Gas	Gas	Gas	Gas	Gas	Gas	Gas	Gas	Gas	Gas	Gas	Gas	Gas	Gas
Number of Gas Turbines operating per Block	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
GT load fraction	-	100%	100%	75%	45%	100%	100%	75%	30%	100%	100%	75%	30%	100%	100%	75%
Evap Cooler status	-	off	off	off	off	off	off	off	off	off	off	off	off	off	off	off
Gas turbine water injection flow rate	klb/h	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Abatement Status																
CO Catalyst Operating status	-	Operating	Operating	Operating	Operating	Operating	Operating	Operating	Operating	Operating	Operating	Operating	Operating	Operating	Operating	Operating
SCR Operating status	-	Operating	Operating	Operating	Operating	Operating	Operating	Operating	Operating	Operating	Operating	Operating	Operating	Operating	Operating	Operating
GT Fuel																
Gas Turbine fuel LHV	Btu/lb	21210	21210	21210	21210	21210	21210	21210	21210	21210	21210	21210	21210	21210	21210	21210
Gas Turbine fuel HHV	Btu/lb	23508	23508	23508	23508	23508	23508	23508	23508	23508	23508	23508	23508	23508	23508	23508
Gas Turbine gas fuel molecular weight	lb/lbmole	16.72	16.72	16.72	16.72	16.72	16.72	16.72	16.72	16.72	16.72	16.72	16.72	16.72	16.72	16.72
Gas Turbine sulfur ppm (by mass)	ppm	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9
Duct Burner																
Duct Burner fuel LHV	Btu/lb	21210	21210	21210	21210	21210	21210	21210	21210	21210	21210	21210	21210	21210	21210	21210
Duct Burner fuel HHV	Btu/lb	23508	23508	23508	23508	23508	23508	23508	23508	23508	23508	23508	23508	23508	23508	23508
Duct Burner fuel molecular weight	lb/lbmole	16.72	16.72	16.72	16.72	16.72	16.72	16.72	16.72	16.72	16.72	16.72	16.72	16.72	16.72	16.72
Duct Burner fuel sulfur content (by mass)	ppm	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9
Duct Burner status	-	Off	Operating	Off	Off	Off	Operating	Off	Off	Off	Operating	Off	Off	Off	Operating	Off
Duct Burner gas fuel flow	lb/h	0	44000.1	0	0	0	42284.8	0	0	0	40544	0	0	0	39855.1	0
Duct Burner load fraction	%	0	100	0	0	0	96.1	0	0	0	92.1	0	0	0	90.6	0
Heat Consumption for permitting (per unit)																
GT Heat Cons (HHV), with permitting margin	MMBtu/h	3454.3	3449.2	2752.9	1991.4	3518.1	3514.9	2757.9	1569.9	3469.6	3465.4	2716.4	1531.2	3437.7	3433.5	2694.8
DB Heat Cons (HHV)	MMBtu/h	0	1034.4	0	0	0	994	0	0	953.1	0	0	0	936.9	0	0
Total	MMBtu/h	3454.3	4483.6	2752.9	1991.4	3518.1	4508.9	2757.9	1569.9	3469.6	4418.5	2716.4	1531.2	3437.7	4370.4	2694.8
HRSG Exit Exhaust gas (per unit)																
Stack N2 mole fraction	-	0.7476	0.7378	0.7479	0.7495	0.746	0.7367	0.7464	0.7506	0.7392	0.7302	0.7396	0.7443	0.7395	0.7305	0.7398
Stack O2 mole fraction	-	0.1155	0.08765	0.1162	0.1207	0.1143	0.08783	0.1154	0.1273	0.1117	0.08582	0.1129	0.1263	0.1118	0.08602	0.1129
Stack AR mole fraction	-	0.0089	0.00879	0.00891	0.00892	0.00888	0.00877	0.00889	0.00894	0.0088	0.00869	0.00881	0.00886	0.00881	0.0088	0.00881
Stack H2O mole fraction	-	0.08457	0.1095	0.0839	0.07991	0.08699	0.1107	0.08603	0.07537	0.09608	0.1192	0.09504	0.08311	0.09579	0.1188	0.0948
Stack CO2 mole fraction	-	0.04336	0.05609	0.04301	0.04097	0.04371	0.05584	0.04322	0.03776	0.04408	0.05597	0.04355	0.03742	0.04411	0.05591	0.0436
Stack Molecular Weight	lb/lbmole	28.43	28.27	28.43	28.46	28.43	28.46	28.43	28.46	28.43	28.46	28.43	28.46	28.43	28.46	28.43
Stack Temperature	°F	172.9	169.9	169.2	163.8	171.8	170.5	168.2	168.2	174.8	172	168.7	162.3	174.6	171.6	168.5
Stack Mass flow, including Permitting Margin, per stack	lb/h	6025400	6071400	4841600	3681000	6782000	6126300	4823100	3152700	5926100	5968500	4698200	3093800	5968900	5910600	4655300
Margined exhaust vol flow (incl. permitting margin)	Mft ³ /h	102.17	103.03	81.599	61.454	103.03	104.12	81.214	52.51	101.21	102.01	79.445	51.647	100.18	100.94	78.686
HRSG Exit Emissions (per unit)																
NOx Volume fraction, dry, at 15 % O2	ppm	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
NOx mass flow rate (as NO2, calculated using EPA Mett)	lb/h	25.5	33	20.3	14.7	25.9	33.2	20.3	11.6	25.6	32.6	20	11.3	25.3	32.2	19.9
CO Volume fraction, dry, at 15 % O2	ppm	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
CO mass flow rate (calculated using EPA Method 19)	lb/h	15.5	20.1	12.3	8.9	15.8	20.2	12.4	7	15.6	19.8	12.2	6.9	15.4	19.6	12.1
VOC Volume fraction, dry, at 15 % O2	ppm	1	1.5	1	1	1	1.5	1	1	1.5	1	1	1	1.5	1	1
VOC mass flow rate (as CH4, calculated using EPA Mett)	lb/h	4.4	8.6	3.5	2.6	4.5	8.7	3.5	2	4.5	8.5	3.5	2	4.4	8.4	3.5
NH3 Volume fraction, dry, at 15 % O2	ppm	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
NH3 mass flow rate	lb/h	23.2	30.5	18.5	13.4	23.6	30.7	18.5	10.5	23.3	30.1	18.3	10.3	23.1	29.7	18.1
SOx mass flow rate (as SO2, See notes 1, 2, and 3)	lb/h	4.9	6.4	3.9	2.8	5	6.5	3.9	2.2	4.9	6.3	3.9	2.2	4.9	6.3	3.8
SOx mass flow rate (calculated, See notes 1, 2, and 3)	lb/MMBtu	0.0014	0.0014	0.0014	0.0014	0.0014	0.0014	0.0014	0.0014	0.0014	0.0014	0.0014	0.0014	0.0014	0.0014	0.0014
Total Particulates (see notes 6, 7, 8, and 11)	lb/h	18.7	24.1	19	10.8	19	23.7	14.9	8.5	18.7	23.2	14.7	8.3	18.6	23	14.6
Total Particulates (Calculated, see notes 6, 7, 8, and 11)	lb/MMBtu	0.0054	0.0054	0.0054	0.0054	0.0054	0.0053	0.0054	0.0054	0.0054	0.0053	0.0054	0.0054	0.0054	0.0053	0.0054
Sulfur Mist as H2SO4 (See notes 2 and 3)	lb/h	3.3	4.7	1.5	2.6	3.4	4.6	2.6	1.5	3.3	4.6	2.6	1.5	3.3	4.5	2.6
H2SO4 (calculated)	lb/MMBtu	0.001	0.001	0.0009	0.001	0.001	0.001	0.001	0.0009	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Stack CO2 (calculated, based on Part 75, see note 10)	lb/h	410568	532908	327202	236692	418151	535915	327796	186054	412387	525170	322864	181994	408595	519453	320296
Stack CH4 (calculated)	lb/h	7.62	9.88	6.07	4.39	7.76	9.94	6.08	3.46	7.65	9.74	5.99	3.38	7.58	9.64	5.94
Stack N2O (calculated)	lb/h	0.76	0.99	0.61	0.44	0.78	0.99	0.61	0.35	0.76	0.97	0.6	0.34	0.76	0.96	0.59
Stack CO2e (calculated)	lb/h	410983	533447	327533	236931	418574	536457	328127	186782	412804	525701	323190	182178	409008	519978	320620
Stack CO2 rate (calculated, per Gross CC Power per st)	lb/MWh	789	829	803	867	772	811	783	405	783	804	776	405	783	803	777
Stack CO2 rate (calculated per Net Plant CC Power per	lb/MWh	803	848	820	889	787	829	800	437	778	822	794	437	778	821	795

Notes:
 (1) SO2 emission values have been estimated by assuming that all the sulfur in the fuel is converted to SO2.
 (2) SO2 emission values are based on maximum sulfur content of 20 gr/100 scf (Cscf) and 100% conversion from S to SO2
 (3) The total conversion from SO2 to H2SO4 mist assumes 10% conversion for GT/DB + 3% for SCR + 10% for CO catalyst.
 (4) The CO2 estimates are margined 0% to account for equipment variation and site operating conditions. If CO2 compliance is to be demonstrated using actual CO2 measurement from the HRSG stack, GE recommends an additional 10% margin to the estimated values.
 (5) Sulfur mist emission calculations conservatively assume that all SO3 combines with water to form sulfur mist. In actuality, some SO3 may form other chemical species. This would include ammonium sulfates in the presence of NH3. The maximum sulfur mist is reported to be conservative.
 (6) Particulate Matter estimates over the entire emissions compliance region of GT operation are based on field data obtained at base load for the GT. In reality, particulate matter emissions measured in lb/h are expected to decrease at part load operation and the lb/MMBtu values at part load operation are expected not to exceed the lb/MMBtu value for PM at base load.
 (7) PM10 and PM2.5 are estimated at the same rate as Total Particulates.
 (8) Vendor PM estimates are based on maximum S content in the fuel of 15.9 ppm for gas fuel.
 (9) Average conditions are based on 59°F at max load and 90.58% duct burner load.
 (10) Calculated CO2 based on Part 75, Appendix G, Equation G-4.
 (11) Particulate values for base load and part load conditions set to use 0.0054 lb/MMBtu based on highest lb/h value.

17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
70°F, Gas fuel, 1 GT @ 100% load, DB 0%	70°F, Gas fuel, 1 GT @ 100% load, DB 90.05%	70°F, Gas fuel, 1 GT @ 100% load, EC on, DB 90.4%	70°F, Gas fuel, 1 GT @ 100% load, EC on, DB 0%	70°F, Gas fuel, 1 GT @ 75% load, DB 0%	70°F, Gas fuel, 1 GT @ 30% load, DB 0%	90°F, Gas fuel, 1 GT @ 100% load, DB 0%	90°F, Gas fuel, 1 GT @ 100% load, DB 86.005%	90°F, Gas fuel, 1 GT @ 100% load, EC on, DB 89.668%	90°F, Gas fuel, 1 GT @ 100% load, EC on, DB 0%	90°F, Gas fuel, 1 GT @ 75% load, DB 0%	90°F, Gas fuel, 1 GT @ 30% load, DB 0%	105°F, Gas fuel, 1 GT @ 100% load, DB 0%	105°F, Gas fuel, 1 GT @ 100% load, DB 78.679%	105°F, Gas fuel, 1 GT @ 100% load, EC on, DB 89.735%	105°F, Gas fuel, 1 GT @ 100% load, EC on, DB 0%	105°F, Gas fuel, 1 GT @ 75% load, DB 0%	105°F, Gas fuel, 1 GT @ 35% load, DB 0%
70	70	70	70	70	70	90	90	90	90	90	90	105	105	105	105	105	105
14.085	14.085	14.085	14.085	14.085	14.085	14.085	14.085	14.085	14.085	14.085	14.085	14.085	14.085	14.085	14.085	14.085	14.085
77	77	77	77	77	77	45	45	45	45	45	45	25	25	25	25	25	25
Gas	Gas	Gas	Gas	Gas	Gas	Gas	Gas	Gas	Gas	Gas	Gas	Gas	Gas	Gas	Gas	Gas	Gas
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
100%	100%	100%	100%	75%	30%	100%	100%	100%	100%	75%	30%	100%	100%	100%	100%	75%	35%
off	off	On	On	off	off	off	off	On	On	off	off	off	off	On	On	off	off
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Operating	Operating	Operating	Operating	Operating	Operating	Operating	Operating	Operating	Operating	Operating	Operating	Operating	Operating	Operating	Operating	Operating	Operating
21210	21210	21210	21210	21210	21210	21210	21210	21210	21210	21210	21210	21210	21210	21210	21210	21210	21210
23508	23508	23508	23508	23508	23508	23508	23508	23508	23508	23508	23508	23508	23508	23508	23508	23508	23508
16.72	16.72	16.72	16.72	16.72	16.72	16.72	16.72	16.72	16.72	16.72	16.72	16.72	16.72	16.72	16.72	16.72	16.72
15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9
21210	21210	21210	21210	21210	21210	21210	21210	21210	21210	21210	21210	21210	21210	21210	21210	21210	21210
23508	23508	23508	23508	23508	23508	23508	23508	23508	23508	23508	23508	23508	23508	23508	23508	23508	23508
16.72	16.72	16.72	16.72	16.72	16.72	16.72	16.72	16.72	16.72	16.72	16.72	16.72	16.72	16.72	16.72	16.72	16.72
15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9
Off	Operating	Operating	Off	Off	Off	Off	Off	Operating	Operating	Off	Off	Off	Off	Operating	Operating	Off	Off
0	39622.2	39775.9	0	0	0	0	0	37842.2	39454.1	0	0	0	0	34618.7	39483.5	0	0
0	90.1	90.4	0	0	0	0	0	86	89.7	0	0	0	0	78.7	89.7	0	0
3405.4	3401	3424.1	3428.6	2662.4	1493.4	3247.1	3242.9	3388.9	3393.3	2543.6	1448.1	3018.4	3014.7	3382.6	3387	2381.7	1487
0	931.4	935.1	0	0	0	0	889.6	927.5	0	0	0	0	813.8	928.2	0	0	0
3405.4	4332.4	4359.2	3428.6	2662.4	1493.4	3247.1	4132.5	4316.4	3393.3	2543.6	1448.1	3018.4	3828.5	4310.8	3387	2381.7	1487
0.7327	0.7238	0.7225	0.7314	0.7331	0.7379	0.7313	0.7225	0.7182	0.7269	0.732	0.7367	0.7335	0.7249	0.7173	0.7261	0.7348	0.7387
0.1106	0.08492	0.08408	0.1098	0.1116	0.1255	0.1113	0.08594	0.08353	0.1091	0.1133	0.127	0.1122	0.08734	0.08356	0.1091	0.1162	0.1272
0.00873	0.00862	0.0086	0.00871	0.00873	0.00879	0.00871	0.0086	0.00855	0.00866	0.00872	0.00877	0.00873	0.00863	0.00854	0.00865	0.00875	0.0088
0.1041	0.1269	0.1289	0.1061	0.1032	0.09083	0.1054	0.1279	0.1341	0.1115	0.1036	0.09142	0.1024	0.1245	0.1351	0.1124	0.09891	0.08906
0.04381	0.05557	0.05581	0.04403	0.04333	0.03695	0.04324	0.05487	0.05549	0.04375	0.04233	0.03602	0.04307	0.05448	0.05537	0.04363	0.04126	0.03618
28.22	28.07	28.05	28.2	28.22	28.3	28.2	28.05	27.99	28.14	28.21	28.28	28.23	28.09	27.98	28.12	28.25	28.31
177.1	172.2	172.4	177.2	170.9	172.4	177.6	170.1	172.2	179.6	172.5	166.7	175.3	166.5	172.3	180.4	172.4	167.3
5834700	5876100	5882400	5840800	4613500	3046400	5633100	5672800	5845200	5803900	4509700	3028900	5262700	5299000	5848800	5807500	4339500	3100100
100.33	100.77	100.99	100.52	78.543	51.229	97.005	97.03	100.54	100.47	77.006	51.103	90.194	90.016	100.65	100.71	73.979	52.309
2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
25.1	31.9	32.1	25.3	19.6	11	23.9	30.4	31.8	25	18.7	10.7	22.2	28.2	31.8	25	17.5	11
2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
15.3	19.4	19.6	15.4	11.9	6.7	14.6	18.5	19.4	15.2	11.4	6.5	13.5	17.2	19.3	15.2	10.7	6.7
1	1.5	1.5	1	1	1	1	1.5	1.5	1	1	1	1	1.5	1.5	1	1	1
4.4	8.3	8.4	4.4	3.4	1.9	4.2	8	8.3	4.4	3.3	1.9	3.9	7.4	8.3	4.4	3.1	1.9
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
22.9	29.5	29.7	23	17.9	10	21.8	28.1	29.4	22.8	17.1	9.7	20.3	26	29.3	22.8	16	10
4.8	6.2	6.3	4.9	3.8	2.1	4.6	5.9	6.2	4.8	3.6	2.1	4.3	5.5	6.2	4.8	3.4	2.1
0.0014	0.0014	0.0014	0.0014	0.0014	0.0014	0.0014	0.0014	0.0014	0.0014	0.0014	0.0015	0.0014	0.0014	0.0014	0.0014	0.0014	0.0014
18.4	22.9	22.9	18.5	14.4	8.1	17.5	22.2	18.3	13.7	7.8	16.3	21.1	22.8	18.3	12.9	8	8
0.0054	0.0053	0.0053	0.0054	0.0054	0.0054	0.0054	0.0054	0.0054	0.0054	0.0054	0.0054	0.0054	0.0055	0.0053	0.0054	0.0054	0.0054
3.3	4.5	4.5	3.3	2.6	1.4	3.1	4.3	4.4	3.3	2.4	1.4	2.9	3.9	4.4	3.2	2.3	1.4
0.001	0.001	0.001	0.001	0.001	0.0009	0.001	0.001	0.001	0.001	0.0009	0.001	0.001	0.001	0.001	0.0009	0.001	0.0009
404756	514937	518122	407514	316445	177501	385941	491177	513035	403318	302335	172117	358758	455045	512369	402569	283082	176741
7.51	9.55	9.61	7.56	5.87	3.29	7.16	9.11	9.52	7.48	5.61	3.19	6.65	8.44	9.5	7.47	5.25	3.28
0.75	0.96	0.96	0.76	0.59	0.33	0.72	0.91	0.95	0.75	0.56	0.32	0.67	0.84	0.95	0.75	0.53	0.33
405165	515457	518646	407926	316765	177681	386331	491674	513554	403726	302631	172291	359121	455505	512887	402976	283368	176919
766	807	811	767	779	900	770	811	811	772	785	911	772	812	813	790	897	897
781	825	825	782	798	939	786	830	830	786	804	951	789	831	831	788	811	935

APPENDIX C. PLAN APPROVAL APPLICATION FORMS

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						
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">Client ID# _____</td> <td style="width: 33%;">APS ID# _____</td> </tr> <tr> <td>Site ID# _____</td> <td>Auth ID# _____</td> </tr> <tr> <td>Facility ID# _____</td> <td></td> </tr> </table>	Client ID# _____	APS ID# _____	Site ID# _____	Auth ID# _____	Facility ID# _____		Date Received & General Notes
Client ID# _____	APS ID# _____						
Site ID# _____	Auth ID# _____						
Facility ID# _____							

CLIENT INFORMATION

DEP Client ID#	Client Type/Code LLC	Dun & Bradstreet ID#
Legal Organization Name or Registered Fictitious Name Montour CT Project LLC		Employer ID# (EIN) XXXXXXXXXX Is the EIN a SSN? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
State of Incorporation or Registration of Fictitious Name Delaware	<input type="checkbox"/> Corporation <input checked="" type="checkbox"/> LLC <input type="checkbox"/> Partnership <input type="checkbox"/> LLP <input type="checkbox"/> LP <input type="checkbox"/> Sole Proprietorship <input type="checkbox"/> Association/Organization <input type="checkbox"/> Estate/Trust <input type="checkbox"/> Other	
Individual Last Name Berryman	First Name Brad	MI MI
Additional Individual Last Name	First Name	MI
Mailing Address Line 1 PO Box 128		Mailing Address Line 2
Address Last Line – City Washingtonville	State PA	ZIP+4 17884
Country USA		
Client Contact Last Name Potter	First Name Kathleen	MI A
Client Contact Title Principal Env Prof	Phone (610) 601-0305	Ext Ext
Cell Phone Cell Phone		
Email Address kathleen.potter@talenergy.com		FAX FAX

SITE INFORMATION

DEP Site ID#	Site Name Montour CT Project, LLC
EPA ID#	Estimated Number of Employees to be Present at Site
Description of Site Electricity generation station - two combined cycle nat. gas-fired combustion turbines.	
Tax Parcel ID(s):	
County Name(s) Montour	Municipality(ies) Derry
City	Boro
Twp	State
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	PA

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Site Location Line 1 18 McMichael Rd	Site Location Line 2
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Site Location Last Line – City Washingtonville	State PA	ZIP+4 17884
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Detailed Written Directions to Site
From Harrisburg, PA, head northwest on local streets to merge onto US-22 E toward Lewistown/State College and continue for about 20 miles. Then take US-11 N toward Bloomsburg/Danville and follow it for roughly 50 miles, passing Selinsgrove and Danville. Near Washingtonville, turn onto McMichael Rd and continue until you reach 18 McMichael Rd, Washingtonville, PA 17884.

Site Contact Last Name Potter	First Name Kathleen	MI A	Suffix
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Site Contact Title Principal Env Prof	Site Contact Firm Talen Energy
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Mailing Address Line 1 PO Box 128	Mailing Address Line 2
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Mailing Address Last Line – City Washingtonville	State PA	ZIP+4 17884
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Phone (610) 601-0305	Ext	FAX	Email Address kathleen.potter@talenergy.com
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NAICS Codes (Two- & Three-Digit Codes – List All That Apply) 221112 - Fossil Fuel Electric Power Generation	6-Digit Code (Optional)
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Client to Site Relationship
OWNOP

FACILITY INFORMATION

Modification of Existing Facility	Yes	No
1. Will this project modify an existing facility, system, or activity?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Will this project involve an addition to an existing facility, system, or activity?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

If "Yes", check all relevant facility types and provide DEP facility identification numbers below.

Facility Type	DEP Fac ID#	Facility Type	DEP Fac ID#
<input type="checkbox"/> Air Emission Plant	_____	<input type="checkbox"/> Industrial Minerals Mining Operation	_____
<input type="checkbox"/> Beneficial Use (water)	_____	<input type="checkbox"/> Laboratory Location	_____
<input type="checkbox"/> Blasting Operation	_____	<input type="checkbox"/> Land Recycling Cleanup Location	_____
<input type="checkbox"/> Captive Hazardous Waste Operation	_____	<input type="checkbox"/> Mine Drainage Treatment / Land Recycling Project Location	_____
<input type="checkbox"/> Coal Ash Beneficial Use Operation	_____	<input type="checkbox"/> Municipal Waste Operation	_____
<input type="checkbox"/> Coal Mining Operation	_____	<input type="checkbox"/> Oil & Gas Encroachment Location	_____
<input type="checkbox"/> Coal Pillar Location	_____	<input type="checkbox"/> Oil & Gas Location	_____
<input type="checkbox"/> Commercial Hazardous Waste Operation	_____	<input type="checkbox"/> Oil & Gas Water Poll Control Facility	_____
<input type="checkbox"/> Dam Location	_____	<input type="checkbox"/> Public Water Supply System	_____
<input type="checkbox"/> Deep Mine Safety Operation -Anthracite	_____	<input type="checkbox"/> Radiation Facility	_____
<input type="checkbox"/> Deep Mine Safety Operation -Bituminous	_____	<input type="checkbox"/> Residual Waste Operation	_____
<input type="checkbox"/> Deep Mine Safety Operation -Ind Minerals	_____	<input type="checkbox"/> Storage Tank Location	_____
<input type="checkbox"/> Encroachment Location (water, wetland)	_____	<input type="checkbox"/> Water Pollution Control Facility	_____
<input type="checkbox"/> Erosion & Sediment Control Facility	_____	<input type="checkbox"/> Water Resource	_____
<input type="checkbox"/> Explosive Storage Location	_____	<input type="checkbox"/> Other:	_____

Latitude/Longitude Point of Origin	Latitude			Longitude		
	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
Plant Entrance	41	04	12	76	40	02
Horizontal Accuracy Measure	Feet			--or--	Meters	
Horizontal Reference Datum Code	<input type="checkbox"/>			North American Datum of 1927		
	<input type="checkbox"/>			North American Datum of 1983		
	<input checked="" type="checkbox"/>			World Geodetic System of 1984		
Horizontal Collection Method Code	Google Earth					
Reference Point Code	Plant Entrance					
Altitude	Feet			--or--	Meters 163	
Altitude Datum Name	<input type="checkbox"/>			The National Geodetic Vertical Datum of 1929		
	<input type="checkbox"/>			The North American Vertical Datum of 1988 (NAVD88)		
Altitude (Vertical) Location Datum Collection Method Code	Google Earth					
Geometric Type Code						
Data Collection Date	11/25/2025					
Source Map Scale Number	Inch(es)		=	Feet		
	--or--			Centimeter(s)		= Meters

PROJECT INFORMATION

Project Name			
CCCT Project			
Project Description			
Montour CT Project, LLC is proposing to install and operate two new identical natural gas fired combined cycle combustion turbines (CCCTs) electric generating units (EGUs) equipped with integrated natural gas duct burners, oxidation catalysts, and selective catalytic reductions (SCRs) at the proposed Montour CT Facility (herein labeled as the CCCT Project) to produce steam for the generation of electricity.			
Project Consultant Last Name	First Name	MI	Suffix
Heath	Christie		
Project Consultant Title		Consulting Firm	
Managing Consultant		Trinity Consultants	
Mailing Address Line 1		Mailing Address Line 2	
211 Welsh Pool Rd			
Address Last Line – City		State	ZIP+4
Exton		PA	19341
Phone	Ext	FAX	Email Address
(908) 432-8001			cheath@trinityconsultants.com
Time Schedules	Project Milestone (Optional)		
2028	Commence Project Construction		
2031	Begin Commercial Operation		

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: Mailed Written
Notifications - See Appendix F

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.	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	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?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	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?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	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?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
1.4	For this coal mining project, will sewage treatment facilities be constructed and treated waste water discharged to surface waters?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	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?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
1.6	Will this coal mining project involve underground coal mining to be conducted within 500 feet of an oil or gas well?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	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.	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	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?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	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?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	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)?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	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?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	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?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	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.	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	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)?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	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 <i>Project Description</i> .	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
3.3	Will the oil- or gas-related project involve the construction and operation of industrial waste treatment facilities?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
4.0	Will the project involve a construction activity that results in earth disturbance? If "Yes", specify the total disturbed acreage.	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	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?	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	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?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	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.	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	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?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	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?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	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?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
5.4	Is your project an interstate transmission natural gas pipeline?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	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?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
5.6	Does your project utilize Floodplain Restoration as a best management practice for Post Construction Stormwater Management?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
5.7	Does your project utilize Class V Gravity / Injection Wells as a best management practice for Post Construction Stormwater Management?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	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?	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	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?	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No
7.0	Will the project involve the construction and operation of industrial waste treatment facilities?	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	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 <i>Project Description</i>, where applicable.	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	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?	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	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.	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	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).	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	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.	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> 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.	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> 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.)?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
13.0.1	If "Yes", is the operation subject to the agricultural exemption in 35 P.S. § 4004.1?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> 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; See Application Report and Appendix B separate each set with semicolons.		
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.	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> 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	<input type="checkbox"/> Yes	<input type="checkbox"/> No
14.0.5	Sub-Fac: Water Treatment Plant	<input type="checkbox"/> Yes	<input type="checkbox"/> No
14.0.6	Sub-Fac: Source	<input type="checkbox"/> Yes	<input type="checkbox"/> No
14.0.7	Sub-Fac: Pump Station	<input type="checkbox"/> Yes	<input type="checkbox"/> No
14.0.8	Sub-Fac: Transmission Main	<input type="checkbox"/> Yes	<input type="checkbox"/> No
14.0.9	Sub-Fac: Storage Facility	<input type="checkbox"/> Yes	<input type="checkbox"/> 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?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> 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.	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
16.0.1	Supplier's Name	_____	
16.0.2	Letter of Approval from Supplier is Attached	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
17.0	Will this project be served by on-lot drinking water wells?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> 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.	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> 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.	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
19.0.1 Type & Amount		Hazardous and residual waste generator	

20.0	Will your project involve the removal of coal, minerals, contaminated media, or solid waste as part of any earth disturbance activities?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
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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.	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
21.0.1 Enter all substances & capacity of each; separate each set with semicolons.			

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.	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
22.0.1 Enter all substances & capacity of each; separate each set with semicolons.			

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.	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
23.0.1 Enter all substances & capacity of each; separate each set with semicolons.			

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.	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
24.0.1 Enter all substances & capacity of each; separate each set with semicolons.			

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

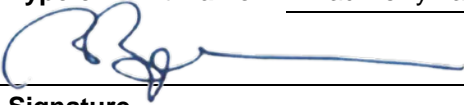
25.0	Will the intended activity involve the use of a radiation source?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
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CERTIFICATION

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 Brad Berryman



Signature

President & Chief Operating
Officer

Title

6/10/2026

Date

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
See Attachment 1				

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
See Attachment 1				

Provide the names and business addresses of all general partners of the applicant and parent and subsidiary corporations, if any.

Name	Business Address
See Attachment 1	

List the names and business address of persons with overall management responsibility for the process being permitted (i.e. plant manager).

Name	Business Address
See Attachments 2 and 3	

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
See Attachment 4				

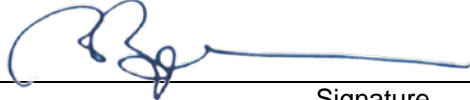
Compliance Background. (Note: Copies of specific documents, if applicable, must be made available to the Department upon its request.) List all documented conduct of violations or enforcement actions identified by the Department pursuant to the APCA, regulations, terms and conditions of an operating 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
	See Attachment 5					\$
						\$
						\$
						\$
						\$
						\$
						\$
						\$
						\$

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
See Attachment 6				

CONTINUING OBLIGATION. 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	
<p>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.</p>	
	6/10/2026
Signature	Date
Brad Berryman	Name (Print or Type)
President & Chief Operating Officer	Title

**SUBSIDIARIES AND AFFILIATES OF TALEN ENERGY CORPORATION
(LIMITED TO SUBSIDIARIES OF TALEN GENERATION, LLC
DIRECTLY OR INDIRECTLY HAVING ASSETS OR OPERATIONS IN PENNSYLVANIA)**

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**TALEN ENERGY CORPORATION
FACT SHEET**

COMPANY NAME: Talen Energy Corporation

REGISTERED OFFICE: DE: c/o Corporation Service Company
251 Little Falls Drive
Wilmington, DE 19808

PA: c/o Corporation Service Company
5235 North Front Street
Harrisburg, PA 17110

OWNED BY: Public equity holders

SUBSIDIARIES: Talen Energy Supply, LLC

PRINCIPAL ACTIVITY: Holding company.

STATE OF ORGANIZATION: Delaware

QUALIFIED TO DO BUSINESS IN: Pennsylvania, Texas

FEDERAL TAX EIN: 47-██████████

OTHER BUSINESS LOCATIONS: N/A

DATE ORGANIZED/ACQUIRED: June 6, 2014

**TALEN ENERGY SUPPLY, LLC
FACT SHEET
(Certain Subsidiaries Omitted)**

COMPANY NAME: Talen Energy Supply, LLC

REGISTERED OFFICE: DE: c/o Corporation Service Company
251 Little Falls Drive
Wilmington, DE 19808

PA: c/o Corporation Service Company
5235 North Front Street
Harrisburg, PA 17110

OWNED BY: Talen Energy Corporation

SUBSIDIARIES: Cumulus Growth Holdings LLC
Susquehanna Nuclear, LLC
Talen Energy Marketing, LLC
Talen Generation, LLC
Talen Montana Holdings, LLC
Talen NE LLC
Talen Technology Ventures LLC

PRINCIPAL ACTIVITY: Finance company.

STATE OF ORGANIZATION: Delaware

QUALIFIED TO DO BUSINESS IN: New Jersey, Ohio, Pennsylvania, Texas, Virginia

FEDERAL TAX EIN: XXXXXXXXXX

OTHER BUSINESS LOCATIONS: N/A

DATE ORGANIZED/ACQUIRED: November 14, 2000

**TALEN GENERATION, LLC
FACT SHEET**

COMPANY NAME: Talen Generation, LLC

REGISTERED OFFICE: DE: c/o Corporation Service Company
251 Little Falls Drive
Wilmington, DE 19808

PA: c/o Corporation Service Company
5235 North Front Street
Harrisburg, PA 17110

OWNED BY: Talen Energy Supply, LLC

SUBSIDIARIES: Brunner Island, LLC
Conemaugh Fuels, LLC
Guernsey Power Station LLC
Holtwood, LLC
Keystone Fuels, LLC
LMBE Project Company LLC
MC OpCo LLC
MC Project Company LLC
Montour, LLC
Montour CT Project LLC
Moxie Freedom LLC
Pennsylvania Mines, LLC
Raven Power Generation Holdings LLC
RMGL Holdings LLC
Talen KeyCon Holdings LLC
Talen MCR Holdings LLC
The Riverlands Recreation Area LLC
Sapphire Power Generation Holdings LLC

PRINCIPAL ACTIVITY: Holding company for generation assets.

STATE OF ORGANIZATION: Delaware

QUALIFIED TO DO BUSINESS IN: Pennsylvania, [Indiana]

FEDERAL TAX EIN: XXXXXXXXXX

OTHER BUSINESS LOCATIONS: N/A

DATE ORGANIZED/ACQUIRED: November 29, 1999

**BRUNNER ISLAND, LLC
FACT SHEET**

COMPANY NAME: Brunner Island, LLC

REGISTERED OFFICE: DE: c/o Corporation Service Company
251 Little Falls Drive
Wilmington, DE 19808

PA: c/o Corporation Service Company
5235 North Front Street
Harrisburg, PA 17110

OWNED BY: Talen Generation, LLC

SUBSIDIARIES: N/A

PRINCIPAL ACTIVITY: Electricity generation – coal-fired generating assets.

STATE OF ORGANIZATION: Delaware

QUALIFIED TO DO BUSINESS IN: Pennsylvania

FEDERAL TAX EIN: XXXXXXXXXX

OTHER BUSINESS LOCATIONS: N/A

DATE ORGANIZED/ACQUIRED: November 29, 1999

**CONEMAUGH FUELS, LLC
FACT SHEET**

COMPANY NAME: Conemaugh Fuels, LLC

REGISTERED OFFICE: DE: c/o Corporation Service Company
251 Little Falls Drive
Wilmington, DE 19808

PA: c/o Corporation Service Company
5235 North Front Street
Harrisburg, PA 17110

OWNED BY: Talen Generation, LLC

SUBSIDIARIES: N/A

PRINCIPAL ACTIVITY: Provides fuel to the Conemaugh Steam Electric Station. Talen Generation, LLC holds a 22.22% ownership interest in this entity.

STATE OF ORGANIZATION: Delaware

QUALIFIED TO DO BUSINESS IN: Pennsylvania

FEDERAL TAX EIN: XXXXXXXXXX

OTHER BUSINESS LOCATIONS: N/A

DATE ORGANIZED/ACQUIRED: July 12, 2002

**HOLTWOOD, LLC
FACT SHEET**

COMPANY NAME: Holtwood, LLC

REGISTERED OFFICE: DE: c/o Corporation Service Company
251 Little Falls Drive
Wilmington, DE 19808

PA: c/o Corporation Service Company
5235 North Front Street
Harrisburg, PA 17110

OWNED BY: Talen Generation, LLC

SUBSIDIARIES: N/A

PRINCIPAL ACTIVITY: Previously owned hydroelectric generating assets.

STATE OF ORGANIZATION: Delaware

QUALIFIED TO DO BUSINESS IN: Pennsylvania

FEDERAL TAX EIN: [REDACTED]

OTHER BUSINESS LOCATIONS: N/A

DATE ORGANIZED/ACQUIRED: November 29, 1999

**KEYSTONE FUELS, LLC
FACT SHEET**

COMPANY NAME: Keystone Fuels, LLC

REGISTERED OFFICE: DE: c/o Corporation Service Company
251 Little Falls Drive
Wilmington, DE 19808

OWNED BY: Talen Generation, LLC

SUBSIDIARIES: N/A

PRINCIPAL ACTIVITY: Provides fuel to the Keystone Steam Electric Station. Talen Generation, LLC holds a 12.34% ownership interest in this entity.

STATE OF ORGANIZATION: Delaware

QUALIFIED TO DO BUSINESS IN: N/A

FEDERAL TAX EIN: XXXXXXXXXX

OTHER BUSINESS LOCATIONS: N/A

DATE ORGANIZED/ACQUIRED: October 24, 2000

**LMBE PROJECT COMPANY LLC
FACT SHEET**

COMPANY NAME: LMBE Project Company LLC

REGISTERED OFFICE: DE: c/o Corporation Service Company
251 Little Falls Drive
Wilmington, DE 19808

PA: c/o Corporation Service Company
5235 North Front Street Harrisburg, PA 17110

OWNED BY: Talen Generation, LLC

SUBSIDIARIES: N/A

PRINCIPAL ACTIVITY: Electricity generation – natural gas-fired generating assets.

STATE OF ORGANIZATION: Delaware

QUALIFIED TO DO BUSINESS IN: Pennsylvania

FEDERAL TAX EIN: XXXXXXXXXX

OTHER BUSINESS LOCATIONS: N/A

DATE ORGANIZED/ACQUIRED: August 16, 2018

**MC OPKO LLC
FACT SHEET**

COMPANY NAME: MC OpCo LLC

REGISTERED OFFICE: DE: c/o Corporation Service Company
251 Little Falls Drive
Wilmington, DE 19808

PA: c/o Corporation Service Company
5235 North Front Street
Harrisburg, PA 17110

OWNED BY: Talen Generation, LLC

SUBSIDIARIES: N/A

PRINCIPAL ACTIVITY: Operator of gas-fired generating assets held in MC Project Company LLC.

STATE OF ORGANIZATION: Delaware

QUALIFIED TO DO BUSINESS IN: Pennsylvania

FEDERAL TAX EIN: XXXXXXXXXX

OTHER BUSINESS LOCATIONS: N/A

DATE ORGANIZED/ACQUIRED: December 3, 2018

**MC PROJECT COMPANY LLC
FACT SHEET**

COMPANY NAME: MC Project Company LLC

REGISTERED OFFICE: DE: c/o Corporation Service Company
251 Little Falls Drive
Wilmington, DE 19808

PA: c/o Corporation Service Company
5235 North Front Street
Harrisburg, PA 17110

OWNED BY: Talen Generation, LLC

SUBSIDIARIES: N/A

PRINCIPAL ACTIVITY: Electricity generation – natural gas-fired generating assets.

STATE OF ORGANIZATION: Delaware

QUALIFIED TO DO BUSINESS IN: Pennsylvania

FEDERAL TAX EIN: XXXXXXXXXX

OTHER BUSINESS LOCATIONS: N/A

DATE ORGANIZED/ACQUIRED: August 16, 2018

**MONTOUR, LLC
FACT SHEET**

COMPANY NAME: Montour, LLC

REGISTERED OFFICE: DE: c/o Corporation Service Company
251 Little Falls Drive
Wilmington, DE 19808

PA: c/o Corporation Service Company
5235 North Front Street
Harrisburg, PA 17110

OWNED BY: Talen Generation, LLC

SUBSIDIARIES: Keystone – Conemaugh Projects, LLC (owns 12.34% Series Keystone and 22.22% Series Conemaugh ownership interests)

PRINCIPAL ACTIVITY: Electricity generation – coal-fired generating assets.

STATE OF ORGANIZATION: Delaware

QUALIFIED TO DO BUSINESS IN: Pennsylvania

FEDERAL TAX EIN: XXXXXXXXXX

OTHER BUSINESS LOCATIONS: N/A

DATE ORGANIZED/ACQUIRED: November 29, 1999

**KEYSTONE – CONEMAUGH PROJECTS, LLC
FACT SHEET**

COMPANY NAME: Keystone – Conemaugh Projects, LLC

REGISTERED OFFICE: DE: c/o Corporation Service Company
251 Little Falls Drive
Wilmington, DE 19808

OWNED BY: Montour, LLC

SUBSIDIARIES: N/A

PRINCIPAL ACTIVITY: Scheduling agent. Montour, LLC holds 12.34% Series Keystone and 22.22% Series Conemaugh ownership interests in this entity.

STATE OF ORGANIZATION: Delaware

QUALIFIED TO DO BUSINESS IN: N/A

FEDERAL TAX EIN: N/A

OTHER BUSINESS LOCATIONS: N/A

DATE ORGANIZED/ACQUIRED: January 23, 2019

**MONTOUR CT PROJECT LLC
FACT SHEET**

COMPANY NAME: Montour CT Project LLC

REGISTERED OFFICE: DE: c/o Corporation Service Company
251 Little Falls Drive
Wilmington, DE 19808

OWNED BY: Talen Generation, LLC

SUBSIDIARIES: N/A

PRINCIPAL ACTIVITY: Electric generation – air permit requirements

STATE OF ORGANIZATION: Delaware

QUALIFIED TO DO BUSINESS IN: N/A

FEDERAL TAX EIN: [REDACTED]

OTHER BUSINESS LOCATIONS: N/A

DATE ORGANIZED/ACQUIRED: December 10, 2025

**MOXIE FREEDOM LLC
FACT SHEET**

COMPANY NAME: Moxie Freedom LLC

REGISTERED OFFICE: DE: c/o Corporation Service Company
251 Little Falls Drive
Wilmington, DE 19808

PA: c/o Corporation Service Company
5235 North Front Street
Harrisburg, PA 17110

OWNED BY: Talen Generation, LLC

SUBSIDIARIES: N/A

PRINCIPAL ACTIVITY: Operator of natural gas fired energy generating facility located in Luzerne County, PA held in Moxie Freedom LLC

STATE OF ORGANIZATION: Delaware

QUALIFIED TO DO BUSINESS IN: Pennsylvania

FEDERAL TAX EIN: XXXXXXXXXX

OTHER BUSINESS LOCATIONS: N/A

DATE ORGANIZED/ACQUIRED: March 4, 2014

**PENNSYLVANIA MINES, LLC
FACT SHEET**

COMPANY NAME: Pennsylvania Mines, LLC

REGISTERED OFFICE: DE: c/o Corporation Service Company
251 Little Falls Drive
Wilmington, DE 19808

PA: c/o Corporation Service Company
5235 North Front Street
Harrisburg, PA 17110

OWNED BY: Talen Generation, LLC

SUBSIDIARIES: N/A

PRINCIPAL ACTIVITY: Provides treatment of refuse area leachate and monitoring of underground mine water.

STATE OF ORGANIZATION: Delaware

QUALIFIED TO DO BUSINESS IN: Pennsylvania

FEDERAL TAX EIN: XXXXXXXXXX

OTHER BUSINESS LOCATIONS: N/A

DATE ORGANIZED/ACQUIRED: December 7, 1999

**RMGL HOLDINGS LLC
FACT SHEET**

COMPANY NAME: RMGL Holdings LLC (f/k/a Talen Generation Services, LLC)

REGISTERED OFFICE: DE: c/o Corporation Service Company
251 Little Falls Drive
Wilmington, DE 19808

PA: c/o Corporation Service Company
5235 North Front Street
Harrisburg, PA 17110

OWNED BY: Talen Generation, LLC

SUBSIDIARIES: N/A

PRINCIPAL ACTIVITY: Owns property that has beneficially reused fly ash.

STATE OF ORGANIZATION: Delaware

QUALIFIED TO DO BUSINESS IN: Pennsylvania

FEDERAL TAX EIN: XXXXXXXXXX

OTHER BUSINESS LOCATIONS: N/A

DATE ORGANIZED/ACQUIRED: June 9, 2000

**TALEN MCR HOLDINGS LLC
FACT SHEET**

COMPANY NAME: Talen MCR Holdings LLC (f/k/a Realty Company of Pennsylvania)

REGISTERED OFFICE: DE: c/o Corporation Service Company
251 Little Falls Drive
Wilmington, DE 19808

PA: c/o Corporation Service Company
5235 North Front Street
Harrisburg, PA 17110

OWNED BY: Talen Generation, LLC

SUBSIDIARIES: N/A

PRINCIPAL ACTIVITY: Owns and develops land for commercial purposes.

STATE OF ORGANIZATION: Delaware

QUALIFIED TO DO BUSINESS IN: New Jersey, Pennsylvania

FEDERAL TAX EIN: XXXXXXXXXX

OTHER BUSINESS LOCATIONS: N/A

DATE ORGANIZED/ACQUIRED: November 29, 1950 (converted to Delaware LLC on 12/1/23)

**THE RIVERLANDS RECREATION AREA LLC
FACT SHEET**

COMPANY NAME: The Riverlands Recreation Area LLC

REGISTERED OFFICE: DE: c/o Corporation Service Company
251 Little Falls Drive
Wilmington, DE 19808

PA: c/o Corporation Service Company
5235 North Front Street
Harrisburg, PA 17110

OWNED BY: Talen Generation, LLC

SUBSIDIARIES: N/A

PRINCIPAL ACTIVITY: Owns and operates recreational land.

STATE OF ORGANIZATION: Delaware

QUALIFIED TO DO BUSINESS IN: Pennsylvania

FEDERAL TAX EIN: XXXXXXXXXX

OTHER BUSINESS LOCATIONS: N/A

DATE ORGANIZED/ACQUIRED: May 30, 2024

Updated as of 04.02.26)

ATTACHMENT 2

**Montour CT Project LLC
List of Officers**

Name	Title
Berryman, Brad	President & Chief Operating Officer
Lebsack, Dale E. Jr.	Chief Asset Development Officer
Muller, Cole	Chief Financial Officer
Wander, John C.	General Counsel and Secretary
Castro, Sergio	Vice President - Treasurer
Douglass, Thomas G. Jr.	Assistant Secretary
LaBella, Julie	Senior Vice President – External Affairs
Laurents, David R.	Assistant Treasurer
Mansh, Jennifer C.	Senior Vice President – Regulatory Counsel
Olagues, Darren J.	Chief Development Officer
Plagens, Anthony J.	Senior Vice President & Chief Accounting Officer
Reneau, Rebekah D.	Assistant Secretary
Selwyn, Adam M.	Assistant Controller
Toomey, Megan	Vice President – Environmental
Wright, Andrew M.	Chief Administrative Officer

ATTACHMENT 3

**Montour CT Project LLC
Persons exercising control:**

NAME	BUSINESS ADDRESS	TITLE
Brad Berryman	2929 Allen Parkway, 22 nd Floor Houston, TX 77019	President & Chief Operation Officer
Michael D. Moyer	Montour SES 18 McMichael Road Washingtonville, PA 17884	Plant Manager

ATTACHMENT 4

PADEP Air Permits

Location	Permit No. / Type	Permit Description	Date Issued	Expiration Date	Notes
Montour SES	Title V Permit No. 47-00001	Title V Air Permit	04/23/2025	04/22/2030	Permit includes RACT 3 and coal cessation modifications.
Montour SES	Title IV Permit No. 47-00001	Phase II Title IV Acid Rain Permit	04/23/2025	04/22/2030	Contains SO ₂ allowances and NO _x requirements for affected units.

ATTACHMENT 5

Montour, LLC 5-Year Compliance History (As of April 20, 2026)

Violation Details for Inspection ID: 3613524
Facility: [MONTOUR LLC/MONTOUR SES \(254018\)](#)
Program: Air Quality

Violation ID	Date	Violation Description	
8158229	09/13/2023	Construction, Modification, Reactivation and Operation of Sources, Plan Approval Requirements, Compliance requirement. Failure to Operate and maintain a source or control device in accordance with the specifications.	
		Resolution: Corrected/Abated	
		Legal Citation: 25 Pa Code 127. 25 : PA Code Website	
		Violation Type: Environmental Health & Safety	
		Related Enforcements	
		Please note: the following related enforcement data is accumulated from possibly many different sites/facilities that may be unrelated to the facility for this inspection.	
		Enforcement ID: 419679	Penalty Final Date:
		Enforcement Type: HPV Day Zero Action (Central Office Air)	Penalty Amount Assessed:
		Date Executed: 09/13/2023	Total Amount Due:
		Taken Against: MONTOUR LLC	Total Amount Collected:
On Appeal? N	Penalty Status:		
Enforcement Status: Waived			
# of Violations Addressed by this Enforcement and Penalty Action (possibly from many facilities): 1			
Please note: the following related enforcement data is accumulated from possibly many different sites/facilities that may be unrelated to the facility for this inspection.			
Enforcement ID: 419658	Penalty Final Date: 12/15/2023		
Enforcement Type: Notice of Violation	Penalty Amount Assessed:		
Date Executed: 09/13/2023	Total Amount Due:		
Taken Against: MONTOUR LLC	Total Amount Collected:		
On Appeal? N	Penalty Status: Completed		
Enforcement Status: Comply/Closed			
# of Violations Addressed by this Enforcement and Penalty Action (possibly from many facilities): 1			

Violation Details for Inspection ID: 3654429
 Facility: [MONTOUR LLC/MONTOUR SES \(254018\)](#)
 Program: Air Quality

Violation ID	Date	Violation Description	
8167131	12/05/2023	Construction, Modification, Reactivation and Operation of Sources, Operating Permit Requirements. Failure to obtain an operating permit before construction, modification, or reactivation of a new source or control device.	
		Resolution: Addressed Through Enforcement	
		Legal Citation: 25 Pa Code 127.443 : PA Code Website	
		Violation Type: Administrative	
		Related Enforcements	
		Please note: the following related enforcement data is accumulated from possibly many different sites/facilities that may be unrelated to the facility for this inspection.	
		Enforcement ID: 422577	Penalty Final Date: 12/26/2023
		Enforcement Type: Notice of Violation	Penalty Amount Assessed:
		Date Executed: 12/05/2023	Total Amount Due:
		Taken Against: MONTOUR LLC	Total Amount Collected:
On Appeal? N	Penalty Status: Completed		
		Enforcement Status: Comply/Closed	
		# of Violations Addressed by this Enforcement and Penalty Action (possibly from many facilities): 2	
		Please note: the following related enforcement data is accumulated from possibly many different sites/facilities that may be unrelated to the facility for this inspection.	
		Enforcement ID: 423382	Penalty Final Date: 06/24/2024
		Enforcement Type: Consent Order and Agreement	Penalty Amount Assessed: 24500
		Date Executed: 12/26/2023	Total Amount Due: 0
		Taken Against: MONTOUR LLC	Total Amount Collected: 39500
		On Appeal? N	Penalty Status: Completed
		Enforcement Status: Comply/Closed	
		# of Violations Addressed by this Enforcement and Penalty Action (possibly from many facilities): 2	

Violation ID	Date	Violation Description														
8167129	12/05/2023	<p>Construction, Modification, Reactivation and Operation of Sources, Plan Approval Requirements, Compliance requirement. Failure to Operate and maintain a source or control device in accordance with the specifications.</p>														
		<p>Resolution: Addressed Through Enforcement</p>														
		<p>Legal Citation: 25 Pa Code 127. 25 : PA Code Website</p>														
		<p>Violation Type: Environmental Health & Safety</p>														
		<p>Related Enforcements</p>														
		<p>Please note: the following related enforcement data is accumulated from possibly many different sites/facilities that may be unrelated to the facility for this inspection.</p>														
		<table border="0"> <tr> <td>Enforcement ID: 422577</td> <td>Penalty Final Date: 12/26/2023</td> </tr> <tr> <td>Enforcement Type: Notice of Violation</td> <td>Penalty Amount Assessed:</td> </tr> <tr> <td>Date Executed: 12/05/2023</td> <td>Total Amount Due:</td> </tr> <tr> <td>Taken Against: MONTOUR LLC</td> <td>Total Amount Collected:</td> </tr> <tr> <td>On Appeal? N</td> <td>Penalty Status: Completed</td> </tr> <tr> <td colspan="2">Enforcement Status: Comply/Closed</td> </tr> <tr> <td colspan="2"># of Violations Addressed by this Enforcement and Penalty Action (possibly from many facilities): 2</td> </tr> </table>	Enforcement ID: 422577	Penalty Final Date: 12/26/2023	Enforcement Type: Notice of Violation	Penalty Amount Assessed:	Date Executed: 12/05/2023	Total Amount Due:	Taken Against: MONTOUR LLC	Total Amount Collected:	On Appeal? N	Penalty Status: Completed	Enforcement Status: Comply/Closed		# of Violations Addressed by this Enforcement and Penalty Action (possibly from many facilities): 2	
		Enforcement ID: 422577	Penalty Final Date: 12/26/2023													
		Enforcement Type: Notice of Violation	Penalty Amount Assessed:													
		Date Executed: 12/05/2023	Total Amount Due:													
Taken Against: MONTOUR LLC	Total Amount Collected:															
On Appeal? N	Penalty Status: Completed															
Enforcement Status: Comply/Closed																
# of Violations Addressed by this Enforcement and Penalty Action (possibly from many facilities): 2																
<p>Please note: the following related enforcement data is accumulated from possibly many different sites/facilities that may be unrelated to the facility for this inspection.</p> <table border="0"> <tr> <td>Enforcement ID: 423382</td> <td>Penalty Final Date: 06/24/2024</td> </tr> <tr> <td>Enforcement Type: Consent Order and Agreement</td> <td>Penalty Amount Assessed: 24500</td> </tr> <tr> <td>Date Executed: 12/26/2023</td> <td>Total Amount Due: 0</td> </tr> <tr> <td>Taken Against: MONTOUR LLC</td> <td>Total Amount Collected: 39500</td> </tr> <tr> <td>On Appeal? N</td> <td>Penalty Status: Completed</td> </tr> <tr> <td colspan="2">Enforcement Status: Comply/Closed</td> </tr> <tr> <td colspan="2"># of Violations Addressed by this Enforcement and Penalty Action (possibly from many facilities): 2</td> </tr> </table>	Enforcement ID: 423382	Penalty Final Date: 06/24/2024	Enforcement Type: Consent Order and Agreement	Penalty Amount Assessed: 24500	Date Executed: 12/26/2023	Total Amount Due: 0	Taken Against: MONTOUR LLC	Total Amount Collected: 39500	On Appeal? N	Penalty Status: Completed	Enforcement Status: Comply/Closed		# of Violations Addressed by this Enforcement and Penalty Action (possibly from many facilities): 2			
Enforcement ID: 423382	Penalty Final Date: 06/24/2024															
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Date Executed: 12/26/2023	Total Amount Due: 0															
Taken Against: MONTOUR LLC	Total Amount Collected: 39500															
On Appeal? N	Penalty Status: Completed															
Enforcement Status: Comply/Closed																
# of Violations Addressed by this Enforcement and Penalty Action (possibly from many facilities): 2																

ATTACHMENT 6

Montour, LLC 5-Year Air Pollution Control Act Deviation History (As of April 20, 2026)

Section / Cond. #	Citation #	Source	Non-Compliance / Deviation	Monitoring Method(s)	Date	Duration	Corrective Action(s)
¹ Section E – III Monitoring Requirements/ #006	40CFR63.10031 (e)	Unit 2	Hg Downtime- monitor out of control hrs: 9:00-10:59 (Corrective Maintenance, Failed Weekly Integrity)	CEMS	02/8/2021	2Hr	Other Mechanical Corrective Action
¹ Section E – III Monitoring Requirements/ #006	40CFR63.10031 (e)	Unit 1	Hg Downtime: Monitoring System Malfunctions /Repairs associated with MSM Hrs: 3:00-4:59	CEMS	02/12/2021	2Hr	Electrical Corrective Action
¹ Section E – III Monitoring Requirements/ #006	40CFR63.10031 (e)	Unit 2	Hg Downtime: Hg Monitor out of control hrs 0800 - 1059 (Failed Wint)	CEMS	07/7/2021	3Hr	Other Mechanical Corrective Action-Replaced HgT path scrubber and Passed Wint.
¹ Section E – III Monitoring Requirements/ #006	40CFR63.10031 (e)	Unit 2	Hg Downtime: Monitoring System Malfunctions /Repairs associated with MSM Hrs: 0500-0959	CEMS	7/15/2021	5Hr	Other Corrective Action - Reprogrammed Flow Monitor Remote
¹ Section E – III Monitoring Requirements/ #006	40CFR63.10031 (e)	Unit 2	Hg Downtime: Monitoring System Malfunctions /Repairs associated with MSM Hrs: 0500-0559	CEMS	7/16/2021	1Hr	Other Corrective Action - Restarted Flow Remote Panel
¹ Section E – III Monitoring Requirements/ #006	40CFR63.10031 (e)	Unit 2	Hg Downtime: Monitoring System Malfunctions /Repairs associated with MSM Hrs: 0800-1059	CEMS	7/20/2021	3Hr	Other Corrective Action - Downloaded PLC
¹ Section E – III Monitoring Requirements/ #006	40CFR63.10031 (e)	Unit 2	Hg Downtime: Monitoring System Malfunctions /Repairs associated with MSM Hrs: 7/20/21, 1800 -	CEMS	7/20/2021	17Hr	Repaired Analyzer - Replaced faulty power supply in analyzer

¹Identified data represents a deviation from the Hg monitoring requirements as per section 63.10020(d) when the MATS final rule revisions were published and became effective on 9/9/2020.

ATTACHMENT 6 (continued)

Section / Cond. #	Citation #	Source	Non-Compliance / Deviation	Monitoring Method(s)	Date	Duration	Corrective Action(s)
¹ Section E – III Monitoring Requirements/ #006	40CFR63.10031 (e)	Unit 1	Hg Downtime: Monitoring System Malfunctions /Repairs associated with MSM Hrs: 0800-0859	CEMS	08/11/2021	1Hr	Other Electrical Corrective Action
¹ Section E – III Monitoring Requirements/ #006	40CFR63.10031 (e)	Unit 2	Hg Downtime: Hg Monitor out of control hrs 0900 - 1259 (Failed CET)	CEMS	08/25/2021	4Hr	Rebooted PLC and DAHS server - Lost 2vn2 Daily Check Time setting which caused CET to fail.
¹ Section E – III Monitoring Requirements/ #006	Table 8 (1)(c) 40CFR63 Subpart UUUUU	Unit 1	Hg Downtime- Monitoring System Malfunctions /Repairs associated with MSM Hrs: 1/6, 2300 - 1/7, 0359	CEMS	01/6/2022	5Hr	Other Electrical Corrective Action - Replaced temperature controller
¹ Section E – III Monitoring Requirements/ #006	40CFR63.10031 (e)	Unit 1	Hg Downtime- monitor out of control hrs: 07:00-07:59 (Failed daily CET)	CEMS	01/12/2022	1Hr	Other Corrective Action - Reran CET after conditioner returned to service
¹ Section E – III Monitoring Requirements/ #006	40CFR63.10031 (e)	Unit 1	Hg Downtime- monitor out of control hrs: 1/30, 1600 – 1/31, 0659 (Failed first fire daily CET)	CEMS	01/30/2022-1/31/2022	15Hr	Other Corrective Action – Daily CET ran as scheduled
¹ Section E – III Monitoring Requirements/ #006	40CFR63.10031 (e)	Unit 2	Hg Downtime- monitor out of control hrs: 1/16, 0900 - 1/17, 1059 Monitoring System Malfunctions /Repairs associated with MSM Hrs: 1/15, 2000 - 1/17, 1059	CEMS	1/15/2022–1/17/2022	39	Other Corrective Action – Hg analyzer internal problem. Placed like kind spare analyzer in service and repaired analyzer.
¹ Section E – III Monitoring Requirements/ #006	40CFR63.10031 (e)	Unit 2	Hg Downtime- monitor out of control hrs: 2/6, 0900 - 1059 Monitoring System Malfunctions /Repairs associated with MSM Hrs: 2/5, 0900 - 2/6, 1059	CEMS	2/5/2022–2/6/2022	26	Other Corrective Action – Hg analyzer internal problem. Replaced internal components

¹Identified data represents a deviation from the Hg monitoring requirements as per section 63.10020(d) when the MATS final rule revisions were published and became effective on 9/9/2020.

ATTACHMENT 6 (continued)

Section / Cond. #	Citation #	Source	Non-Compliance / Deviation	Monitoring Method(s)	Date	Duration	Corrective Action(s)
¹ Section E – III Monitoring Requirements/ #006	40CFR63.10031 (e)	Unit 1	Hg Downtime- Monitor Out Of Control and Monitoring System Malfunctions (MSM) /Repairs associated with MSM: 04:00-05:59 (No valid CET within the past 26 operating hours)	CEMS	07/20/2022	2Hr	Other Corrective Action - Ran and passed CET
¹ Section E – III Monitoring Requirements/ #006	40CFR63.10031 (e)	Unit 1	Hg Downtime- Monitor Out Of Control hrs: 12/21, 1500 – 12/22, 559 (No valid Flow Monitor CET within the past 26 operating hours)	CEMS	12/21/2022-12/22/2022	15Hr	Other Corrective Action – Ran and passed CET
¹ Section E – III Monitoring Requirements/ #006	40CFR63.10031 (e)	Unit 1	Hg Downtime- Monitor Out Of Control and Monitoring System Malfunctions (MSM) /Repairs associated with MSM hrs: 12/26, 0:00 – 12/27, 8:59 (No valid Weekly Integrity Check)	CEMS	12/26/2022 – 12/27/2022	33	Other Mechanical Corrective Action – Replace filters then ran and passed CET
¹ Section E – III Monitoring Requirements/ #006	40CFR63.10031 (e)	Unit 1	Hg Downtime- Monitor Out of Control and Monitoring System Malfunctions (MSM) /Repairs associated with MSM Hrs.: 02/03 (21:00) – 2/4 (20:59) (Failed daily CET)	CEMS	02/03/2023 - 02/04/2023	24Hr	Other Mechanical Corrective Action - Water in sample line restricting sample flow. Removed water passed CET.
¹ Section E – III Monitoring Requirements/ #006	40CFR63.10031 (e)	Unit 1	Hg Downtime- Monitoring System Malfunctions (MSM) /Repairs associated with MSM Hrs.: 02/04 (23:00) – 2/5 (0:59) (Failed daily CET)	CEMS	02/04/2023 - 02/05/2023	2Hr	Other Mechanical Corrective Action - Water in sample line restricting sample flow. Removed water passed CET.
¹ Section E – III Monitoring Requirements/ #006	40CFR63.10031 (e)	Unit 1	Hg Downtime- Monitor Out of Control and Monitoring System Malfunctions (MSM) /Repairs associated with MSM Hrs.: 02/05 (07:00 – 13:59) (Failed daily CET)	CEMS	02/05/2023	7Hr	Other Mechanical Corrective Action - Water in sample line restricting sample flow. Removed water, adjusted pump, and passed CET.
¹ Section E – III Monitoring Requirements/ #006	40CFR63.10031 (e)	Unit 1	Hg Downtime- Monitor Out of Control and Monitoring System Malfunctions (MSM) /Repairs associated with MSM Hrs.: 03/15 (06:00 – 08:59) (sample interface malfunction)	CEMS	03/15/2023	3Hr	Other Mechanical Corrective Action - Partial separation of sample line at Hot Box connection. Remade connection, passed CET.

¹Identified data represents a deviation from the Hg monitoring requirements as per section 63.10020(d) when the MATS final rule revisions were published and became effective on 9/9/2020.

ATTACHMENT 6 (continued)

Section / Cond. #	Citation #	Source	Non-Compliance / Deviation	Monitoring Method(s)	Date	Duration	Corrective Action(s)
¹ Section E – III Monitoring Requirements/ #006	40CFR63.10031 (e)	Unit 1	Hg Downtime- Preventative Maintenance Hrs.: 03/16 (10:00 – 11:59)	CEMS	03/16/2023	2Hr	No Corrective Action Required
^{1,2} Section E – III Monitoring Requirements/ #006	40CFR63.10031 (e)	Unit 1	Hg Downtime- Monitor Out of Control and Monitoring System Malfunctions (MSM) /Repairs associated with MSM Hrs.: 06/21 (13:00 – 16:59) (sample interface malfunction)	CEMS	06/21/2023	4Hr	Other Mechanical Corrective Action - Loss of Umbilical Heating and Sample Tubing Damage. Replacement of Umbilical in Progress
^{1,2} Section E – III Monitoring Requirements/ #006	40CFR63.10031 (e)	Unit 1	Hg Downtime- Monitor Out of Control and Monitoring System Malfunctions (MSM) /Repairs associated with MSM Hrs.: 06/22 (08:00 – 15:59) (sample interface malfunction)	CEMS	06/22/2023	32Hr	Other Mechanical Corrective Action - Loss of Umbilical Heating and Sample Tubing Damage. Replacement of Umbilical in Progress
^{1,2} Section E – III Monitoring Requirements/ #006	40CFR63.10031 (e)	Unit 1	Hg Downtime- Monitor Out of Control and Monitoring System Malfunctions (MSM) /Repairs associated with MSM Hrs.: 06/28 (00:00) – 6/29 (17:59) (sample interface malfunction)	CEMS	06/28/2023-6/29/2023	42Hr	Other Mechanical Corrective Action - Loss of Umbilical Heating and Sample Tubing Damage. Replacement of Umbilical in Progress
^{1,2} Section E – III Monitoring Requirements/ #006	40CFR63.10031 (e)	Unit 1	Hg Downtime- Monitor Out of Control and Monitoring System Malfunctions (MSM) /Repairs associated with MSM Hrs.: 07/10 (12:00) – 7/13 (22:59) (sample interface malfunction)	CEMS	07/10/2023 - 07/13/2023	83Hr	Other Corrective Action - Repair, replacement of portion of Umbilical
¹ Section E – III Monitoring Requirements/ #006	40CFR63.10031 (e)	Unit 1	Hg Downtime- Monitor Out of Control and Monitoring System Malfunctions (MSM) /Repairs associated with MSM Hrs.: 08/15 (3:00-4:59) (corrective maintenance - CET & Weekly Integrity Test Overdue)	CEMS	08/15/2023	2Hr	Other Corrective Action – Passed CET & WINT

¹Identified data represents a deviation from the Hg monitoring requirements as per section 63.10020(d) when the MATS final rule revisions were published and became effective on 9/9/2020.

²Duration reflects operation on 100% gas

ATTACHMENT 6 (continued)

Section / Cond. #	Citation #	Source	Non-Compliance / Deviation	Monitoring Method(s)	Date	Duration	Corrective Action(s)
¹ Section E – III Monitoring Requirements/ #006	40CFR63.10031 (e)	Unit 2	Hg Downtime- Monitoring System Malfunctions (MSM) /Repairs associated with MSM Hrs.: 07/04 (19:00 – 19:59) (sample interface malfunction)	CEMS	07/04/2023	1Hr	Other Corrective Action - Reset HVAC and reduced shelter temp returned 3320 temps to normal
¹ Section E – III Monitoring Requirements/ #006	40CFR63.10031 (e)	Unit 2	Hg Downtime- Non-Hg Monitoring System Malfunction (MSM) Hrs.: 07/05 (17:00 – 18:59)	CEMS	07/05/2023	2Hr	Other Corrective Action – PLC Rebooted
^{1,2} Section E – III Monitoring Requirements/ #006	40CFR63.10031 (e)	Unit 2	Hg Downtime- Monitoring System Malfunctions (MSM) /Repairs associated with MSM Hrs.: 07/31 (1:00 – 6:59) (sample interface malfunction)	CEMS	07/31/2023	6Hr	Other Electrical Corrective Action - replaced SSR and passed CET (which was also 1st fire CET)
¹ Section E – III Monitoring Requirements/ #006	40CFR63.10031 (e)	Unit 2	Hg Downtime- Monitoring System Malfunctions (MSM) /Repairs associated with MSM Hrs.: 09/03 (17:00 – 23:59) (sample interface malfunction)	CEMS	09/03/2023	7Hr	Other Corrective Action – Reduced shelter temperature and returned HVAC to operation
¹ Section E – III Monitoring Requirements/ #006	40CFR63.10031 (e)	Unit 2	Hg Downtime- Preventative Maintenance Hrs.: 09/04 (2:00 – 2:59)	CEMS	09/04/2023	1Hr	Other Corrective Action
¹ Section E – III Monitoring Requirements/ #006	40CFR63.10031 (e)	Unit 2	Hg Downtime- Preventative Maintenance Hrs.: 09/05 (2:00 – 2:59)	CEMS	09/05/2023	1Hr	Other Corrective Action
¹ Section E – III Monitoring Requirements/ #006	40CFR63.10031 (e)	Unit 2	Hg Downtime- Preventative Maintenance Hrs.: 09/06 (6:00 – 6:59)	CEMS	09/06/2023	1Hr	Other Corrective Action

¹ Identified data represents a deviation from the Hg monitoring requirements as per section 63.10020(d) when the MATS final rule revisions were published and became effective on 9/9/2020.

² Duration reflects operation on 100% gas

ATTACHMENT 6 (continued)

Section / Cond. #	Citation #	Source	Non-Compliance / Deviation	Monitoring Method(s)	Date	Duration	Corrective Action(s)
¹ Section E – III Monitoring Requirements/ #006	40CFR63.10031 (e)	Unit 2	Hg Downtime- Preventative Maintenance Hrs.: 09/06 (22:00 – 22:59)	CEMS	09/06/2023	1Hr	Other Corrective Action
Federal Implementation Plan (FIP) requirements in 40 CFR 52.2065 for RACT	40 CFR Part 52, Subpart NN, specifically §52.2065(h)(1)	Unit 1 & 2	The periodic report for the reporting period of March 29, 2023 through June 30, 2023 was submitted beyond the applicable date of July 30, 2023	Reporting	07/30/2023	N/A	The report was submitted on August 17, 2023. Note that the August 21, 2023 comments to the Draft RACT 2/3 TV permit modification submitted to the Department seek to sync the deadline for submitting the periodic report under Subpart NN with the facility's current schedule for submitting Title V semi-annual reports, which are due Sept. 1st for the first semester and March 1 st for the 2 nd semester
Federal Implementation Plan (FIP) requirements in 40 CFR 52.2065 for RACT	40 CFR Part 52, Subpart NN, specifically §52.2065(f)(1)	Unit 1&2	Average emissions were elevated relative to the Unit 2 Specific NOx 17,721 lbs/day Limit	CEMS	7/29/2023; 7/31/2023; 8/1/2023- 8/4/2023; 8/15/2023- 8/17/2023	NA	The facility's 30-day average NOx emission rate exceedances occurred during the gas commissioning phase of the facility's natural gas firing project; during gas commissioning, operating conditions are materially different from normal operation which ultimately led to the elevated NOx emissions. The exceedances were primarily caused by 1) an elevated NOx emission day on coal due to insufficient opportunity to test SCR controls during gas commissioning, 2) a high number of gas commissioning days that counted as operating days, but did not help average down the higher days in the period, and 3) a NOx CEMs issue that caused conservatively high substituted NOx values to be used in the 30-day calculation. Montour has completed the gas project commissioning and has therefore corrected the problems above.

¹Identified data represents a deviation from the Hg monitoring requirements as per section 63.10020(d) when the MATS final rule revisions were published and became effective on 9/9/2020.

ATTACHMENT 6 (continued)

Section / Cond. #	Citation #	Source	Non-Compliance / Deviation	Monitoring Method(s)	Date	Duration	Corrective Action(s)
Federal Implementation Plan (FIP) requirements in 40 CFR 52.2065 for RACT	40 CFR Part 52, Subpart NN, specifically §52.2065(f)(2)	Unit 2	Measured emissions were elevated relative to the Unit-Specific Daily NOX Mass Emissions Limits of 17,721 lb/day	CEMS	7/5/2023	NA	Elevated emissions occurred when the unit was dispatched on coal in the middle of commissioning the unit on gas. Due to modifications made for the gas project, which had not been fully tuned, the SCR ammonia injection did not operate properly when put in service for coal combustion. The equipment was subsequently repaired/adjusted.
Federal Implementation Plan (FIP) requirements in 40 CFR 52.2065 for RACT	40 CFR Part 52, Subpart NN, specifically §52.2065(f)(2)	Unit 2	Measured emissions were elevated relative to the Unit-Specific Daily NOX Mass Emissions Limits of 17,721 lb/day	CEMS	9/3/2023	NA	The unit exceeded the daily maximum NOx mass limit on a day the unit was starting up on coal. During startups NOx cannot be controlled by the SCR because the flue gas temperature is not hot enough for the reduction reaction. This startup incurred delays due to equipment issues in safely raising load and temperature, so the calendar day only included higher startup NOx emissions.
^{1,2} Section E – III Monitoring Requirements/ #006	40CFR63.10031 (e)	Unit 2	Hg Downtime- Monitoring System Malfunctions (MSM) /Repairs associated with MSM Hrs.: 02/28 (11:00 – 11:59) (ancillary analyzer malfunction)	CEMS	02/28/2024	1Hr	Other Corrective Action – reduced load & recalibrated flue gas flow monitor
^{1,2} Section E – III Monitoring Requirements/ #006	40CFR63.10031 (e)	Unit 2	Hg Downtime- Monitoring System Malfunctions (MSM) /Repairs associated with MSM Hrs.: 02/28 (13:00 – 13:59) (ancillary analyzer malfunction)	CEMS	02/28/2024	1Hr	Other Corrective Action – reduced load & recalibrated flue gas flow monitor

¹Identified data represents a deviation from the Hg monitoring requirements as per section 63.10020(d) when the MATS final rule revisions were published and became effective on 9/9/2020.

²Duration reflects operation on 100% gas

ATTACHMENT 6 (continued)

Section / Cond. #	Citation #	Source	Non-Compliance / Deviation	Monitoring Method(s)	Date	Duration	Corrective Action(s)
^{1,2} Section E – III Monitoring Requirements/ #006	40CFR63.10031 (e)	Unit 1	Hg Downtime- Monitoring System Malfunctions (MSM) /Repairs associated with MSM Hrs.: 6/24 (03:00 – 03:59) (ancillary analyzer malfunction)	CEMS	06/24/2024	1Hr	Other Action – Returned the analyzer to normal service
^{1,2} Section E – III Monitoring Requirements/ #006	40CFR63.10031 (e)	Unit 2	Hg Downtime- Monitor Out of Control Period/Repairs associated with OOC Hrs.: 06/13(10:00 – 13:59) (Failed Wint)	CEMS	06/13/2024	4Hr	Other Mechanical Corrective Action -Replaced filter and increased converter temp.
^{1,2} Section E – III Monitoring Requirements/ #006	40CFR63.10031 (e)	Unit 2	Hg Downtime- Monitoring System Malfunctions (MSM) /Repairs associated with MSM Hrs.: 6/15 19:00 - 6/30 23:59) (ancillary analyzer malfunction)	CEMS	06/15/2024 – 6/30/2024	346Hr	Other Corrective Action - After investigating high Hg concentrations for a while, it was determined that a partially clogged probe tube was the root cause. The probe tube was cleaned out and placed back in service.
^{1,2,3} Section E GROUP MATS Rule - III Monitoring Requirements/ #006	40CFR63.10031 (e)	Unit 2	Hg Downtime- Monitoring System Malfunctions (MSM) /Repairs associated with MSM Hrs: 7/1/2024 00:00 - 7/11/2024 09:59)	CEMS	7/1/2024 - 7/11/2024	250Hr	Other Corrective Action – After extensive troubleshooting to determine the root cause of the high Hg concentrations, it was determined that a partially clogged probe tube was the root cause. The probe tube was cleaned out.
^{1,2,3} Section E GROUP MATS Rule - III Monitoring Requirements/ #006	40CFR63.10031 (e)	Unit 1	Hg Downtime- Monitoring System Malfunctions (MSM) /Repairs associated with MSM Hrs.: 07/08/2024 (04:00 – 04:59)	CEMS	07/08/2024	1Hr	No Action Required
Section E – GROUP CEMS-IV Reporting Requirements/ #022	25 Pa. Code Chapter 139 and the Departments "Continuous Source Monitoring Manual"	Unit 1	Recertification RATA Completion Notification – Late Submission The RATA was completed on 12/12/2024. This notification, required within 10 days of test completion, was submitted 1/9/2025.	Reporting	NA	NA	Measures have been implemented to improve the internal tracking procedures. The tracking spreadsheet will be reviewed and revised to assure that it identifies the deadlines and responsible individuals for performing each task in order to prevent future delays in reporting.

¹Identified data represents a deviation from the Hg monitoring requirements as per section 63.10020(d) when the MATS final rule revisions were published and became effective on 9/9/2020.

²Duration reflects operation on 100% gas

ATTACHMENT 6 (continued)

Section / Cond. #	Citation #	Source	Non-Compliance / Deviation	Monitoring Method(s)	Date	Duration	Corrective Action(s)
Section E – GROUP CEMS-II Monitoring Requirements/ #009	40 CFR Part 75 Continuous Emission Monitoring §40 CFR 75.20	Unit 1	<p>Electronic monitoring plan (eMP) submitted to USEPA via ECMPS – Late Submission</p> <p>The Recertification RATA was completed on 12/12/2024. The eMP submission, required within 45 days of test completion, was submitted on 1/29/2025.</p>	Reporting	NA	NA	<p>Implementation of new SO2 monitoring methods (due to the result of elimination of SO2 CEMS) created MP file errors preventing ECMPS submission. Numerous discussions with EPA ensued until the file was successfully submitted on 1/29/2025.</p> <p>Measures have been implemented to improve the internal tracking procedures. The tracking spreadsheet will be reviewed and revised to assure that it identifies the deadlines and responsible individuals for performing each task in order to prevent future delays in reporting.</p>
Section E – GROUP CEMS-II Monitoring Requirements/ #009	40 CFR Part 75 Continuous Emission Monitoring §40 CFR 75.20	Unit 2	<p>Electronic monitoring plan (eMP) submitted to USEPA via ECMPS – Late Submission</p> <p>The Recertification RATA was completed on 1/14/2025. The eMP submission, required within 45 days of test completion, was submitted on 3/3/2025.</p>	Reporting	NA	NA	<p>Due to DAHS problems, the data was not able to be pulled into anedr file by COB on the deadline, Friday February 28, 2025. On the next working day, Monday 3/3/2025, the DAHS issues were corrected and the edr was submitted.</p> <p>Measures have been implemented to improve the internal tracking procedures. The tracking spreadsheet will be reviewed and revised to assure that it identifies the deadlines and responsible individuals for performing each task in order to prevent future delays in reporting.</p>



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: Montour CT Project, LLC / Montour CT Facility

DEP Client ID# (If Known): _____

Type of Review required and Fees:

Source which is not subject to NSPS, NESHAPs, MACT, NSR and PSD:	\$3,100
Source requiring approval under NSPS or NESHAPS or both:	\$9,300
Source requiring approval under NSR:	\$9,400
Source requiring the establishment of a MACT limitation:	\$
Source requiring approval under PSD:	\$40,600

Applicant's Checklist

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

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

Certification of Truth, Accuracy and Completeness by a Responsible Official

I, Brad Berryman, 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):

Date: 6/10/2026

Name (Print): Brad Berryman

Title: President & Chief Operating Officer

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: Two identical natural gas-fired combined cycle combustion turbines equipped with natural gas-fired duct burners in the heat recovery steam generators (HRSGs) arranged in a 1x1 configuration with a steam turbine generator.

Manufacturer GE Vernova (or equivalent)	Model No. 7HA.02 (or equivalent)	Number of units 2	
Maximum heat input (Btu/hr) 3,518 MMBtu/hr (each turbine) 4,509 MMBtu/hr (each turbine w duct burner)	Rated heat input (Btu/hr) 3,518 MMBtu/hr (each turbine) 4,509 MMBtu/hr (each turbine w duct burner)	Typical heat input (Btu/hr) 3,518 MMBtu/hr (each turbine) 4,509 MMBtu/hr (each turbine w duct burner)	Furnace Volume
Grate Area (if applicable) NA	Method of firing Premix Burners		

Indicate how combustion air is supplied to boiler
NA

Indicate the Steam Usage: NA

Mark and describe soot Cleaning Method:

- | | |
|---------------------------|--------------------------------|
| i. Air Blown | iv. Other <u>NA</u> |
| ii. Steam Blown | v. Frequency of Cleaning _____ |
| iii. Brushed and Vacuumed | |

Maximum Operating schedule

Hours/Day 24 (each unit)	Days/Week 7 (each unit)	Days/Year 365 (each unit)	Hours/Year 8760 (each unit)
-----------------------------	----------------------------	------------------------------	--------------------------------

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

Capacity (specify units)

Per hour 4,509 MMBtu (turbine+DB)	Per day	Per week	Per year
--------------------------------------	---------	----------	----------

Typical Operating schedule

Hours/Day 24 (each unit)	Days/Week 7 (each unit)	Days/Year 365 (each unit)	Hours/Year 8760 (each 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.
 The CCTs will be fired by natural gas only.

Section B - Combustion Unit Information (Continued)

3. 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
Oil Number	GPH @ 60°F	X 10 ³ Gal	% by wt		Btu/Gal. & Lbs./Gal. @ 60 °F
Natural Gas X	4,386,090 (each turbine w duct burner) SCFH	X 10 ⁶ Gal	0.5 gr/100 SCF	NA	1,020 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 GE Vernova (or equivalent)	Model Number 7HA.02 (or equivalent)	Type of Atomization (Steam, air, press, mech., rotary cup) NA	
Number of Burners NA	Maximum fuel firing rate (all burners) 4,509 MMBtu/hr (each turbine w duct burner)	Normal fuel firing rate 4,509 MMBtu/hr (each turbine w duct burner)	
If oil, temperature and viscosity. NA			
Maximum theoretical air requirement NA			
Percent excess air 100% rating NA			
Turndown ratio NA			
Combustion modulation control (on/off, low-high fire, full automatic, manual). Describe. NA			
Main burner flame ignition method (electric spark, auto gas pilot, hand-held torch, other). Describe. NA			

5. Nitrogen Oxides (NO_x) control Options

Mark and describe the NO_x control options adopted

Low excess air (LEA)	Flue gas recirculation	Other. <u>Good combustion and operating practices</u>
Over fire air (OFA)	Burner out of service	
X Low-NO _x burner	Reburning	
Low NO _x burners with over fire air	X Flue gas treatment (SCR / SNCR)	

Section B - Combustion Unit Information (Continued)

6. Miscellaneous Information

Describe fly ash reinjection operation
 NA

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.
 See Application Report for discussion of regulatory applicability and monitoring requirements.

Describe each proposed modification to an existing source.
 NA

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.
 Emissions during startup/shutdown will be minimized by limiting the time that the unit is in startup or shutdown mode. Startup and shutdown are defined in Section 3 of the Narrative. The emissions from startup and shutdown shall be included in the 12-month rolling sum. Refer to Appendix B for startup and shutdown emission calculations.

Describe in detail with a schematic diagram of the control options adopted for SO₂ (if applicable).
 Natural gas is only fuel used. Process flow diagram is provided in Appendix A.

Anticipated milestones:

Expected commencement date of construction/reconstruction: 2028
 Expected completion date of construction/reconstruction: 2031
 Anticipated date(s) of start-up: 2031

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	See Appendix B for complete PTE calculations				
PM ₁₀					
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.

See Appendix B for detailed PTE calculations. A maximum operating schedule of 8760 hr/yr was assumed.

2. Gas Conditioning - NA

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 - NA

Manufacturer		Type	Model No.
Pressure Drop (in. of water)	Inlet Volume _____ ACFM @ _____ °F		Outlet Volume _____ ACFM @ _____ °F _____ % Moisture
Number of Individual Cyclone(s)		Outlet Straightening Vanes Used? <input type="checkbox"/> Yes <input type="checkbox"/> 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 - NA

Equipment Specifications

Manufacturer _____		Model No. _____	<input type="checkbox"/> Pressurized Design <input type="checkbox"/> Suction Design
Number of Compartments _____	Number of Filters Per Compartment _____	Is Baghouse Insulated? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Can each compartment be isolated for repairs and/or filter replacement?		<input type="checkbox"/> Yes <input type="checkbox"/> No	
Are temperature controls provided? (Describe in detail)		<input type="checkbox"/> Yes <input type="checkbox"/> No	
Dew point at maximum moisture _____ °F		Design inlet volume _____ SCFM	
Type of Fabric			
Material _____	<input type="checkbox"/> Felted	<input type="checkbox"/> Membrane	
Weight _____ oz/sq.yd	<input type="checkbox"/> Woven	<input type="checkbox"/> Others: List: _____	
Thickness _____ in	<input type="checkbox"/> Felted-Woven		
Fabric permeability (clean) @ 1/2" 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			
<input type="checkbox"/> Manual Cleaning	<input type="checkbox"/> Bag Collapse	<input type="checkbox"/> Reverse Air Jets	
<input type="checkbox"/> Mechanical Shakers	<input type="checkbox"/> Sonic Cleaning	<input type="checkbox"/> Other: _____	
<input type="checkbox"/> Pneumatic Shakers	<input type="checkbox"/> 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			
<input type="checkbox"/> Timer	Frequency if timer actuated _____		
<input type="checkbox"/> Expected pressure drop range _____ in. of water	<input type="checkbox"/> 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: - NA _____

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 - NA

Equipment specifications

Manufacturer	Model No.	<input type="checkbox"/> Wet	<input type="checkbox"/> Dry
		<input type="checkbox"/> Single-Stage	<input type="checkbox"/> Two-Stage

Gas distribution grids <input type="checkbox"/> YES <input type="checkbox"/> 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 _____ Micro amperes/ft ²	Corona power _____ Watts/1000 ACFM	Corona power density _____ 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: - NA _____
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: <input type="checkbox"/> Counter-current <input type="checkbox"/> Cross flow <input type="checkbox"/> 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
TBD	TBD	TBD

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).

See Appendix B

Operating parameters

Volume of gases handled (ACFM) 1,503,000 @ 172 (°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)
5 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 (%)
NO _x		2.0 ppmvd @ 15% O ₂	

Section C - Air Cleaning Device (Continued)

9. Other Control Equipment: Oxidation Catalyst

Equipment specifications

Manufacturer TBD	Type TBD	Model No TBD
---------------------	-------------	-----------------

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.

The oxidation catalyst will remove carbon monoxide (CO) and volatile organic compounds (VOC) from the turbine exhaust gas stream.

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

Maintaining a 4-hour rolling average of the catalyst inlet temperature within the range suggested by the catalyst manufacturer.

Emissions data

Pollutant	Inlet	Outlet	Removal Efficiency (%)
CO		2.0 ppmvd @ 15% O ₂	
VOC		1.5 ppmvd @ 15% O ₂ (w duct burners) 1.0 ppmvd @ 15% O ₂ (no duct burners)	

Section C - Air Cleaning Device (Continued)

10. Costs NA

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

Device	Direct Cost	Indirect Cost	Total Cost	Operating Cost

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.

NA

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

See Section 5 BACT/BAT/LAER and Appendix B – Vendor Cases that guarantee post-control emissions.

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

Montour will perform maintenance and monitoring in accordance with 40 CFR Part 60, Subpart KKKKa.

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.

No

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? | <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO |
| b. New Source Review, 25 Pa. Code Chapter 127, Subchapter E? | <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO |
| c. New Source Performance Standards, 40 CFR Part 60?
(If Yes, which subpart) <u>KKKKa and TTTTa</u> | <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO |
| d. National Emissions Standards for Hazardous Air Pollutants (NESHAPS), 40 CFR Part 61?
If Yes, which subpart) <u>YYYY</u> | <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO |
| e. Maximum Achievable Control Technology (MACT), 40 CFR Part 63?
(If Yes, which subpart) _____ | <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO |

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

See Narrative - Section 5 and Appendix D

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)

See Appendix B

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	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)
See Appendix B							

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

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

338.0 credits will be required for NOx offsets and 91.0 credits will be required for VOC offsets. See Narrative Section 4 and Appendix B for more detail.
- Provide a demonstration that the lowest achievable emission rate (LAER) control techniques will be implemented (if applicable). See Narrative Section 5 and Appendix D for BACT/LAER/BAT analyses. See Appendix B for detailed emission calculations
- 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). See Narrative Section 6.

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 B.

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

Section F - Flue and Air Contaminant Emission

1. Estimated Maximum Emissions* - See Appendix B for detailed PTE calculations

Pollutant	Maximum emission rate			Calculation/ Estimation Method
	specify units	lbs/hr	tons/yr.	
PM			211	Vendor Data
PM ₁₀			211	Vendor Data
SO _x			57	Vendor Data
CO			225	Vendor Data
NO _x			291	Vendor Data
VOC			80	Vendor Data
Others: (e.g., HAPs)	-----	-----	See Appendix B-	-----

* 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 CCCT Stack 1

List Source(s) or source ID exhausted to this stack:
CCCT 1

% of flow exhausted to stack: 100

Stack height above grade (ft.) 225 ft
Grade elevation (ft.)

Stack diameter (ft) or Outlet duct area (sq. ft.)
22 ft

Weather Cap
 YES NO

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

See Appendix E

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. See Appendix E

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

Stack Exhaust

Volume 1,503,000 ACFM Temperature 172 °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.

2. Stack and Exhauster

Stack Designation/Number CCCT Stack 2						
List Source(s) or source ID exhausted to this stack: CCCT 2				% of flow exhausted to stack: 100		
Stack height above grade (ft.) 225 ft Grade elevation (ft.)		Stack diameter (ft) or Outlet duct area (sq. ft.) 22 ft			Weather Cap <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
Distance of discharge to nearest property line (ft.). Locate on topographic map. See Appendix E						
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. See Appendix E						
Location of Stack** Latitude/Longitude Point of Origin	Latitude			Longitude		
	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
Stack Exhaust Volume <u>1,503,000</u> ACFM Temperature <u>172</u> °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:

Narrative:

- Section 1 – Executive Summary
- Section 2 – Project Description
- Section 3 – Emissions Calculation Methodologies and Summary
- Section 4 – Applicable Federal and State Requirements
- Section 5 – BACT/LAER/BAT Analyses
- Section 6 – Alternative Sites Analysis
- Appendix A – Site Map and Process Flow Diagram
- Appendix B – Potential to Emit Calculations
- Appendix C – Plan Approval Application Forms
- Appendix D – BACT/LAER/BAT Supporting Documentation
- Appendix E – Ambient Air Quality Analysis
- Appendix F – Municipal Notifications
- Appendix G – Acid Rain Permit Application



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

Addendum A: Source Applicable Requirements

Describe and cite all applicable requirements pertaining to this source.

Note: A Method of Compliance Worksheet (Addendum 1) must be completed for each requirement listed.

Citation Number	Citation Limitation	Limitation Used
40 CFR Part 60 Subpart KKKKa	Entire section as applicable.	<p>For a new combustion turbine firing natural gas with a rating greater than 850 MMBtu/hr and an utilization greater than 45%, the NO_x emission standard is 5 ppm at 15% O₂.</p> <p>Subpart KKKKa includes a NO_x limit of 96 ppm at 15% O₂ for turbines operating during periods of turbine tuning, byproduct-fired turbines, and/or operating at less than 70 percent of the base load rating.</p> <p>SO₂ emissions into the atmosphere from combustion turbines located in the continental U.S. are limited to 0.9 lb/MWh gross output [or 110 nanograms per Joule (ng/J)], or the units must not burn any fuel with total potential sulfur emissions in excess of 0.060 lb SO₂/MMBtu heat input</p>
40 CFR Part 60 Subpart TTTTa	<p>Phase 1 Standard of Performance for Base Load CTs:</p> <p>40 CFR §60.5520a(a) and Table 1 of Subpart TTTTa</p>	The 12-operating month averages beginning before January 2032, emissions of CO ₂ must be limited to 800 to 1,250 lb CO ₂ /MWh of gross energy output; or 820 to 1,280 lb CO ₂ /MWh of net energy output, as determined by the procedures in §60.5525a.
40 CFR Part 63 Subpart YYYY	Entire section as applicable.	Limit the concentration of formaldehyde to 91 ppbvd or less at 15% O ₂ , except during turbine startup.
Cross-State Air Pollution Rule (CSAPR)	40 CFR 97 Subpart AAAAA	CSAPR NO _x Annual Trading Program
Cross-State Air Pollution Rule (CSAPR)	40 CFR 97 Subpart CCCCC	CSAPR SO ₂ Group 1 Trading Program
Cross-State Air Pollution Rule (CSAPR)	40 CFR 97 Subpart EEEEE	CSAPR NO _x Ozone Season Group 2 Trading Program
Title IV Acid Rain Program	40 CFR 72 (Permits Regulation), 40 CFR 73 (SO ₂ Allowance System), 40 CFR 75 (Continuous Emission Monitoring); and 40 CFR 77 (Excess Emissions).	The Acid Rain Program was developed to reduce SO ₂ and NO _x emissions from electric utility plants.

25 Pa. Code 123.1 and 123.2	Standards for allowable outdoor fugitive emissions and reasonable actions to control fugitive emissions.	Standards for allowable outdoor fugitive emissions and reasonable actions to control fugitive emissions.
25 Pa. Code 123.11	123.11(a)(2)	Combustion units with heat inputs equal to or greater than 600 MMBtu/hr are subject to an emission limit of 0.1 lb/MMBtu.
25 Pa. Code 123.13	123.13(c)(1)	PM emission limit of 0.02 grain per dry standard cubic foot, when the effluent gas volume is greater than 300,000 dry standard cubic feet per minute.
25 Pa. Code 123.21	Entire 25 Pa. Code 123.21	Sulfur oxide emissions may not exceed 500 parts per million, by volume, dry basis.
25 Pa. Code 123.22	Section 123.22, Sulfur Compound Emissions – Combustion Unit, provides fuel sulfur restrictions applicable to combustion units.	SO ₂ emissions limited to 4 lb/MMBtu.
25 Pa. Code 123.31	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.	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.
25 Pa. Code 123.41-43	A person may not permit the emission into the outdoor atmosphere of visible air contaminants in such a manner that the opacity is equal to or greater than 20% for a period if more than 1 minute in any hour or equal to or greater than 60% at any time.	A person may not permit the emission into the outdoor atmosphere of visible air contaminants in such a manner that the opacity is equal to or greater than 20% for a period if more than 1 minute in any hour or equal to or greater than 60% at any time.
25 Pa. Code 123.51	Section 123.51, Nitrogen Compound Emissions – Monitoring Requirements, requires combustion units with rated heat inputs greater than 250 MMBtu/hr and an annual capacity factor greater than 30% to install, operate, and maintain continuous nitrogen oxides monitoring systems and other monitoring systems to convert data to required reporting units in compliance with Chapter 139, Subchapter C.	Combustion units with rated heat inputs greater than 250 MMBtu/hr and an annual capacity factor greater than 30% must install, operate, and maintain continuous nitrogen oxides monitoring systems and other monitoring systems to convert data to required reporting units in compliance with Chapter 139, Subchapter C.



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

Addendum 1

Method Of Compliance Worksheet

SECTION 1. APPLICABLE REQUIREMENT

Federal Tax Id:	XXXXXXXXXX	Firm Name:	Montour CT Project LLC
Plant Code:		Plant Name:	Montour CT

Applicable Requirement for: (please check only one box below)

- The entire site
- A group of sources, Group ID: Source ID CCCT 1 and Source ID CCCT 2
- A single source, Unit ID: _____
- Alternative Scenario, Scenario Name: _____

Citation #: 40 CFR Part 60 Subpart KKKKa

Compliance Method based upon: Applicable Requirement Gap Filling Requirement

Method of Compliance Type: (Check all that applies and complete all appropriate sections below)

- Monitoring Testing Reporting
- Record Keeping Work Practice Standard

Section 2: Monitoring

1. Monitoring device type (stack test, CEM, etc.): NOx CEMS, initial RATA, and fuel sulfur content

2. Monitoring device location: Source ID CCCT 1 and Source ID CCCT 2

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

Fuel sulfur content and CEMS for NOx.

3. How will data be reported: Quarterly Reports

Section 3: Testing

1. Reference Test Method Description:	60.4400a, 60.4405a, 60.4410a, and 60.4415a of Subpart KKKKa as applicable.
2. Reference Test Method Citation:	60.4400a, 60.4405a, 60.4410a, and 60.4415a of Subpart KKKKa as applicable.

Section 4: Record Keeping

Describe what parameters will be recorded and the frequency of recording:

Montour CT will install, calibrate, maintain, and operate a continuous emission monitoring system (CEMS). Input-based emission rates and standards for NOx are to be determined on a 4-operating-hour rolling basis.

At a minimum, non-out-of-control CEMS hourly averages shall be obtained for 90 percent of all operating hours on a 30-operating-day rolling average basis

Montour CT elects to opt out of the daily fuel sulfur content rule by using a fuel that is demonstrated not to exceed potential sulfur emissions of 0.060 lb/MMBtu SO₂. This demonstration can be made using a purchase contract specifying that the fuel sulfur content for the natural gas is less than or equal to 20 gr/100 scf of sulfur.

Section 5: Reporting

Describe what is to be reported and the frequency of reporting:

60.4375a, 60.4380a, 60.4385a, and 60.4395a of Subpart KKKKa as applicable

1. Reporting start date:	Upon startup
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Section 6: Work Practice Standard

Describe any work practice standards:

Montour CT elects to opt out of the daily fuel sulfur content rule by using a fuel that is demonstrated not to exceed potential sulfur emissions of 0.060 lb/MMBtu SO₂.

Pursuant to 40 CFR §60.4333a(a), the CCCT, air pollution control equipment, and monitoring equipment will be maintained in a manner that is consistent with good air pollution control practices for minimizing emissions.



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

Addendum 1

Method Of Compliance Worksheet

SECTION 1. APPLICABLE REQUIREMENT

Federal Tax Id:	XXXXXXXXXX	Firm Name:	Montour CT Project LLC
Plant Code:		Plant Name:	Montour CT

Applicable Requirement for: (please check only one box below)

- The entire site
- A group of sources, Group ID: Source ID CCCT 1 and Source ID CCCT 2
- A single source, Unit ID: _____
- Alternative Scenario, Scenario Name: _____

Citation #: 40 CFR Part 60 Subpart TTTTa

Compliance Method based upon: Applicable Requirement Gap Filling Requirement

Method of Compliance Type: (Check all that applies and complete all appropriate sections below)

- Monitoring Testing Reporting
- Record Keeping Work Practice Standard

Section 2: Monitoring

4. Monitoring device type (stack test, CEM, etc.): 60.5535a as applicable.

5. Monitoring device location: Source ID CCCT 1 and Source ID CCCT 2

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

CO2/MWh, as determined by the procedures in §60.5525a

6. How will data be reported: 60.5540a and 60.5555a as applicable

Section 3: Testing

3. Reference Test Method Description:

4. Reference Test Method Citation:

Section 4: Record Keeping

Describe what parameters will be recorded and the frequency of recording:

60.5560a and 60.5565a as applicable.

Section 5: Reporting

Describe what is to be reported and the frequency of reporting:

60.5550a and 60.5555a as applicable.

2. Reporting start date: Upon startup

Section 6: Work Practice Standard

Describe any work practice standards:



Addendum 1 Method Of Compliance Worksheet

SECTION 1. APPLICABLE REQUIREMENT

Federal Tax Id: XXXXXXXXXX	Firm Name: Montour CT Project LLC
Plant Code: XXXXXXXXXX	Plant Name: Montour CT

Applicable Requirement for: (please check only one box below)

- The entire site
- A group of sources, Group ID: Source ID CCCT 1 and Source ID CCCT 2
- A single source, Unit ID: _____
- Alternative Scenario, Scenario Name: _____

Citation #: 40 CFR Part 63 Subpart YYYY

Compliance Method based upon: Applicable Requirement Gap Filling Requirement

Method of Compliance Type: (Check all that applies and complete all appropriate sections below)

- Monitoring
- Testing
- Reporting
- Record Keeping
- Work Practice Standard

Section 2: Monitoring

7. Monitoring device type (stack test, CEM, etc.): Monitoring per 40 CFR §63.6125(e)

8. Monitoring device location: Source ID CCCT 1 and Source ID CCCT 2

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

Maintain 4-hour average catalyst inlet temperature within the range suggested by the oxidation catalyst manufacturer, excluding data recorded during startup.

9. How will data be reported: See below

Section 3: Testing

5. Reference Test Method Description:	Initial performance test and subsequent performance tests.
6. Reference Test Method Citation:	40 CFR §63.6110, 40 CFR §63.6115, 40 CFR §63.6120, 40 CFR §63.6130, NESHAP Subpart YYYY Table 3, and NESHAP Subpart YYYY Table 4

Section 4: Record Keeping

Describe what parameters will be recorded and the frequency of recording:

Submit a semi-annual compliance report in CEDRI by January 31 and July 31 each year.
40 CFR §63.6140(b), 40 CFR §63.6150(a), 40 CFR §63.6150(g), NESHAP Subpart YYYY Table 6
Keep copies of all notifications, performance tests, startup events, air pollution control equipment maintenance, and deviations for five years.
40 CFR §63.6155 and 40 CFR §63.6160

Section 5: Reporting

Describe what is to be reported and the frequency of reporting:

Submit a performance test report in CEDRI within 60 days after completing each required performance test.
40 CFR §63.6150(f) and 40 CFR §63.6150(g)

3. Reporting start date:	Upon startup
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Section 6: Work Practice Standard

Describe any work practice standards:

Maintain the affected source, including associated air pollution control and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions per 40 CFR §63.6105.



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DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

Addendum 1

Method Of Compliance Worksheet

SECTION 1. APPLICABLE REQUIREMENT

Federal Tax Id:	XXXXXXXXXX	Firm Name:	Montour CT Project LLC
Plant Code:		Plant Name:	Montour CT

Applicable Requirement for: (please check only one box below)

- The entire site
- A group of sources, Group ID: Source ID CCCT 1 and Source ID CCCT 2
- A single source, Unit ID: _____
- Alternative Scenario, Scenario Name: _____

Citation #: Cross-State Air Pollution Rule (CSAPR) - 40 CFR 97 Subpart AAAAA

Compliance Method based upon: Applicable Requirement Gap Filling Requirement

Method of Compliance Type: (Check all that applies and complete all appropriate sections below)

- Monitoring Testing Reporting
- Record Keeping Work Practice Standard

Section 2: Monitoring

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

11. Monitoring device location: _____

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

Those required by 40 CFR §97.430, §97.431, 40 CFR §97.432.

12. How will data be reported: _____

Section 3: Testing

7. Reference Test Method Description:

8. Reference Test Method Citation:

Section 4: Record Keeping

Describe what parameters will be recorded and the frequency of recording:

The applicable record keeping requirements of 40 CFR §97.404, §97.406, §97.407 40 CFR §97.413, 40 CFR §97.415, 40 CFR §97.416, 40 CFR §97.418, §97.424, §97.425, §97.426, 40 CFR §97.430, 40 CFR §97.431 and 40 CFR §97.434.

Section 5: Reporting

Describe what is to be reported and the frequency of reporting:

The applicable reporting requirements of 40 CFR §97.406, 40 CFR §97.414, 40 CFR §97.422 40 CFR §97.430, 40 CFR §97.433, §97.434 and 40 CFR §97.435.

4. Reporting start date: Upon startup

Section 6: Work Practice Standard

Describe any work practice standards:



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BUREAU OF AIR QUALITY

Addendum 1 Method Of Compliance Worksheet

SECTION 1. APPLICABLE REQUIREMENT

Federal Tax Id: [REDACTED] Firm Name: Montour CT Project LLC

Plant Code: [REDACTED] Plant Name: Montour CT

Applicable Requirement for: (please check only one box below)

- The entire site
- A group of sources, Group ID: Source ID CCCT 1 and Source ID CCCT 2
- A single source, Unit ID: _____
- Alternative Scenario, Scenario Name: _____

Citation #: Cross-State Air Pollution Rule (CSAPR) - 40 CFR 97 Subpart CCCCC

Compliance Method based upon: Applicable Requirement Gap Filling Requirement

Method of Compliance Type: (Check all that applies and complete all appropriate sections below)

- Monitoring Testing Reporting
- Record Keeping Work Practice Standard

Section 2: Monitoring

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

14. Monitoring device location: _____

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

Those required by 40 CFR §97.630, §97.631, 40 CFR §97.632.

15. How will data be reported: _____

Section 3: Testing

9. Reference Test Method Description:

10. Reference Test Method Citation:

Section 4: Record Keeping

Describe what parameters will be recorded and the frequency of recording:

The applicable record keeping requirements of 40 CFR §97.604, §97.606, §97.607 40 CFR §97.613, 40 CFR §97.615, 40 CFR §97.616, 40 CFR §97.618, §97.624, §97.625, §97.626, 40 CFR §97.630, 40 CFR §97.631 and 40 CFR §97.634.

Section 5: Reporting

Describe what is to be reported and the frequency of reporting:

The applicable reporting requirements of 40 CFR §97.606, 40 CFR §97.614, 40 CFR §97.622 40 CFR §97.630, 40 CFR §97.633, §97.634 and 40 CFR §97.635.

5. Reporting start date: Upon startup

Section 6: Work Practice Standard

Describe any work practice standards:



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BUREAU OF AIR QUALITY

Addendum 1 Method Of Compliance Worksheet

SECTION 1. APPLICABLE REQUIREMENT

Federal Tax Id: Firm Name: Montour CT Project LLC

Plant Code: Plant Name: Montour CT

Applicable Requirement for: (please check only one box below)

- The entire site
- A group of sources, Group ID: Source ID CCCT 1 and Source ID CCCT 2
- A single source, Unit ID:
- Alternative Scenario, Scenario Name:

Citation #: Cross-State Air Pollution Rule (CSAPR) - 40 CFR 97 Subpart EEEEE

Compliance Method based upon: Applicable Requirement Gap Filling Requirement

Method of Compliance Type: (Check all that applies and complete all appropriate sections below)

- Monitoring Testing Reporting
- Record Keeping Work Practice Standard

Section 2: Monitoring

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

17. Monitoring device location:

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

Those required by 40 CFR §97.830, §97.831, 40 CFR §97.832.

18. How will data be reported:

Section 3: Testing

11. Reference Test Method Description:

12. Reference Test Method Citation:

Section 4: Record Keeping

Describe what parameters will be recorded and the frequency of recording:

The applicable record keeping requirements of 40 CFR §97.804, §97.806, §97.807 40 CFR §97.813, 40 CFR §97.815, 40 CFR §97.816, 40 CFR §97.818, §97.824, §97.825, §97.826, 40 CFR §97.830, 40 CFR §97.831 and 40 CFR §97.834.

Section 5: Reporting

Describe what is to be reported and the frequency of reporting:

The applicable reporting requirements of 40 CFR §97.806, 40 CFR §97.814, 40 CFR §97.822 40 CFR §97.830, 40 CFR §97.833, §97.834 and 40 CFR §97.835.

6. Reporting start date: Upon startup

Section 6: Work Practice Standard

Describe any work practice standards:



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BUREAU OF AIR QUALITY

Addendum 1

Method Of Compliance Worksheet

SECTION 1. APPLICABLE REQUIREMENT

Federal Tax Id:	[REDACTED]	Firm Name:	Montour CT Project LLC
Plant Code:		Plant Name:	Montour CT

Applicable Requirement for: (please check only one box below)

- The entire site
- A group of sources, Group ID: Source ID CCCT 1 and Source ID CCCT 2
- A single source, Unit ID: _____
- Alternative Scenario, Scenario Name: _____

Citation #: Title IV Acid Rain Program - 40 CFR 72 (Permits Regulation), 40 CFR 73 (SO2 Allowance System), 40 CFR 75 (Continuous Emission Monitoring); and 40 CFR 77 (Excess Emissions).

Compliance Method based upon: Applicable Requirement Gap Filling Requirement

Method of Compliance Type: (Check all that applies and complete all appropriate sections below)

- Monitoring Testing Reporting
- Record Keeping Work Practice Standard

Section 2: Monitoring

19. Monitoring device type (stack test, CEM, etc.): 40 CFR 75 (Continuous Emission Monitoring)

20. Monitoring device location: Source ID CCCT 1 and Source ID CCCT 2

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

40 CFR 72 (Permits Regulation), 40 CFR 73 (SO2 Allowance System), 40 CFR 75 (Continuous Emission Monitoring); and 40 CFR 77 (Excess Emissions).

21. How will data be reported: 40 CFR 77 (Excess Emissions)

Section 3: Testing

13. Reference Test Method Description:

14. Reference Test Method Citation:

Section 4: Record Keeping

Describe what parameters will be recorded and the frequency of recording:

40 CFR 72 (Permits Regulation), 40 CFR 73 (SO₂ Allowance System), 40 CFR 75 (Continuous Emission Monitoring); and 40 CFR 77 (Excess Emissions).

Section 5: Reporting

Describe what is to be reported and the frequency of reporting:

40 CFR 72 (Permits Regulation), 40 CFR 73 (SO₂ Allowance System), 40 CFR 75 (Continuous Emission Monitoring); and 40 CFR 77 (Excess Emissions).

7. Reporting start date: Upon startup

Section 6: Work Practice Standard

Describe any work practice standards:



COMMONWEALTH OF PENNSYLVANIA
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BUREAU OF AIR QUALITY

Addendum 1

Method Of Compliance Worksheet

SECTION 1. APPLICABLE REQUIREMENT

Federal Tax Id:	<input type="checkbox"/>	Firm Name:	Montour CT Project LLC
Plant Code:	<input type="checkbox"/>	Plant Name:	Montour CT

Applicable Requirement for: (please check only one box below)

- The entire site
- A group of sources, Group ID: _____
- A single source, Unit ID: _____
- Alternative Scenario, Scenario Name: _____

Citation #: 25 Pa. Code 123.1 and 123.2

Compliance Method based upon: Applicable Requirement Gap Filling Requirement

Method of Compliance Type: (Check all that applies and complete all appropriate sections below)

- Monitoring Testing Reporting
- Record Keeping Work Practice Standard

Section 2: Monitoring

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

23. Monitoring device location: _____

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

24. How will data be reported: _____

Section 3: Testing

15. Reference Test Method Description:

16. Reference Test Method Citation:

Section 4: Record Keeping

Describe what parameters will be recorded and the frequency of recording:

Section 5: Reporting

Describe what is to be reported and the frequency of reporting:

8. Reporting start date:

Section 6: Work Practice Standard

Describe any work practice standards:

Standards for allowable outdoor fugitive emissions and reasonable actions to control fugitive emissions will be followed.



COMMONWEALTH OF PENNSYLVANIA
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BUREAU OF AIR QUALITY

Addendum 1 Method Of Compliance Worksheet

SECTION 1. APPLICABLE REQUIREMENT

Federal Tax Id:	<input type="text"/>	Firm Name:	Montour CT Project LLC
Plant Code:	<input type="text"/>	Plant Name:	Montour CT

Applicable Requirement for: (please check only one box below)

- The entire site
- A group of sources, Group ID:
- A single source, Unit ID:
- Alternative Scenario, Scenario Name:

Citation #:

Compliance Method based upon: Applicable Requirement Gap Filling Requirement

Method of Compliance Type: (Check all that applies and complete all appropriate sections below)

- Monitoring Testing Reporting
- Record Keeping Work Practice Standard

Section 2: Monitoring

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

26. Monitoring device location:

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

27. How will data be reported:

Section 3: Testing

17. Reference Test Method Description:

18. Reference Test Method Citation:

Section 4: Record Keeping

Describe what parameters will be recorded and the frequency of recording:

Section 5: Reporting

Describe what is to be reported and the frequency of reporting:

9. Reporting start date:

Section 6: Work Practice Standard

Describe any work practice standards:

Per 123.11(a)(2), combustion units with heat inputs equal to or greater than 600 MMBtu/hr are subject to an emission limit of 0.1 lb/MMBtu. This limit applies to the HRSG duct burners.



COMMONWEALTH OF PENNSYLVANIA
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BUREAU OF AIR QUALITY

Addendum 1

Method Of Compliance Worksheet

SECTION 1. APPLICABLE REQUIREMENT

Federal Tax Id:	<input type="text"/>	Firm Name:	Montour CT Project LLC
Plant Code:	<input type="text"/>	Plant Name:	Montour CT

Applicable Requirement for: (please check only one box below)

- The entire site
- A group of sources, Group ID:
- A single source, Unit ID:
- Alternative Scenario, Scenario Name:

Citation #:

Compliance Method based upon: Applicable Requirement Gap Filling Requirement

Method of Compliance Type: (Check all that applies and complete all appropriate sections below)

- Monitoring Testing Reporting
- Record Keeping Work Practice Standard

Section 2: Monitoring

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

29. Monitoring device location:

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

30. How will data be reported:

Section 3: Testing

19. Reference Test Method Description:

20. Reference Test Method Citation:

Section 4: Record Keeping

Describe what parameters will be recorded and the frequency of recording:

Section 5: Reporting

Describe what is to be reported and the frequency of reporting:

10. Reporting start date:

Section 6: Work Practice Standard

Describe any work practice standards:

Per 123.13(c)(1), PM emission limit of 0.02 grain per dry standard cubic foot, when the effluent gas volume is greater than 300,000 dry standard cubic feet per minute for process units.



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BUREAU OF AIR QUALITY

Addendum 1

Method Of Compliance Worksheet

SECTION 1. APPLICABLE REQUIREMENT

Federal Tax Id:	<input type="text"/>	Firm Name:	Montour CT Project LLC
Plant Code:	<input type="text"/>	Plant Name:	Montour CT

Applicable Requirement for: (please check only one box below)

- The entire site
- A group of sources, Group ID:
- A single source, Unit ID:
- Alternative Scenario, Scenario Name:

Citation #:

Compliance Method based upon: Applicable Requirement Gap Filling Requirement

Method of Compliance Type: (Check all that applies and complete all appropriate sections below)

- Monitoring Testing Reporting
- Record Keeping Work Practice Standard

Section 2: Monitoring

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

32. Monitoring device location:

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

33. How will data be reported:

Section 3: Testing

21. Reference Test Method Description:

22. Reference Test Method Citation:

Section 4: Record Keeping

Describe what parameters will be recorded and the frequency of recording:

Section 5: Reporting

Describe what is to be reported and the frequency of reporting:

11. Reporting start date:

Section 6: Work Practice Standard

Describe any work practice standards:

Sulfur oxide emissions may not exceed 500 parts per million, by volume, dry basis. Montour CT will comply with this requirement by firing natural gas fuel in the duct burners.



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BUREAU OF AIR QUALITY

Addendum 1

Method Of Compliance Worksheet

SECTION 1. APPLICABLE REQUIREMENT

Federal Tax Id:	XXXXXXXXXX	Firm Name:	Montour CT Project LLC
Plant Code:		Plant Name:	Montour CT

Applicable Requirement for: (please check only one box below)

- The entire site
- A group of sources, Group ID: Source ID CCCT 1 and Source ID CCCT 2
- A single source, Unit ID: _____
- Alternative Scenario, Scenario Name: _____

Citation #: 25 Pa. Code 123.22

Compliance Method based upon: Applicable Requirement Gap Filling Requirement

Method of Compliance Type: (Check all that applies and complete all appropriate sections below)

- Monitoring Testing Reporting
- Record Keeping Work Practice Standard

Section 2: Monitoring

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

35. Monitoring device location: _____

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

36. How will data be reported: _____

Section 3: Testing

23. Reference Test Method Description:

24. Reference Test Method Citation:

Section 4: Record Keeping

Describe what parameters will be recorded and the frequency of recording:

Section 5: Reporting

Describe what is to be reported and the frequency of reporting:

12. Reporting start date:

Section 6: Work Practice Standard

Describe any work practice standards:

SO2 emissions limited to 4 lb/MMBtu for combustion units. Montour CT will comply with this requirement by firing natural gas fuel in the duct burners.



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

Addendum 1 Method Of Compliance Worksheet

SECTION 1. APPLICABLE REQUIREMENT

Federal Tax Id:	<input type="text"/>	Firm Name:	Montour CT Project LLC
Plant Code:	<input type="text"/>	Plant Name:	Montour CT

Applicable Requirement for: (please check only one box below)

- The entire site
- A group of sources, Group ID: _____
- A single source, Unit ID: _____
- Alternative Scenario, Scenario Name: _____

Citation #: 25 Pa. Code 123.31

Compliance Method based upon: Applicable Requirement Gap Filling Requirement

Method of Compliance Type: (Check all that applies and complete all appropriate sections below)

- Monitoring Testing Reporting
- Record Keeping Work Practice Standard

Section 2: Monitoring

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

38. Monitoring device location: _____

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

39. How will data be reported: _____

Section 3: Testing

25. Reference Test Method Description:

26. Reference Test Method Citation:

Section 4: Record Keeping

Describe what parameters will be recorded and the frequency of recording:

Section 5: Reporting

Describe what is to be reported and the frequency of reporting:

13. Reporting start date:

Section 6: Work Practice Standard

Describe any work practice standards:

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.



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

Addendum 1 Method Of Compliance Worksheet

SECTION 1. APPLICABLE REQUIREMENT

Federal Tax Id:	<input type="text"/>	Firm Name:	Montour CT Project LLC
Plant Code:	<input type="text"/>	Plant Name:	Montour CT

Applicable Requirement for: (please check only one box below)

- The entire site
- A group of sources, Group ID:
- A single source, Unit ID:
- Alternative Scenario, Scenario Name:

Citation #:

Compliance Method based upon: Applicable Requirement Gap Filling Requirement

Method of Compliance Type: (Check all that applies and complete all appropriate sections below)

- Monitoring Testing Reporting
- Record Keeping Work Practice Standard

Section 2: Monitoring

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

41. Monitoring device location:

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

42. How will data be reported:

Section 3: Testing

27. Reference Test Method Description:

28. Reference Test Method Citation:

Section 4: Record Keeping

Describe what parameters will be recorded and the frequency of recording:

Section 5: Reporting

Describe what is to be reported and the frequency of reporting:

14. Reporting start date:

Section 6: Work Practice Standard

Describe any work practice standards:

A person may not permit the emission into the outdoor atmosphere of visible air contaminants in such a manner that the opacity is equal to or greater than 20% for a period of more than 1 minute in any hour or equal to or greater than 60% at any time.



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

Addendum 1 Method Of Compliance Worksheet

SECTION 1. APPLICABLE REQUIREMENT

Federal Tax Id: XXXXXXXXXX Firm Name: Montour CT Project LLC

Plant Code: XXXXXXXXXX Plant Name: Montour CT

Applicable Requirement for: (please check only one box below)

- The entire site
- A group of sources, Group ID: Source ID CCCT 1 and Source ID CCCT 2
- A single source, Unit ID: _____
- Alternative Scenario, Scenario Name: _____

Citation #: 25 Pa. Code 123.51

Compliance Method based upon: Applicable Requirement Gap Filling Requirement

Method of Compliance Type: (Check all that applies and complete all appropriate sections below)

- Monitoring Testing Reporting
- Record Keeping Work Practice Standard

Section 2: Monitoring

43. Monitoring device type (stack test, CEM, etc.): NOX CEMS

44. Monitoring device location: Source ID CCCT 1 and Source ID CCCT 2

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

NOX continuous emissions monitoring

45. How will data be reported: In accordance with 25 Pa. Code Chapter 139.

Section 3: Testing

29. Reference Test Method Description:

30. Reference Test Method Citation:

Section 4: Record Keeping

Describe what parameters will be recorded and the frequency of recording:

Section 5: Reporting

Describe what is to be reported and the frequency of reporting:

15. Reporting start date:

Section 6: Work Practice Standard

Describe any work practice standards:



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

AIR QUALITY FEES FOR NEW PLAN APPROVAL

Company Information				
Federal Tax ID: XXXXXXXXXX		Firm Name: Montour CT Project, LLC		
Permit # (If any):		Facility Name: Montour CT Facility		
Municipality: Derry Township		County: Montour		
Contact Person Name: Kathleen Potter		Telephone Number: (610) 601-0305		
E-mail: Kathleen.Potter@TalenEnergy.com				
New Plan Approval (The following fees are cumulative.)				
Line #	Check the appropriate boxes below	Type of review requested	Fee 2026 - 2030	Total Fees
1	<input type="checkbox"/>	Subchapter B	\$3,100	\$3,100
2	<input checked="" type="checkbox"/>	New Source Review, Subchapter E	\$9,400	\$9,400
3	<input checked="" type="checkbox"/>	NSPS / NESHAP / MACT standard A. # of NSPS: <u> 2 </u> B. # of NESHAP / MACT: <u> 1 </u> C. Add lines A and B: <u> 3 </u> D. Maximum applicable standards: <u> 3 </u> E. Enter smaller of line C or line D: <u> 3 </u> Multiply line E by \$3,100 and enter the amount in the "Total Fees" column.	\$3,100	\$9,300
4	<input type="checkbox"/>	Case-by-Case MACT	\$11,900	
5	<input checked="" type="checkbox"/>	Prevention of Significant Deterioration (PSD) requirements, Subchapter D	\$40,600	\$40,600
6	<input type="checkbox"/>	Plantwide Applicability Limit (PAL) for NSR regulated pollutants or PAL for PSD regulated pollutants or both	\$9,400	
7	<input type="checkbox"/>	Risk Assessment Analysis – Inhalation only	\$12,500	
8	<input type="checkbox"/>	Risk Assessment Analysis – Multi-pathway	\$31,300	
Add Lines 1 thru 8 of Total Fees column and write it here. →				\$62,400



TALen ENERGY SUPPLY LLC
 2929 ALLEN PARKWAY
 22ND FLOOR
 HOUSTON, TX 77019



DATE: 05/27/2026 VENDOR NAME: COMMONWEALTH OF PENNSYLVANIA -CLEAN AIR

INVOICE DATE	INVOICE NO.	DESCRIPTION	GROSS	DISCOUNT	NET
05/22/2026	PA Air Permit App-2700-PM-BAQ0030f		62,400.00	0.00	62,400.00

FOR SECURITY PURPOSES, THE BACK OF THIS DOCUMENT CONTAINS AN ARTIFICIAL WATERMARK



TALen ENERGY SUPPLY LLC
 2929 ALLEN PARKWAY
 22ND FLOOR
 HOUSTON, TX 77019

MUFG Bank, Ltd.

10343

53-292/113

DATE
 05/27/2026

AMOUNT
 \$62,400.00

Sixty Two Thousand Four Hundred And 0/100 Dollars

VOID if over 180 days

Pay to the Order of
 COMMONWEALTH OF PENNSYLVANIA -CLEAN AIR FUND
 909 ELMERTON AVE
 HARRISBURG, PA 17110-9207

1

Talen Energy Supply, LLC

AUTHORIZED SIGNATURE

SIGNATURE HAS A BLUE-GREEN BACKGROUND • BORDER CONTAINS MICROPRINTING MP



APPENDIX D. BACT/LAER/BAT SUPPORTING DOCUMENTATION

RBL Search Results - NOx

RBLCID	FACILITY NAME	PERMIT ISSUANCE DATE	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGHPUT	THROUGHPUT UNIT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	EMISSION LIMIT 1 AVG TIME CONDITION
WI-0300	NEMADJI TRAIL ENERGY CENTER	09/01/2020 ACT	09/01/2020	Natural-Gas-Fired Combined-Cycle Turbine (P01) Start-Up and Shutdown (diesel)	0			860	LB/START-UP	
VA-0332	CHICKAHOMINY POWER LLC	06/24/2019 ACT	06/24/2019	Three (3) Mitsubishi Hitachi Power Systems Combustion	35000	MMCF/YR	dry, low NOx burners and selective catalytic reduction	703	LB/TURBINE/CAL DAY	24 HR TOTAL
VA-0328	C4GT, LLC	04/26/2018 ACT	04/26/2018	GE Combustion Turbine - Tuning & Water Washing	34000	MMCF/YR	dry, low NOx burners and SCR	638	LB/TURBINE/CAL DAY	24 HR AV
VA-0334	DOMINION ENERGY - BRUNSWICK	12/01/2020 ACT	12/01/2020	COMBUSTION TURBINE GENERATORS, (3) with Alternate Operating Scenario - Turbine Tuning	3442	MMBTU/H	Dry, low NOx burners and selective catalytic reduction (SCR) with a NOx performance of 2.0 ppmvd at 15% O2.	604	LBS	CALENDAR DAY/PER TURBINE
VA-0334	DOMINION ENERGY - BRUNSWICK	12/01/2020 ACT	12/01/2020	COMBUSTION TURBINE GENERATORS, (3) with Alternate Operating Scenario - Turbine Blade Water Washing	3442	MMBTU/H	Dry, low NOx burners and selective catalytic reduction (SCR) with a NOx performance of 2.0 ppmvd at 15% O2.	604	LBS	CALENDAR DAY/PER TURBINE
VA-0328	C4GT, LLC	04/26/2018 ACT	04/26/2018	Siemens Combustion Turbine - Tuning & Water Washing	35000	MMCF/YR	dry, low NOx burners and SCR	564	LB/TURBINE CAL DAY	24 HR AV
WI-0300	NEMADJI TRAIL ENERGY CENTER	09/01/2020 ACT	09/01/2020	Natural Gas-Fired Combined-Cycle Turbine (P01) Start-up and Shutdown (Natural Gas)	0			335	LB/START-UP	
VA-0328	C4GT, LLC	04/26/2018 ACT	04/26/2018	GE Combustion Turbine - Startup and Shutdown	34000	MMCF/YR	Dry, low NOx burners and SCR	273	LB/TURBINE/EVENT	COLD START 60 MIN OR LESS
MI-0435	BELLE RIVER COMBINED CYCLE POWER PLANT	07/16/2018 ACT	07/16/2018	FGCTGHRSG (EUCTGHRSG1 & EUCTGHRSG2)--Startup & Shutdown	0		SCR with DLNB (Selective catalytic reduction with dry low NOx burners).	262.4	LB/H	EACH UNIT; OPERATING HOUR DURING S.S.
LA-0391	MAGNOLIA POWER GENERATING STATION UNIT 1	06/03/2022 ACT	06/03/2022	Combined Cycle Gas Turbine Startup and Shutdown	5081	mm BTU/h	Good combustion practices.	260	LB/HR	
MI-0432	NEW COVERT GENERATING FACILITY	07/30/2018 ACT	07/30/2018	FG-TURB/DB1-3--Startup/Shutdown Operations	1230	MW	Good combustion practices, DLN burners and SCR.	249	LB/H	EACH CT/HRSG TRAIN;STARTUP/SHUTDOWN
TX-0834	MONTGOMERY COUNTY POWER STATION	03/30/2018 ACT	03/30/2018	COMBINED CYCLE TURBINE MSS REDUCED LOAD	0		minimizing duration of startup / shutdown events, engaging the pollution control equipment as soon as practicable (based on vendor recommendations and guarantees), and meeting the emissions limits on the MAERT	170	LB/H	
MD-0045	MATTAWOMAN ENERGY CENTER	11/13/2015 ACT	11/13/2015	2 COMBINED-CYCLE COMBUSTION TURBINES - COLD STARTUP	286	MW	GOOD COMBUSTION PRACTICES, DRY LOW-NOX COMBUSTOR DESIGN AND SELECTIVE CATALYTIC REDUCTION (SCR)	153	LB/EVENT	COLD STARTUP
MD-0045	MATTAWOMAN ENERGY CENTER	11/13/2015 ACT	11/13/2015	2 COMBINED-CYCLE COMBUSTION TURBINES - WARM STARTUP	286	MW	GOOD COMBUSTION PRACTICES, DRY LOW-NOX COMBUSTOR DESIGN AND SELECTIVE CATALYTIC REDUCTION (SCR)	132	LB/EVENT	WARM STARTUP
WI-0306	WPL- RIVERSIDE ENERGY CENTER	02/28/2020 ACT	02/28/2020	Natural Gas Fired Combustion Turbine (P20, P21) Phase I Commissioning	2208	MMBTU/H		110	PPMVD, 15% OXYGEN	AVG. ANY 24-HR OPERATIONAL PERIOD
WI-0306	WPL- RIVERSIDE ENERGY CENTER	02/28/2020 ACT	02/28/2020	Natural Gas Fired Combustion Turbine (P20, P21)- Startup operation during Phase I Commissioning	2208	MMBTU/H		110	PPMVD, 15% OXYGEN	AVG. ANY 24-HR OPERATIONAL PERIOD
MD-0045	MATTAWOMAN ENERGY CENTER	11/13/2015 ACT	11/13/2015	2 COMBINED-CYCLE COMBUSTION TURBINES - HOT STARTUP	286	MW	GOOD COMBUSTION PRACTICES, DRY LOW-NOX COMBUSTOR DESIGN AND SELECTIVE CATALYTIC REDUCTION (SCR)	105	LB/EVENT	HOT STARTUP
VA-0328	C4GT, LLC	04/26/2018 ACT	04/26/2018	Siemens Combustion Turbine - Startup & Shutdown	35000	MMCF/YR	dry, low NOx burners and SCR	95	LB/TURBINE/EVENT	COLD START 55 MIN OR LESS
MI-0447	LBWL--ERICKSON STATION	01/07/2021 ACT	01/07/2021	EUCTGHRSG1	667	MMBTU/H	Dry low NOx burners and selective catalytic reduction for NOx control for each CTG/HRSG unit.	60	LB/H	HOURLY; INCL STRT/SHUT IN COMBINED CYCLE
MI-0447	LBWL--ERICKSON STATION	01/07/2021 ACT	01/07/2021	EUCTGHRSG2	667	MMBTU/H	Dry low NOx burners and selective catalytic reduction for NOx control for each CTG/HRSG unit.	60	LB/H	HOURLY; INCL STRT/SHUT IN COMBINED CYCLE
VA-0332	CHICKAHOMINY POWER LLC	06/24/2019 ACT	06/24/2019	Three (3) Mitsubishi Hitachi Power Systems combustion turbine generators	35000	MMCF/YR	dry, low NOx burners and selective catalytic reduction	60	LB/TURBINE/EVENT	COLD START-42 MINUTES OR LESS
WI-0306	WPL- RIVERSIDE ENERGY CENTER	02/28/2020 ACT	02/28/2020	Natural Gas Fired Combustion Turbine (P20, P21) Phase II Commissioning	2208	MMBTU/H		55	PPMVD, 15% OXYGEN	AVG. ANY 24-HR OPERATIONAL PERIOD
WI-0306	WPL- RIVERSIDE ENERGY CENTER	02/28/2020 ACT	02/28/2020	Natural Gas Fired Combustion Turbine (P20, P21)- Startup operation during Phase II Commissioning	2208	MMBTU/H		55	PPMVD, 15% OXYGEN	AVG. ANY 24-HR OPERATIONAL PERIOD
MI-0424	HOLLAND BOARD OF PUBLIC WORKS EAST 5TH STREET	12/05/2016 ACT	12/05/2016	FGCTGHRSG--Startup/Shutdown (2 combined cycle CTGs with HRSGs; EUCTGHRSG10 & EUCTGHRSG11)	554	MMBTU/H; EACH	Selective catalytic reduction with dry low NOx burners (SCR with DLNB).	43.7	LB/H	OPERATING HOUR DURING STARTUP; EACH EU
MI-0423	INDECK NILES, LLC	01/04/2017 ACT	01/04/2017	FGCTGHRSG (2 Combined Cycle CTGs with HRSGs)	8322	MMBTU/H	SCR with DLNB (selective catalytic reduction with dry low NOx burners)	38.1	LB/H	24-H ROLLING AVERAGE
*IN-0365	MAPLE CREEK ENERGY LLC	06/19/2023 ACT	06/19/2023	Combined Cycle Turbine CTGB SU/SD	0			35.8	TONS YEAR	FOR DURATION OF COMBINED SU/SD EVENTS
OH-0374	GUERNSEY POWER STATION LLC	10/23/2017 ACT	10/23/2017	Combined Cycle Combustion Turbines (3, identical) (P001 to P003)	3516	MMBTU/H	dry low NOx burners and SCR	33.85	LB/H	WITH DUCT BURNER. SEE NOTES.
*NW-0029	HARRISON COUNTY POWER PLANT	03/27/2018 ACT	03/27/2018	GE 7HA.02 Turbine	3496.2	mmBtu/hr	Dry-Low NOx Burners, SCR	32.9	LB/HR	1-HOUR AVERAGE
MI-0427	FILER CITY STATION	11/17/2017 ACT	11/17/2017	EUCCT (Startup/Shutdown)	1934.7	MMBTU/H	SCR with DLNB (Selective catalytic reduction with dry low NOx burners).	32	POUNDS	PER EVENT
OH-0367	SOUTH FIELD ENERGY LLC	09/23/2016 ACT	09/23/2016	Combined Cycle Combustion Turbines (two, identical) (P001 and P002)	3131	MMBTU/H	Dry low NOx (DLN) burners for natural gas firing, wet injection when firing ultra low sulfur diesel, and selective catalytic reduction (SCR) for both natural gas and ultra low sulfur diesel.	30.51	LB/H	WITH DUCT BURNER. SEE NOTES.
OH-0377	HARRISON POWER	04/19/2018 ACT	04/19/2018	General Electric (GE) Combustion Turbines (P005 & P006)	3459.6	MMBTU/H	dry low NOx burners and an SCR system	29.5	LB/H	WITH DUCT BURNER. SEE NOTES.
OH-0377	HARRISON POWER	04/19/2018 ACT	04/19/2018	Mitsubishi Hitachi Power Systems (MHPS) Combustion Turbines (P007 & P008)	3231	MMBTU/H	dry low NOx burners and an SCR system	28	LB/H	WITH DUCT BURNER. SEE NOTES.
OH-0375	LONG RIDGE ENERGY GENERATION LLC - HANNIBAL POWER	11/07/2017 ACT	11/07/2017	Siemens Combustion Turbine (P006)	3602	MMBTU/H	dry low NOx burners and an SCR system	27.1	LB/H	WITH DUCT BURNER. SEE NOTES.
LA-0313	ST. CHARLES POWER STATION	08/31/2016 ACT	08/31/2016	SCPS Combined Cycle Unit 1A	3625	MMBTU/hr	Selective Catalytic Reduction (SCR) with Dry Low NOx Burners (DLNB) during normal operations; Good Combustion Practices during Startup/Shutdown operations.	26.91	LB/H	HOURLY MAXIMUM
LA-0313	ST. CHARLES POWER STATION	08/31/2016 ACT	08/31/2016	SCPS Combined Cycle Unit 1B	3625	MMBTU/hr	Selective Catalytic Reduction (SCR) with Dry Low NOx Burners (DLNB) during normal operations, and good combustion practices during startup/shutdown operations.	26.91	LB/H	HOURLY MAXIMUM
OH-0375	LONG RIDGE ENERGY GENERATION LLC - HANNIBAL POWER	11/07/2017 ACT	11/07/2017	General Electric Combustion Turbine (P004)	3544	MMBTU/H	dry low NOx burners and an SCR system	26.1	LB/H	EXCEPT STARTUP AND SHUTDOWN. SEE NOTES

RBL Search Results - NOx

RBLCID	FACILITY NAME	PERMIT ISSUANCE DATE	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGHPUT	THROUGHPUT UNIT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	EMISSION LIMIT 1 AVG TIME CONDITION
OH-0370	TRUMBULL ENERGY CENTER	09/07/2017 ACT	09/07/2017	Combined Cycle Combustion Turbines (two, identical) (P001 and P002)	3025	MMBTU/H	dry low NOx combustors (DLN) and selective catalytic reduction (SCR)	25.3	LB/H	WITH DUCT BURNER. SEE NOTES.
OH-0372	OREGON ENERGY CENTER	09/27/2017 ACT	09/27/2017	Combined Cycle Combustion Turbines (two, identical) (P001 and P002)	3055	MMBTU/H	Dry low NOX combustors and selective catalytic reduction (SCR)	25.3	LB/H	WITH DUCT BURNER. SEE NOTES.
OH-0375	LONG RIDGE ENERGY GENERATION LLC - HANNIBAL POWER	11/07/2017 ACT	11/07/2017	Mitsubishi Combustion Turbine (P005)	3320	MMBTU/H	dry low NOx burners and an SCR system	25.1	LB/H	WITH DUCT BURNER. SEE NOTES.
KS-0041	HOLLYFRONTIER EL DORADO REFINERY	10/30/2019 ACT	10/30/2019	L3804	456.5	MMBTU/H	Steam/water injection	25	PPMVD	1-HOUR ROLLING AVERAGE
MI-0439	JACKSON GENERATING STATION	04/02/2019 ACT	04/02/2019	FGLMDB1-6 (6 combined cycle natural gas fired CTG each equipped with a HRSG)	420	MW	Steam injection, good combustion practices and only combust natural gas.	25	PPM	AT 15% O2; 30 DAY ROLLING AVG; EACH UNIT
OH-0366	CLEAN ENERGY FUTURE - LORDSTOWN, LLC	08/25/2015 ACT	08/25/2015	Combined Cycle Combustion Turbines (two, identical) (P001 and P002)	2725	MMBTU/H	dry low NOx combustors, selective catalytic reduction (SCR)	23.5	LB/H	WITH DUCT BURNER. SEE NOTES.
*WV-0032	BROOKE COUNTY POWER PLANT	09/18/2018 ACT	09/18/2018	GE 7HA.01 Turbine	2737.7	mmBtu/hr	Dry-Low NOx Burners, SCR	23.2	LB/HR	
MD-0045	MATTAWOMAN ENERGY CENTER	11/13/2015 ACT	11/13/2015	2 COMBINED-CYCLE COMBUSTION TURBINES - SHUTDOWN	286	MW	DRY LOW-NOX COMBUSTOR DESIGN, GOOD COMBUSTION PRACTICES AND SELECTIVE CATALYTIC REDUCTION (SCR)	23	LB/EVENT	SHUT DOWN
*LA-0365	BIG CAJUN I POWER PLANT	06/27/2019 ACT	06/27/2019	Combustion Turbine #1 (EQT0002, CTG-1)	1679	MM BTU/hr	Dry low NOX Burners & water injection	23	PPMV	THREE HOUR ROLLING AVERAGE
*LA-0365	BIG CAJUN I POWER PLANT	06/27/2019 ACT	06/27/2019	Combustion Turbine #2 (EQT0003, CTG-2)	1679	MM BTU/hr	Dry low NOX burners & water injection	23	PPMV	THREE HOUR ROLLING AVERAGE
*IN-0365	MAPLE CREEK ENERGY LLC	06/19/2023 ACT	06/19/2023	Combined Cycle Turbine CTGA SU/SD	3800	MMBTu per hour		20.7	TONS PER YEAR	FOR DURATION OF THE COMBINED SU/SD EVENT
AK-0085	GAS TREATMENT PLANT	08/13/2020 ACT	08/13/2020	Six (6) Cogeneration Gas-Fired Turbines (Treated Gas Compressor Turbines)	576	MMBTu/hr	DLN combustors and Good Combustion Practices	17	PPMV @ 15% O2	3-HOUR AVERAGE
AK-0085	GAS TREATMENT PLANT	08/13/2020 ACT	08/13/2020	Six (6) Cogeneration Gas-Fired Turbines (CO2 Compressor Turbines)	431	MMBTu/hr	DLN combustors and good combustion practices	17	PPMV @ 15% O2	3-HOUR AVERAGE
OH-0365	ROLLING HILLS GENERATING, LLC	05/20/2015 ACT	05/20/2015	Combustion Turbines, Scenario 2 (4, identical) (P001, P002, P004, P005)	2144	MMBTU/H	dry-low NOx (DLN) burner and selective catalytic reduction (SCR)	15.6	LB/H	WITHOUT DUCT BURNERS. SEE NOTES.
OH-0365	ROLLING HILLS GENERATING, LLC	05/20/2015 ACT	05/20/2015	Combustion Turbines, Scenario 1 (4, identical) (P001, P002, P004, P005)	2022	MMBTU/H	dry-low NOx (DLN) burner and selective catalytic reduction (SCR)	14.7	LB/H	WITHOUT DUCT BURNERS. SEE NOTES.
TX-0790	PORT ARTHUR LNG EXPORT TERMINAL	02/17/2016 ACT	02/17/2016	Refrigeration Compression Turbines	10	M TONNES/YR	Dry low NOx burners and good combustion practices	9	PPM	ROLLING 24-HR AVERAGE
PA-0334	RENOVO ENERGY CENTER LLC/RENOVO PLT	04/29/2021 ACT	04/29/2021	COMBUSTION TURBINE #2 (ULSD)	3940	MMBTu/Hr	selective catalytic reduction (SCR) system, oxidation catalyst.	4	PPMVD	@ 15% O2 / 1 HR
PA-0334	RENOVO ENERGY CENTER LLC/RENOVO PLT	04/29/2021 ACT	04/29/2021	COMBUSTION TURBINE #1 (ULSD)	3940	MMBTu/Hr	selective catalytic reduction (SCR) system, oxidation catalyst.	4	PPMVD	@ 15% O2 / 1 HR
*TX-1005	FERMI AMERICA PROJECT MATADOR	02/25/2026 ACT	02/25/2026	COMBINED CYCLE TURBINES	443	MMBTU/HR	GOOD COMBUSTION, SCR	4	PPMVD	15% O2 NORMAL 3-HR AVG
MI-0424	HOLLAND BOARD OF PUBLIC WORKS - EAST 5TH STREET	12/05/2016 ACT	12/05/2016	FGCTGHRSG (2 Combined cycle CTGs with HRSGs; EUCTGHRSG10 & EUCTGHRSG11)	554	MMBTU/H, each	Selective catalytic reduction with dry low NOx burners (SCR with DLNB).	3	PPM AT 15% O2	24-H ROLLING AVG; EACH EU
MI-0427	FILER CITY STATION	11/17/2017 ACT	11/17/2017	EUCCT (Combined cycle CTG with unfired HRSG)	1934.7	MMBTU/H	SCR with DLNB (Selective catalytic reduction with dry low NOx burners).	3	PPM	24-H ROLL AVG., EXCEPT STARTUP/SHUTDOWN
MI-0441	LBWL-ERICKSON STATION	12/21/2018 ACT	12/21/2018	EUCTGHRSG2-A 667 MMBTU/H natural gas fired CTG with a HRSG.	667	MMBTU/H	Dry low NOx burners and selective catalytic reduction for NOx control.	3	PPM	PPMVD@15%O2; 24-H AVG; SEE NOTES
MI-0441	LBWL-ERICKSON STATION	12/21/2018 ACT	12/21/2018	EUCTGHRSG1-A 667 MMBTU/H NG fired combustion turbine generator coupled with a heat recovery steam generator (HRSG)	667	MMBTU/H	Dry low NOx burners and selective catalytic reduction for NOx control.	3	PPM	PPMVD@15%O2; 24-H ROLL AVG; SEE NOTES
MI-0454	LBWL-ERICKSON STATION	12/20/2022 ACT	12/20/2022	EUCTGHRSG1	667	MMBTU/H	Dry low NOx burners and selective catalytic reduction for NOx control for each CTG/HRSG unit.	3	PPM	PPMVD AT 15%O2; 24-HR ROLL AVG EXC SU/SD
MI-0454	LBWL-ERICKSON STATION	12/20/2022 ACT	12/20/2022	EUCTGHRSG2	667	MMBTU/H	Dry low NOx burners and selective catalytic reduction for NOx control for each CTG/HRSG unit.	3	PPM	@ 15%O2; 24-H ROLL AVG EXCEPT START/SHUT
LA-0331	CALCASIEU PASS LNG PROJECT	09/21/2018 ACT	09/21/2018	Combined Cycle Combustion Turbines (CCCT1 to CCCT5) EUCTGHRSG (North Plant): A combined cycle natural gas fired combustion turbine generator with heat recovery steam generator	921	MM BTU/h	Low NOx Burners, SCR, and Good Combustion Practices	2.5	PPMV	30 DAY ROLLING AVERAGE
MI-0451	MEC NORTH, LLC	06/23/2022 ACT	06/23/2022	Four Combined Cycle Gas-Fired Turbines	384	MMBTu/hr	SCR, DLN combustors, and good combustion practices	2	PPMV @ 15% O2	24-HR ROLLING AVG
AK-0088	LIQUEFACTION PLANT	07/07/2022 ACT	07/07/2022	Two 744 MW Combined Cycle Units	744	MW	SCR	2	PPM	3-HOURS
AL-0328	PLANT BARRY	11/09/2020 ACT	11/09/2020	Combustion Turbines (GEN1 and GEN2)	2217	MMBTU/H	Selective Catalytic Reduction, Dry Low NOx Burners	2	PPM @ 15% O2	3 HOUR AVG / @15% O2
CA-1251	PALMDALE ENERGY PROJECT	04/25/2018 ACT	04/25/2018	CPV TOWANTIC, LLC	21200000	MMBTU/12 months	SCR	2	PPMVD @15% O2	1-HOUR
CT-0157	CPV TOWANTIC, LLC	11/30/2015 ACT	11/30/2015	Combined Cycle Power Plant	21200000	MMBTU/yr	SCR	2	PPMVD @15% O2	1 HR BLOCK
CT-0158	CPV TOWANTIC, LLC	11/30/2015 ACT	11/30/2015	Combined Cycle Power Plant	21200000	MMBTU/yr	SCR	2	PPMVD @15% O2	1 HR BLOCK
CT-0161	KILLINGLY ENERGY CENTER	06/30/2017 ACT	06/30/2017	Natural Gas w/o Duct Firing	2969	MMBTu/hr	SCR	2	PPMVD @15% O2	1 HOUR BLOCK
CT-0161	KILLINGLY ENERGY CENTER	06/30/2017 ACT	06/30/2017	Natural Gas w/Duct Firing	2639	MMBTu/hr	SCR	2	PPMVD @15% O2	1 HOUR BLOCK
FL-0356	OKEECHOBEE CLEAN ENERGY CENTER	03/09/2016 ACT	03/09/2016	Combined-cycle electric generating unit	3096	MMBTu per turbine	Selective catalytic reduction; dry low-NOx; and wet injection	2	PPMVD@15% O2	GAS, 24-HR BLOCK, EXCLUDING SSM
FL-0367	SHADY HILLS COMBINED CYCLE FACILITY	07/27/2018 ACT	07/27/2018	1-on-1 combined cycle unit (GE 7HA)	3266.9	MMBTu/hour	Dry low-NOX combustors and Selective Catalytic Reduction (SCR)	2	PPMVD AT 15% O2	24-HOUR BLOCK AVERAGE BASIS (BACT)
FL-0371	SHADY HILLS COMBINED CYCLE FACILITY	06/07/2021 ACT	06/07/2021	GE 7HA.02 Combustion Turbine and HRSG with Duct Firing	3622.1	MMBTu/hour	Dry low-NOX combustors and Selective Catalytic Reduction (SCR)	2	PPMVD AT 15% O2	24-HOUR BLOCK AVERAGE BASIS (BACT)
IL-0129	CPV THREE RIVERS ENERGY CENTER	07/30/2018 ACT	07/30/2018	Combined Cycle Combustion Turbines	3474	mmBtu/hr	Selective Catalytic Reduction (SCR) and low-NOx combustion technology (dry low-NOx combustion technology for natural gas; water injection for ULSD)	2	PPMV @ 15% O2	3-UNIT OPERATING HOURS
IL-0130	JACKSON ENERGY CENTER	12/31/2018 ACT	12/31/2018	Combined-Cycle Combustion Turbine	3864	mmBtu/hr	Selective Catalytic Reduction (SCR) and low-NOx combustion technology (dry low-NOx combustion technology)	2	PPMV	3-UNIT OPERATING HOURS @ 15% O2
IL-0133	LINCOLN LAND ENERGY CENTER	07/29/2022 ACT	07/29/2022	Combined-Cycle Combustion Turbines	3647	mmBtu/hour	Dry low-NOx combustion with ultra-low NOx combustors; low-NOx duct burners; and selective catalytic reduction (SCR)	2	PPMV @ 15% O2	SEE NOTES
*IN-0365	MAPLE CREEK ENERGY LLC	06/19/2023 ACT	06/19/2023	Combined Cycle Turbine CTGB	4200	MMBTu per hour	Selective Catalytic Reduction system and dry-low-NOx combustors.	2	PPMVD	15% O2 BASED ON A 3-HR AVERAGE

RBL Search Results - NOx

RBLCID	FACILITY NAME	PERMIT ISSUANCE DATE	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGHPUT	THROUGHPUT UNIT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	EMISSION LIMIT 1 AVG TIME CONDITION
IN-0371	WABASH VALLEY RESOURCES, LLC	01/11/2024 ACT	01/11/2024	Integrated Gasification Combined Cycle Combustion Turbine	2292	MMBtu/hr	Steam Injection/SCR and Good Combustion Practices	2	PPMV	15% OXYGEN WHEN COMBUSTING >50% NAT. GAS
*IN-0365	MAPLE CREEK ENERGY LLC	06/19/2023 ACT	06/19/2023	Combined Cycle Turbine CTGA	3800	MMBtu per hour	Selective catalytic reduction system and dry-low-NOx combustors	2	PPMVD	@15% O2 BASED ON A 3-HR AVERAGE
LA-0364	FG LA COMPLEX	01/06/2020 ACT	01/06/2020	Cogeneration Units	2222	mm btu/h	Dry low NOx combustor design along with SCR.	2	PPMVD	12-MONTH ROLLING AVERAGE
LA-0391	MAGNOLIA POWER GENERATING STATION UNIT 1	06/03/2022 ACT	06/03/2022	Combined Cycle Gas Turbine w/ Duct Burners and HRSG	5081	mm BTU/h	Dry low-NOx combustor design, selective catalytic reduction (SCR), and good combustion practices.	2	PPMVD	24-HR ROLLING AVG BASED ON 1-HR AVG
MD-0045	MATTAWOMAN ENERGY CENTER	11/13/2015 ACT	11/13/2015	2 COMBINED-CYCLE COMBUSTION TURBINES	286	MW	GOOD COMBUSTION PRACTICES, DRY LOW-NOX COMBUSTOR DESIGN AND SELECTIVE CATALYTIC REDUCTION (SCR)	2	PPMVD @ 15% O2	3-HOUR BLOCK AVERAGE (EXCLUDING SU/SD)
MI-0431	INDECK NILES LLC	06/26/2018 ACT	06/26/2018	FGCTGHRSG (2 Combined Cycle CTG with HRSGs)	3421	MMBTU/H	SCR with DLNB (Selective Catalytic Reduction with Dry Low NOx Burners)	2	PPM	AT 15%O2; 24-HR ROLL AVG
MI-0432	NEW COVERT GENERATING FACILITY	07/30/2018 ACT	07/30/2018	FG-TURB/DB1-3 (3 combined cycle combustion turbine and heat recovery steam generator trains)	1230	MW	Good combustion practices, DLN burners and SCR.	2	PPMVD	AT 15%O2; EACH INDIV. CT/HRSG TRAIN
MI-0433	MEC NORTH, LLC AND MEC SOUTH LLC	06/29/2018 ACT	06/29/2018	EUCTGHRSG (South Plant): A combined cycle natural gas-fired combustion turbine generator with heat recovery steam generator.	500	MW	SCR with DLNB (Selective catalytic reduction with dry low NOx burners).	2	PPMV	AT 15%O2; 24-HR ROLL AVG NOT S.S.
MI-0433	MEC NORTH, LLC AND MEC SOUTH LLC	06/29/2018 ACT	06/29/2018	EUCTGHRSG (North Plant): A combined-cycle natural gas-fired combustion turbine generator with heat recovery steam generator.	500	MW	SCR with DLNB (Selective catalytic reduction with Dry Low NOx burners).	2	PPMVD	AT 15%O2; 24-H ROLL AVG; NOT S.S.
MI-0435	BELLE RIVER COMBINED CYCLE POWER PLANT	07/16/2018 ACT	07/16/2018	FGCTGHRSG (EUCTGHRSG1 & EUCTGHRSG2)	0		SCR with DLNB (Selective catalytic reduction with dry low NOx burners).	2	PPMVD	AT 15%O2; 24-H ROLL AVG; EACH UNIT; EACH; 24-HR ROLL.AVG EXCEPT START/SHUT
MI-0442	THOMAS TOWNSHIP ENERGY, LLC	08/21/2019 ACT	08/21/2019	FGCTGHRSG	625	MW	Good combustion practices, dry low NOx burners and selective catalytic reduction (SCR).	2	PPM	PPMVD @15% O2. 24HR ROLL AVG EXCEPT SS
*MI-0445	INDECK NILES, LLC	11/26/2019 ACT	11/26/2019	FGCTGHRSG	3421	MMBTU/H	SCR with DLNB (Selective Catalytic Reduction with Dry Low NOx Burners)	2	PPM	
MI-0452	MEC SOUTH, LLC	06/23/2022 ACT	06/23/2022	EUCTGHRSG (South Plant): A combined-cycle natural gas-fired combustion turbine generator with heat recovery steam generator.	3064	MMBTU/H	SCR with DLNB [Selective Catalytic Reduction with Dry Low NOx Burners]	2	PPM	24-HR ROLLING AVG
MI-0455	MIDLAND COGENERATION VENTURE LIMITED PARTNERSHIP	02/01/2023 ACT	02/01/2023	EUCTGHRSG1	4197.6	MMBTU/H	Selective catalytic regeneration	2	PPM	PPMVD AT 15%O2; 24-HR ROLL AVG EXC SU/SD
NJ-0085	MIDDLESEX ENERGY CENTER, LLC	07/19/2016 ACT	07/19/2016	Combined Cycle Combustion Turbine firing Natural Gas with Duct Burner	4000	h/yr	SELECTIVE CATALYTIC REDUCTION AND DRY LOW NOX	2	PPMVD@15%O2	3 H ROLLING AV BASED ON ONE H BLOCK AV
NJ-0085	MIDDLESEX ENERGY CENTER, LLC	07/19/2016 ACT	07/19/2016	Combined Cycle Combustion Turbine firing Natural Gas without Duct Burner	8040	H/YR	Selective Catalytic Reduction System and Dry Low NOx	2	PPMVD@15%O2	3 H ROLLING AV BASED ON ONE H BLOCK AV
PA-0306	TENASKA PA PARTNERS/WESTMORELAND GEN FAC	02/12/2016 ACT	02/12/2016	Large combustion turbine	0		SCR, DLN, and good combustion practice	2	PPMVD@15% O2	
PA-0307	YORK ENERGY CENTER BLOCK 2 ELECTRICITY GENERATION PROJECT	06/15/2015 ACT	06/15/2015	Two Combine Cycle Combustion Turbine with Duct Burner	3001.57	MCF/hr	SCR, Dry Lo-NOx combustor, good combustion practices and low sulfur fuels	2	PPVDM @ 15 O2	
PA-0309	LACKAWANNA ENERGY CTR/JESSUP	12/23/2015 ACT	12/23/2015	Combustion turbine with duct burner	3304.3	MMBtu/hr	Dry low-NOx burners, SCR, exclusive natural gas	2	PPMVD @ 15% O2	
PA-0310	CPV FAIRVIEW ENERGY CENTER	09/02/2016 ACT	09/02/2016	Combustion turbine and HRSG with duct burner NG only	3338	MMBtu/hr	Dry Low NOx combustion technology, SCR at all steady state operating loads, good combustion and operating practices	2	PPMVD @ 15% O2	
PA-0311	MOXIE FREEDOM GENERATION PLANT	09/01/2015 ACT	09/01/2015	Combustion Turbine With Duct Burner	3727	MMBtu/hr	DLN burner, SCR, good engineering practice	2	PPMVD @ 15% O2	
PA-0311	MOXIE FREEDOM GENERATION PLANT	09/01/2015 ACT	09/01/2015	Combustion Turbine without Duct Burner	0		DLN burners, SCR, good engineering practice	2	PPMVD @ 15% O2	
*PA-0315	HILLTOP ENERGY CENTER, LLC	04/12/2017 ACT	04/12/2017	Combustion Turbine without Duct Burner	3509	MMBtu/hr		2	PPMVD	CORRECTED TO 15% O2
*PA-0316	RENOVO ENERGY CENTER, LLC	01/26/2018 ACT	01/26/2018	Combustion Turbine Firing NG	0		SCR	2	PPMVD	CORRECTED TO 15% O2
*PA-0319	RENAISSANCE ENERGY CENTER	08/27/2018 ACT	08/27/2018	COMBUSTION TURBINE UNIT w/o DUCT BURNERS UNIT	2665.9	MMBtu/hr	SCR	2	PPMVD	@15% O2
PA-0333	ESC TIOGA COUNTY POWER LLC/ELEC PWR GEN FAC	08/20/2019 ACT	08/20/2019	COMBUSTION TURBINE/DUCT BURNER	4469	MMBtu/Hr	SCR, Catalytic Oxidizer	2	PPMVD	@ 15% O2 / 1 HR
PA-0334	RENOVO ENERGY CENTER LLC/RENOVO PLT	04/29/2021 ACT	04/29/2021	COMBUSTION TURBINE w DUCT BURNER #2 (Natural Gas)	4546	MMBtu/Hr	SCR, CATALYTIC OXIDIZER	2	PPMVD	@ 15% O2 / 1 HR
PA-0334	RENOVO ENERGY CENTER LLC/RENOVO PLT	04/29/2021 ACT	04/29/2021	COMBUSTION TURBINE w DUCT BURNER #1 (Natural Gas)	4546	MMBtu/Hr	SCR, Catalytic Oxidizer	2	PPMVD	@ 15% O2 / 1 HR
TN-0162	JOHNSONVILLE COGENERATION	04/19/2016 ACT	04/19/2016	Natural Gas-Fired Combustion Turbine with HRSG	1339	MMBtu/hr	Good combustion design and practices, selective catalytic reduction (SCR)	2	PPMVD @ 15% O2	30 UNIT- OPERATING-DAY MOVING AVERAGE
NJ-0088	COGEN TECH LINDEN VENTURE LP	07/30/2019 ACT	07/30/2019	250 MW COMBINED CYCLE COMBUSTION TURBINE FIRING NATURAL GAS	21042	MMcubic ft/yr	Selective Catalytic Reduction, Dry Low NOx, and use of Natural gas as Primary fuel	2	PPMVD@15%O2	3 H ROLLING AV BASED ON ONE H BLOCK
*TN-0164	JOHNSONVILLE COGENERATION	02/01/2018 ACT	02/01/2018	Dual-fuel CT and HRSG with duct burner	1020	MMBtu/hr	SCR, good combustion design & practices	2	PPMVD @ 15% O2	30 DAY AVG WHEN BURNING NATURAL GAS
TX-0730	COLORADO BEND ENERGY CENTER EAGLE MOUNTAIN STEAM ELECTRIC STATION	04/01/2015 ACT	04/01/2015	Combined-cycle gas turbine electric generating facility	1100	MW	SCR and oxidation catalyst	2	PPMVD @ 15% O2	24-HR AVERAGE
TX-0751	STATION	06/18/2015 ACT	06/18/2015	Combined Cycle Turbines (>25 MW) &C" natural gas	210	MW	Selective Catalytic Reduction	2	PPM	ROLLING 24-HR AVERAGE
TX-0767	LON C. HILL POWER STATION	10/02/2015 ACT	10/02/2015	Combined Cycle Turbines (>25 MW)	195	MW	Selective Catalytic Reduction	2	PPM	ROLLING 24-HR AVERAGE
TX-0773	FGE EAGLE PINES PROJECT	11/04/2015 ACT	11/04/2015	Combined Cycle Turbines (>25 MW)	321	MW	Selective Catalytic Reduction	2	PPM	24-HR AVERAGE
TX-0788	NECHES STATION	03/24/2016 ACT	03/24/2016	Combined Cycle & Cogeneration	231	MW	Selective Catalytic Reduction	2	PPM	
TX-0789	DECORDOVA STEAM ELECTRIC STATION	03/08/2016 ACT	03/08/2016	Combined Cycle & Cogeneration	231	MW	Selective Catalytic Reduction	2	PPM	
TX-0819	GAINES COUNTY POWER PLANT	04/28/2017 ACT	04/28/2017	Combined Cycle Turbine with Heat Recovery Steam Generator, fired Duct Burners, and Steam Turbine Generator	426	MW	Selective Catalytic Reduction (SCR) and Dry Low NOx burners	2	PPMVD	15% O2 3-H AVG
TX-0834	MONTGOMERY COUNTY POWER STATION	03/30/2018 ACT	03/30/2018	Combined Cycle Turbine	2635	MMBTU/HR/UNIT	SCR and Dry Low NOx burners	2	PPMVD	15% O2 1-HOUR AVERAGE
VA-0325	GREENSVILLE POWER STATION	06/17/2016 ACT	06/17/2016	COMBUSTION TURBINE GENERATOR WITH DUCT-FIRED HEAT RECOVERY STEAM GENERATORS (3)	3227	MMBTU/HR	SCR	2	PPMVD	1 HR AVG

RBLC Search Results - VOC

RBLCID	FACILITY NAME	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGHPUT	THROUGHPUT UNIT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	EMISSION LIMIT 1 AVG TIME CONDITION
WI-0300	NEMADJI TRAIL ENERGY CENTER	09/01/2020	Natural-Gas-Fired Combined-Cycle Turbine (P01) Start-Up and Shutdown (diesel)	0			2951	LB/START-UP	
TX-0834	MONTGOMERY COUNTY POWER STATION	03/30/2018	COMBINED CYCLE TURBINE MSS REDUCED LOAD	0		minimizing duration of startup / shutdown events, engaging the pollution control equipment as soon as practicable (based on vendor recommendations and guarantees), and meeting the emissions limits on the MAERT	2000	LB/H	
WI-0300	NEMADJI TRAIL ENERGY CENTER	09/01/2020	Natural Gas-Fired Combined-Cycle Turbine (P01) Start-up and Shutdown (Natural Gas)	0			950	LB/START-UP	
OH-0365	ROLLING HILLS GENERATING, LLC	05/20/2015	Combustion Turbines, Scenario 1 (4, identical) (P001, P002, P004, P005)	2022	MMBTU/H	good combustion practices along with clean fuels	611.38	T/YR	PER ROLLING 12 MONTH PERIOD. SEE NOTES.
LA-0391	MAGNOLIA POWER GENERATING STATION UNIT 1	06/03/2022	Combined Cycle Gas Turbine Startup and Shutdown	5081	mm BTU/h	Good combustion practices.	520	LB/HR	
MD-0045	MATTAWOMAN ENERGY CENTER	11/13/2015	2 COMBINED-CYCLE COMBUSTION TURBINES - COLD STARTUP	286	MW	OXIDATION CATALYST AND GOOD COMBUSTION PRACTICES	301	LB/EVENT	COLD STARTUP
MD-0045	MATTAWOMAN ENERGY CENTER	11/13/2015	2 COMBINED-CYCLE COMBUSTION TURBINES - WARM STARTUP	286	MW	OXIDATION CATALYST AND GOOD COMBUSTION PRACTICES	258	LB/EVENT	WARM STARTUP
VA-0332	CHICKAHOMINY POWER LLC	06/24/2019	Three (3) Mitsubishi Hitachi Power Systems combustion turbine generators	35000	MMCF/YR	Oxidation catalyst and good combustion practices	216	LB/TURBINE/EVENT	COLD START 42 MIN OR LESS
MD-0045	MATTAWOMAN ENERGY CENTER	11/13/2015	2 COMBINED-CYCLE COMBUSTION TURBINES - HOT STARTUP	286	MW	OXIDATION CATALYST AND GOOD COMBUSTION PRACTICES	207	LB/EVENT	HOT STARTUP
MD-0045	MATTAWOMAN ENERGY CENTER	11/13/2015	2 COMBINED-CYCLE COMBUSTION TURBINES - SHUTDOWN	286	MW	GOOD COMBUSTION PRACTICES AND OXIDATION CATALYST	63	LB/EVENT	SHUTDOWN
LA-0313	ST. CHARLES POWER STATION	08/31/2016	SCPS Combined Cycle Unit 1A	3625	MMBTU/hr	Catalytic oxidation and good combustion practices for normal operations, and good combustion practices for startup/shutdown operations.	61.27	LB/H	HOURLY MAXIMUM
LA-0313	ST. CHARLES POWER STATION	08/31/2016	SCPS Combined Cycle Unit 1B	3625	MMBTU/hr	Catalytic oxidation and good combustion practices during normal operations, and good combustion practices during startup/shutdown operations.	61.27	LB/H	HOURLY MAXIMUM
VA-0328	C4GT, LLC	04/26/2018	GE Combustion Turbine - Startup and Shutdown	34000	MMCF/YR	Oxidation catalyst and good combustion practices	60	LB/TURBINE/EVENT	COLD START 60 MIN OR LESS
VA-0328	C4GT, LLC	04/26/2018	Siemens Combustion Turbine - Startup & Shutdown	35000	MMCF/YR	Oxidation catalyst and good combustion practices	37	LB/TURBINE/EVENT	COLD START 55 MIN OR LESS
*IN-0365	MAPLE CREEK ENERGY LLC	06/19/2023	Combined Cycle Turbine CTGA SU/SD	3800	MMBTU per hour		29.3	TONS PER YEAR	FOR DURATION OF COMBINED SU/SD EVENTS
*IN-0365	MAPLE CREEK ENERGY LLC	06/19/2023	Combined Cycle Turbine CTGB SU/SD	0			18.8	TONS PER YEAR	FOR DURATION OF COMBINED SU/SD EVENTS
AL-0328	PLANT BARRY	11/09/2020	Two 744 MW Combined Cycle Units	744	MW	Oxidation Catalyst	13.6	LB/HR	3 HOUR AVG
OH-0374	GUERNSEY POWER STATION LLC	10/23/2017	Combined Cycle Combustion Turbines (3, identical) (P001 to P003)	3516	MMBTU/H	oxidation catalyst and good combustion practices as recommended by the manufacturer	11.73	LB/H	WITH DUCT BURNER. SEE NOTES.
*WW-0029	HARRISON COUNTY POWER PLANT	03/27/2018	GE 7HA.02 Turbine	3496.2	mmBtu/hr	Oxidation Catalyst, Good Combustion Practices	11.4	LB/HR	
OH-0367	SOUTH FIELD ENERGY LLC	09/23/2016	Combined Cycle Combustion Turbines (two, identical) (P001 and P002)	3131	MMBTU/H	Good combustion controls and oxidation catalyst	10.64	LB/H	WITH DUCT BURNER. SEE NOTES.
OH-0377	HARRISON POWER	04/19/2018	Mitsubishi Hitachi Power Systems (MHPS) Combustion Turbines (P007 & P008)	3231	MMBTU/H	Good combustion practices and oxidation catalyst	9.8	LB/H	WITH DUCT BURNER. SEE NOTES.
OH-0375	LONG RIDGE ENERGY GENERATION LLC - HANNIBAL POWER	11/07/2017	Siemens Combustion Turbine (P006)	3602	MMBTU/H	oxidation catalyst and shall operate the emissions unit in accordance with good combustion practices as recommended by the manufacturer	9.5	LB/H	WITH DUCT BURNER. SEE NOTES.
OH-0370	TRUMBULL ENERGY CENTER	09/07/2017	Combined Cycle Combustion Turbines (two, identical) (P001 and P002)	3025	MMBTU/H	Good combustion controls and oxidation catalyst	8.8	LB/H	WITH DUCT BURNER. SEE NOTES.
OH-0372	OREGON ENERGY CENTER	09/27/2017	Combined Cycle Combustion Turbines (two, identical) (P001 and P002)	3055	MMBTU/H	oxidation catalyst and good combustion control	8.8	LB/H	WITH DUCT BURNER. SEE NOTES.
OH-0375	LONG RIDGE ENERGY GENERATION LLC - HANNIBAL POWER	11/07/2017	Mitsubishi Combustion Turbine (P005)	3320	MMBTU/H	oxidation catalyst and shall operate the emissions unit in accordance with good combustion practices as recommended by the manufacturer	8.8	LB/H	WITH DUCT BURNER. SEE NOTES.
OH-0366	CLEAN ENERGY FUTURE - LORDSTOWN, LLC	08/25/2015	Combined Cycle Combustion Turbines (two, identical) (P001 and P002)	2725	MMBTU/H	Good combustion controls and oxidation catalyst	8.2	LB/H	WITH DUCT BURNER. SEE NOTES.
*WW-0032	BROOKE COUNTY POWER PLANT	09/18/2018	GE 7HA.01 Turbine	2737.7	mmBtu/hr	Oxidation Catalyst, Good Combustion Practices	8.1	LB/HR	
OH-0375	LONG RIDGE ENERGY GENERATION LLC - HANNIBAL POWER	11/07/2017	General Electric Combustion Turbine (P004)	3544	MMBTU/H	Oxidation catalyst and good combustion practices as recommended by the manufacturer.	4.54	LB/H	EXCEPT STARTUP AND SHUTDOWN. SEE NOTES
OH-0377	HARRISON POWER	04/19/2018	General Electric (GE) Combustion Turbines (P005 & P006)	3459.6	MMBTU/H	Good combustion practices and oxidation catalyst	4.36	LB/H	WITH DUCT BURNER. SEE NOTES.
LA-0364	FG LA COMPLEX	01/06/2020	Cogeneration Units	2222	mm btu/h	Good combustion practices and catalytic oxidation	4	PPMVD	
MI-0423	INDECK NILES, LLC	01/04/2017	FGCTGHRSG (2 Combined Cycle CTGs with HRSGs)	8322	MMBTU/H	Oxidation Catalyst Technology and Good Combustion Practices	4	PPM	TEST PROTOCOL WILL SPECIFY
MI-0424	HOLLAND BOARD OF PUBLIC WORKS - EAST 5TH STREET	12/05/2016	FGCTGHRSG (2 Combined cycle CTGs with HRSGs; EUCTGHRSG10 & EUCTGHRSG11)	554	MMBTU/H, each	Oxidation catalyst technology and good combustion practices.	4	PPM AT 15% O2	TEST PROTOCOL WILL SPECIFY AVG TIME
MI-0433	MEC NORTH, LLC AND MEC SOUTH LLC	06/29/2018	EUCTGHRSG (South Plant): A combined cycle natural gas-fired combustion turbine generator with heat recovery steam generator.	500	MW	Oxidation catalyst technology and good combustion practices.	4	PPMVD	AT 15%O2; NOT INCL. STARTUP/SHUTDOWN

RBLC Search Results - VOC

RBLCID	FACILITY NAME	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGHPUT	THROUGHPUT UNIT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	EMISSION LIMIT 1 AVG TIME CONDITION
MI-0433	MEC NORTH, LLC AND MEC SOUTH LLC	06/29/2018	EUCTGHRSG (North Plant): A combined-cycle natural gas-fired combustion turbine generator with heat recovery steam generator.	500	MW	Oxidation catalyst technology and good combustion practices.	4	PPMVD	AT 15%O2; HOURLY
*MI-0445	INDECK NILES, LLC	11/26/2019	FGCTGHRSG	3421	MMBTU/H	Good combustion practices, inlet air conditioning, and the use of pipeline quality natural gas.	4	PPM	PPMVD@15%O2, HOURLY; EACH
TX-0730	COLORADO BEND ENERGY CENTER	04/01/2015	Combined-cycle gas turbine electric generating facility	1100	MW	SCR and oxidation catalyst	4	PPMVD @ 15% O2	3-HR AVERAGE
TX-0819	GAINES COUNTY POWER PLANT	04/28/2017	Combined Cycle Turbine with Heat Recovery Steam Generator, fired Duct Burners, and Steam Turbine Generator	426	MW	Oxidation catalyst and good combustion practices	3.5	PPMVD	15% O2
MI-0441	LBWL--ERICKSON STATION	12/21/2018	EUCTGHRSG2--A 667 MMBTU/H natural gas fired CTG with a HRSG.	667	MMBTU/H	An oxidation catalyst for VOC control and good combustion practices.	3	PPM	PPMVD@15%O2; HOURLY; SEE NOTES
MI-0441	LBWL--ERICKSON STATION	12/21/2018	EUCTGHRSG1--A 667 MMBTU/H NG fired combustion turbine generator coupled with a heat recovery steam generator (HRSG)	667	MMBTU/H	An oxidation catalyst for VOC control for each CTG/HRSG unit, good combustion practices.	3	PPM	PPMVD@15%O2; HOURLY EXC.START/SHUT; NOTE
MI-0447	LBWL--ERICKSON STATION	01/07/2021	EUCTGHRSG1	667	MMBTU/H	An oxidation catalyst for VOC control for each CTG/HRSG unit, good combustion practices.	3	PPM	HOURLY EXCEPT STARTUP SHUTDOWN
MI-0447	LBWL--ERICKSON STATION	01/07/2021	EUCTGHRSG2	667	MMBTU/H	An oxidation catalyst for VOC control for each CTG/HRSG unit, good combustion practices.	3	PPM	HOURLY; EXCEPT DURING STARTUP/SHUTDOWN
MI-0454	LBWL-ERICKSON STATION	12/20/2022	EUCTGHRSG1	667	MMBTU/H	An oxidation catalyst for VOC control for each CTG/HRSG unit, good combustion practices.	3	PPM	PPMVD AT 15%O2; HOURLY EXC SU/SD
MI-0454	LBWL-ERICKSON STATION	12/20/2022	EUCTGHRSG2	667	MMBTU/H	An oxidation catalyst for VOC control for each CTG/HRSG unit, good combustion practices.	3	PPM	PPMVD AT 15%O2; HOURLY EXC SU/SD. CC MOD
WI-0300	NEMADJI TRAIL ENERGY CENTER	09/01/2020	Natural-Gas-Fired Combined-Cycle Turbine (P01)	4671	MMBTU/H	Oxidation Catalyst, good combustion control	2.7	PPM AT 15% O2	168-HR AVG., NAT. GAS, DUCT FIRING
*WI-0326	NEMADJI TRAIL ENERGY CENTER	09/19/2023	Combustion Turbine; S01/P01/C01a (SCR)/C01b (oxidation catalyst)	4671	MMBTU/hr	Except during start-up and shutdown, BACT has been determined to be: (a) An oxidation catalyst shall be used to control emissions from P01 while P01 is in operation. (b) The permittee shall use good combustion control according to the manufacturer's recommendations.	2.7	PPM	168-HOUR ROLLING, NATURAL GAS W/ DUCT
MI-0455	MIDLAND COGENERATION VENTURE LIMITED PARTNERSHIP	02/01/2023	EUCTGHRSG1	4197.6	MMBTU/H	Oxidation catalyst	2.4	PPM	PPMVD AT 15%O2; HOURLY EXC SU/SD
PA-0306	TENASKA PA PARTNERS/WESTMORELAND GEN FAC	02/12/2016	Large combustion turbine	0		Ox Cat and good combustion practices	2.4	PPMDV@15% O2	
AK-0088	LIQUEFACTION PLANT	07/07/2022	Four Combined Cycle Gas-Fired Turbines	384	MMBTU/hr	Oxidation catalyst and good combustion practices	2	PPMV @ 15% O2	3-HOURS
MI-0451	MEC NORTH, LLC	06/23/2022	EUCTGHRSG (North Plant): A combined cycle natural gas fired combustion turbine generator with heat recovery steam generator	3064	MMBTU/H	Oxidation catalyst technology and good combustion practices.	2	PPM	HOURLY
MI-0452	MEC SOUTH, LLC	06/23/2022	EUCTGHRSG (South Plant): A combined-cycle natural gas-fired combustion turbine generator with heat recovery steam generator.	3064	MMBTU/H	Oxidation Catalyst Technology and Good Combustion Practices	2	PPM	HOURLY
NJ-0085	MIDDLESEX ENERGY CENTER, LLC	07/19/2016	Combined Cycle Combustion Turbine firing Natural Gas with Duct Burner	4000	h/yr	Oxidation Catalyst and good combustion practices	2	PPMVD@15%O2	AV OF THREE ONE H STACK TESTS EVERY 5 YR
*PA-0315	HILLTOP ENERGY CENTER, LLC	04/12/2017	Combustion Turbine With Duct Bumer	4367	MMBTU/hr		2	PPMDV	CORRECTED TO 15% O2
PA-0334	RENOVO ENERGY CENTER LLC/RENOVO PLT	04/29/2021	COMBUSTION TURBINE #2 (ULSD)	3940	MMBTU/Hr	selective catalytic reduction (SCR) system, oxidation catalyst.	2	PPMVD	@ 15% O2 / 1 HR
PA-0334	RENOVO ENERGY CENTER LLC/RENOVO PLT	04/29/2021	COMBUSTION TURBINE #1 (ULSD)	3940	MMBTU/Hr	SCR, Catalytic Oxidizer	2	PPMVD	@ 15% O2 / 1 HR
TX-0751	EAGLE MOUNTAIN STEAM ELECTRIC STATION	06/18/2015	Combined Cycle Turbines (>25 MW) <sup>2</sup> natural gas	210	MW	Oxidation catalyst	2	PPM	
TX-0767	LON C. HILL POWER STATION	10/02/2015	Combined Cycle Turbines (>25 MW)	195	MW	oxidation catalyst	2	PPM	
TX-0773	FGE EAGLE PINES PROJECT	11/04/2015	Combined Cycle Turbines (>25 MW)	321	MW	Oxidation Catalyst	2	PPM	
TX-0788	NECHES STATION	03/24/2016	Combined Cycle & amp; Cogeneration	231	MW	OXIDATION CATALYST	2	PPM	
TX-0789	DECORDOVA STEAM ELECTRIC STATION	03/08/2016	Combined Cycle & amp; Cogeneration	231	MW	OXIDATION CATALYST	2	PPM	
TX-0790	PORT ARTHUR LNG EXPORT TERMINAL	02/17/2016	Refrigeration Compression Turbines	10	M TONNES/YR	Dry low NOx burners and good combustion practices	2	PPM	3-HR AVG
TX-0834	MONTGOMERY COUNTY POWER STATION	03/30/2018	Combined Cycle Turbine	2635	MMBTU/HR/UNIT	Oxidation catalyst	2	PPMVD	15% O2 3 HOUR AVERAGE
TX-0878	LNG EXPORT TERMINAL	09/15/2022	Refrigeration Compression Turbines	26.92	MMTON/Y	good combustion practices.	2	PPM	3-HR AVG
TX-0939	ORANGE COUNTY ADVANCED POWER STATION	03/13/2023	Combined Cycle Turbines	1215	MW	Oxidation Catalyst and good combustion practices	2	PPMVD	15% O2 3-HR AVERAGE
*TX-0994	SL ENERGY POWER PLANT I	10/29/2025	COMBINED CYCLE GAS TURBINES	348	MMBTU	An oxidation catalyst and good combustion practices	2	PPMVD	15% O2
*TX-1005	FERMI AMERICA PROJECT MATADOR	02/25/2026	COMBINED CYCLE TURBINES	443	MMBTU/HR	low carbon fuel, energy efficient design, good combustion	2	PPMVD	15% O2 NORMAL 3-HR AVG
*TX-1007	NRG JEWETT ENERGY CENTER	01/15/2026	Combined Cycle & amp; Cogeneration (>25 MW), Nat	775	MMBTU/HR	Oxidation catalyst and good combustion practices.MSS: N	2	PPMVD	15% O2 24-HR AVG
PA-0307	YORK ENERGY CENTER BLOCK 2 ELECTRICITY GENERATION PROJECT	06/15/2015	Two Combine Cycle Combustion Turbine with Duct Burner	3001.57	MCF/hr	Oxidation catalyst, good combustion practices and low sulfur fuels	1.9	PPMDV @ 15% O2	
CT-0161	KILLINGLY ENERGY CENTER	06/30/2017	Natural Gas w/Duct Firing	2639	MMBTU/hr	Oxidation Catalyst	1.6	PPMVD @15% O2	

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PA-0334	RENOVO ENERGY CENTER LLC/RENOVO PLT	04/29/2021	COMBUSTION TURBINE w DUCT BURNER #2 (Natural Gas)	4546	MMBtu/Hr	SCR, CATALYTIC OXIDIZER	1.6	PPMVD	@ 15% O2 / 1 HR
PA-0334	RENOVO ENERGY CENTER LLC/RENOVO PLT	04/29/2021	COMBUSTION TURBINE w DUCT BURNER #1 (Natural Gas)	4546	MMBtu/Hr	SCR, Catalytic Oxidizer	1.6	PPMVD	@ 15% O2 / 1 HR
PA-0307	YORK ENERGY CENTER BLOCK 2 ELECTRICITY GENERATION PROJECT	06/15/2015	Two combined cycle turbines with out duct burner	2291.64	MCF/hr	Oxidation catalyst, good combustion practices and low sulfur fuels	1.5	PPMDV @ 15% O2	
PA-0309	LACKAWANNA ENERGY CTR/JESSUP	12/23/2015	Combustion turbine with duct burner	3304.3	MMBtu/hr	Oxidation catalyst, combustion controls, exclusive natural gas	1.5	PPMDV @ 15% O2	
PA-0310	CPV FAIRVIEW ENERGY CENTER	09/02/2016	Combustion turbine and HRSG with duct burner NG only	3338	MMBtu/hr	Oxidation catalyst and good combustion practices	1.5	PPMDV @ 15% O2	
PA-0311	MOXIE FREEDOM GENERATION PLANT	09/01/2015	Combustion Turbine With Duct Burner	3727	MMBtu/hr	Oxidation catalyst and good engineering practice	1.5	PPMDV @ 15% O2	
*VA-0335	PANDA STONEWALL LLC	12/18/2020	Combustion Turbines, Two (2) and HRSG Duct Burners	2.55	MMBTU/H	Catalytic Oxidizer	1.5	PPMVD AT 15% O2	NORMAL OPERATIONS W DUCT BURNER/W/O DB
PA-0311	MOXIE FREEDOM GENERATION PLANT	09/01/2015	Combustion Turbine without Duct Burner	0		Oxidation catalyst, and good engineering practice	1.5	LB/MMBTU	
*LA-0412	ENTERGY LOUISIANA, LLC - FRANKLIN F	12/23/2025	Gas Turbines	4985.3	mm BTU/h	Oxidation catalyst and energy efficiency/waste heat recov	1.5	PPM	
*PA-0319	RENAISSANCE ENERGY CENTER	08/27/2018	COMBUSTION TURBINE UNIT with DUCT BURNERS UNIT	0			1.4	PPMVD	@15% O2
VA-0325	GREENSVILLE POWER STATION	06/17/2016	COMBUSTION TURBINE GENERATOR WITH DUCT-FIRED HEAT RECOVERY STEAM GENERATORS (3)	3227	MMBTU/HR	Oxidation Catalyst and good combustion practices	1.4	PPMVD	
LA-0331	CALCASIEU PASS LNG PROJECT	09/21/2018	Combined Cycle Combustion Turbines (CCCT1 to CCCT5)	921	MM BTU/h	Catalytic Oxidation, Proper Equipment Design and Good Combustion Practices.	1.1	PPMV	3 HOUR AVERAGE
CT-0157	CPV TOWANTIC, LLC	11/30/2015	Combined Cycle Power Plant	2120000	MMBtu/12 months	Oxidation Catalyst	1	PPMVD @15% O2	
CT-0158	CPV TOWANTIC, LLC	11/30/2015	Combined Cycle Power Plant	2120000	MMBtu/yr	Oxidation Catalyst	1	PPMVD @15% O2	
FL-0356	OKEECHOBEE CLEAN ENERGY CENTER	03/09/2016	Combined-cycle electric generating unit	3096	MMBtu/hr per turbine	Complete combustion minimizes VOC	1	PPMVD@15%O2	GAS OPERATION
FL-0363	DANIA BEACH ENERGY CENTER	12/04/2017	2-on-1 combined cycle unit (GE 7HA)	4000	MMBtu/hr	Clean fuels	1	PPMVD@15% O2	FOR NATURAL GAS OPERATION
FL-0364	SEMINOLE GENERATING STATION	03/21/2018	2-on-1 natural gas combined-cycle unit (GE 7HA.02)	3514	MMBtu/hr	Oxidation catalyst	1	PPMVD@15% O2	WITHOUT DUCT BURNER FIRING
IL-0133	LINCOLN LAND ENERGY CENTER	07/29/2022	Combined-Cycle Combustion Turbines	3647	mmBtu/hour	Oxidation catalyst and good combustion practices.	1	PPMV, ADJ. TO 15% O2	ROLLING 3-OPERATING HOUR
*IN-0365	MAPLE CREEK ENERGY LLC	06/19/2023	Combined Cycle Turbine CTGB	4200	MMBTU per hour	catalytic oxidation	1	PPMVD	@15% O2 BASED ON A 3-HR AVERAGE
*IN-0365	MAPLE CREEK ENERGY LLC	06/19/2023	Combined Cycle Turbine CTGA	3800	MMBTU per hour	Oxidation catalyst	1	PPMVD	@ 15% O2 BASED ON A 3 HR AVERAGE
IN-0382	DUKE ENERGY INDIANA, INC.- CAYUGA GENERATING STATION	02/14/2025	Combustion Turbines (6A and 6B)	4254	MMBtu/hr	Oxidation Catalyst and Good Combustion Practices	1	PPMVD@15% O2	3-HOUR AVERAGE W/O DB EXCL. SU/SD
LA-0391	MAGNOLIA POWER GENERATING STATION UNIT 1	06/03/2022	Combined Cycle Gas Turbine w/ Duct Burners and HRSG	5081	mm BTU/h	Catalytic oxidation and good combustion practices.	1	PPMVD	3 1-HR TEST AVERAGE
MD-0045	MATTAWOMAN ENERGY CENTER	11/13/2015	2 COMBINED-CYCLE COMBUSTION TURBINES	286	MW	OXIDATION CATALYST AND GOOD COMBUSTION PRACTICES	1	PPMVD @ 15% O2	3-HR BLOCK AVG. W/OUT DUCT FIRING
MI-0432	NEW COVERT GENERATING FACILITY	07/30/2018	FG-TURB/DB1-3 (3 combined cycle combustion turbine and heat recovery steam generator trains)	1230	MW	An oxidation catalyst and good combustion practices.	1	PPMVD	HOURLY; EACH CT/HRSG TRAIN
NJ-0085	MIDDLESEX ENERGY CENTER, LLC	07/19/2016	Combined Cycle Combustion Turbine firing Natural Gas without Duct Burner	8040	H/YR	Oxidation catalyst and good combustion practices	1	PPMVD@15%O2	AV OF THREE ONE H STACK TESTS EVERY 5 YR
PA-0309	LACKAWANNA ENERGY CTR/JESSUP	12/23/2015	Combustion turbine without duct burner	0		Oxidation catalyst, combustion controls, exclusive natural gas	1	PPNDV @ 15% O2	
PA-0310	CPV FAIRVIEW ENERGY CENTER	09/02/2016	Combustion turbine and HRSG without duct burner NG only	0			1	PPMDV @ 15% O2	
*PA-0315	HILLTOP ENERGY CENTER, LLC	04/12/2017	Combustion Turbine without Duct Burner	3509	MMBtu/hr		1	PPMVD	CORRECTED TO 15% O2
*PA-0316	RENOVO ENERGY CENTER, LLC	01/26/2018	Combustion Turbine Firing NG	0			1	PPMVD	CORRECTED TO 15% O2
*PA-0319	RENAISSANCE ENERGY CENTER	08/27/2018	COMBUSTION TURBINE UNIT w/o DUCT BURNERS UNIT	2665.9	MMBtu/hr	Oxidation Catalyst	1	PPMVD	@15% O2
TX-0817	CHOCOLATE BAYOU STEAM GENERATING (CBSG) STATION	02/17/2017	Combined Cycle Cogeneration	50	MW	OXIDATION CATALYST	1	PPMVD	
TX-0915	UNIT 5	03/17/2021	COMBINED CYCLE TURBINE	0		OXIDATION CATALYST	1	PPMVD	3-HR ROLLING
VA-0328	C4GT, LLC	04/26/2018	Siemens Combustion Turbine - Option 2 - Normal Operation	35000	MMCF/YR	Oxidation catalyst and good combustion practice	1	PPMVD @ 15% O2	3 H AV/WITHOUT DB
*WV-0033	MAIDSVILLE	01/05/2022	Combustion Turbine & Duct Burner (CT-01/HRSG1 & CT-02/HRSG2)	1275	mw	good combustion practices and oxidation catalyst	1	PPMVD @ 15% O2	AVG OF 3 1-HR TEST RUNS (W/O DUCT FIRING)
NJ-0088	COGEN TECH LINDEN VENTURE LP	07/30/2019	250 MW COMBINED CYCLE COMBUSTION TURBINE FIRING NATURAL GAS	21042	MMcubic ft/yr	Add on Oxidation Catalyst and use of Natural Gas as primary fuel for pollution prevention	1	PPMVD@15% O2	3 H ROLLING AV BASED ON ONE H BLOCK
*IN-0402	BLUE POWER, LLC	09/03/2025	Combined- Cycle Combustion Turbines	485	MMbtu	Oxidation Catalyst	1	PPMVD @ 15% O2	3 HR- AVG
CT-0161	KILLINGLY ENERGY CENTER	06/30/2017	Natural Gas w/o Duct Firing	2969	MMBtu/hr	Oxidation Catalyst	0.7	PPMVD @15% O2	
VA-0328	C4GT, LLC	04/26/2018	GE Combustion Turbine - Option 1 - Normal Operation	34000	MMCF/YR	Oxidation catalyst and good combustion practices	0.7	PPMVD @ 15% O2	3 HR AV/WITHOUT DB
VA-0332	CHICKAHOMINY POWER LLC	06/24/2019	Three (3) Mitsubishi Hitachi Power Systems combustion turbine generators	35000	MMCF/YR	Controlled by an oxidation catalyst and good combustion practices (e.g. controlled fuel/air mixing, adequate temperature, and gas residence time)	0.7	PPMVD @ 15% O2	3 HR AVG

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TX-0756	CCI CORPUS CHRISTI CONDENSATE SPLITTER FACILITY	06/19/2015	Boilers, BL-1 and BL-2	37	MMBtu/hr (max)	Good combustion practices will limit VOC emissions to 0.005 lb per 1000 scf. Fuel flow will be measured.	0.005	LB/100 SCF	EACH BOILER
MI-0442	THOMAS TOWNSHIP ENERGY, LLC	08/21/2019	FGCTGHRSG	625	MW	Oxidation catalyst and good combustion practices.	0.004	LB/MMBTU	HOURLY; NOT STARTUP/SHUTDOWN; EACH UNIT
MI-0435	BELLE RIVER COMBINED CYCLE POWER PLANT	07/16/2018	FGCTGHRSG (EUCTGHRSG1 & EUCTGHRSG2)	0		Oxidation catalyst technology and good combustion practices.	0.0026	LB/MMBTU	EACH UNIT; HOURLY EXCEPT S.S.
AK-0085	GAS TREATMENT PLANT	08/13/2020	Six (6) Cogeneration Gas-Fired Turbines (Treated Gas Compressor Turbines)	576	MMBtu/hr	Oxidation catalyst and good combustion practices	0.0022	LB/MMBTU	3-HOUR AVERAGE
AK-0085	GAS TREATMENT PLANT	08/13/2020	Six (6) Cogeneration Gas-Fired Turbines (CO2 Compressor Turbines))	431	MMBtu/hr	Oxidation catalyst and good combustion control practices	0.0022	LB/MMBTU	3-HOUR AVERAGE
KS-0041	HOLLYFRONTIER EL DORADO REFINERY	10/30/2019	L3804	456.5	MMBTU/H	Proper combustion and operation	0.0021	LB/MMBTU	3-HOUR ROLLING AVERAGE
IN-0382	DUKE ENERGY INDIANA, INC.- CAYUGA GENERATING STATION	02/14/2025	Lube Oil Demister Vents	0		good engineering design and operating practices	0		
OH-0365	ROLLING HILLS GENERATING, LLC	05/20/2015	Combustion Turbines, Scenario 2 (4, identical) (P001, P002, P004, P005)	2144	MMBTU/H	good combustion practices along with clean fuels	0		
TX-0939	ORANGE COUNTY ADVANCED POWER STATION	03/13/2023	LUBE OIL VENTS	0		Mist eliminator	0		
TX-0939	ORANGE COUNTY ADVANCED POWER STATION	03/13/2023	TURBINE MSS	0		On-line turbine washing, turbine filter changeouts, catalyst handling, fuel venting, CEMS calibration, fugitive/small equipment maintenance Good air pollution control practices and safe operating practices.	0		
WI-0306	WPL- RIVERSIDE ENERGY CENTER	02/28/2020	Natural Gas Fired Combustion Turbine (P20, P21) Phase I Commissioning	2208	MMBTU/H		0	SEE NOTES	
WI-0306	WPL- RIVERSIDE ENERGY CENTER	02/28/2020	Natural Gas Fired Combustion Turbine (P20, P21) Phase II Commissioning	2208	MMBTU/H		0	(SEE NOTES)	
*TX-1014	RAYBURN ENERGY STATION	03/31/2026	Simple Cycle Gas Turbines	57	MW	good combustion practices, LUBE OIL VENTS dedicated closed-loop lube oil recirculation systems to lubricate the moving parts. Lubricating oil will be recirculated through the combustion turbines' machinery from the oil sump, and the heating of recirculating lube oil in the turbine and generator housings will create oil vapor and oil droplets in the oil reservoir compartments. An available control technology to control particulate matter and VOC emissions from lube oil vents is to use the mist eliminators. Oil mist eliminators work by capturing and removing fine oil droplets from air or gas streams, typically using a series of filters or coalescing elements. As the mist-laden air passes through the eliminator, small oil droplets coalesce into larger ones, which are then collected and drained away. dedicated closed-loop lube oil recirculation systems to lubricate the moving parts. Lubricating oil will be recirculated through the combustion turbines' machinery from the oil sump, and the heating of recirculating lube oil in the	0		

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WI-0300	NEMADJI TRAIL ENERGY CENTER	09/01/2020	Natural-Gas-Fired Combined-Cycle Turbine (P01) Start-Up and Shutdown (diesel)	0			25846	LB/START-UP	
WI-0300	NEMADJI TRAIL ENERGY CENTER	09/01/2020	Natural Gas-Fired Combined-Cycle Turbine (P01) Start-up and Shutdown (Natural Gas)	0			11066	LB/START-UP	
TX-0834	MONTGOMERY COUNTY POWER STATION	03/30/2018	COMBINED CYCLE TURBINE MSS REDUCED LOAD	0		minimizing duration of startup / shutdown events, engaging the pollution control equipment as soon as practicable (based on vendor recommendations and guarantees), and meeting the emissions limits on the MAERT	8000	LB/H	
MD-0045	MATTAWOMAN ENERGY CENTER	11/13/2015	2 COMBINED-CYCLE COMBUSTION TURBINES - COLD STARTUP	286	MW	GOOD COMBUSTION PRACTICES AND OXIDATION CATALYST	1772	LB/EVENT	COLD STARTUP
WI-0306	WPL- RIVERSIDE ENERGY CENTER	02/28/2020	Natural Gas Fired Combustion Turbine (P20, P21) Phase I Commissioning	2208	MMBTU/H		1750	PPMVD, 15% OXYGEN	AVG. ANY 24-HR OPERATIONAL
*IN-0365	MAPLE CREEK ENERGY LLC	06/19/2023	Combined Cycle Turbine CTGA SU/SD	3800	MMBTu per hour		1724	LB PER EVENT	
LA-0391	MAGNOLIA POWER GENERATING STATION UNIT 1	06/03/2022	Combined Cycle Gas Turbine Startup and Shutdown	5081	mm BTU/h	Good combustion practices.	1620	LB/HR	
MI-0427	FILER CITY STATION	11/17/2017	EUCCT (Startup/Shutdown)	1934.7	MMBTU/H	Oxidation catalyst technology and good combustion practices.	1580	POUNDS	POUNDS PER EVENT
MD-0045	MATTAWOMAN ENERGY CENTER	11/13/2015	2 COMBINED-CYCLE COMBUSTION TURBINES - WARM STARTUP	286	MW	GOOD COMBUSTION PRACTICES AND OXIDATION CATALYST	1461	LB/EVENT	WARM STARTUP
MD-0045	MATTAWOMAN ENERGY CENTER	11/13/2015	2 COMBINED-CYCLE COMBUSTION TURBINES - HOT STARTUP	286	MW	GOOD COMBUSTION PRACTICES AND OXIDATION CATALYST	1216	LB/EVENT	HOT STARTUP
MI-0432	NEW COVERT GENERATING FACILITY	07/30/2018	FG-TURB/DB1-3--Startup/Shutdown Operations	1230	MW	Oxidation catalyst technology and good combustion practices.	1164	LB/H	EACH CT/HRSG TRAIN; STARTUP/SHUTDOWN
VA-0328	C4GT, LLC	04/26/2018	GE Combustion Turbine - Startup and Shutdown	34000	MMCF/YR	Oxidation catalyst and good combustion practice	840	LB/TURBINE/EVENT	COLD START 60 MIN OR LESS
MI-0435	BELLE RIVER COMBINED CYCLE POWER PLANT	07/16/2018	FGCTGHRSG (EUCTGHRSG1 & EUCTGHRSG2)--Startup & Shutdown	0		Oxidation catalyst technology and good combustion practices.	791.5	LB/H	EACH UNIT; OPERATING HOUR DURING S.S.
VA-0332	CHICKAHOMINY POWER LLC	06/24/2019	Three (3) Mitsubishi Hitachi Power Systems combustion turbine generators	35000	MMCF/YR	Oxidation catalyst and good combustion practices	444	LB/TURBINE/EVENT	COLD START 42 MIN OR LESS
VA-0328	C4GT, LLC	04/26/2018	Siemens Combustion Turbine - Startup & Shutdown	35000	MMCF/YR	Oxidation catalyst and good combustion practices	434	LB/TURBINE/EVENT	COLD START 55 MIN OR LESS
VA-0334	DOMINION ENERGY-BRUNSWICK	12/01/2020	COMBUSTION TURBINE GENERATORS, (3) with Alternate Operating Scenario - Turbine Tuning	3442	MMBTU/H	Oxidation catalyst and good combustion practices.	416	LBS	CALENDAR DAY/PER TURBINE
VA-0334	DOMINION ENERGY-BRUNSWICK	12/01/2020	COMBUSTION TURBINE GENERATORS, (3) with Alternate Operating Scenario - Turbine Blade Water Washing	3442	MMBTU/H	Oxidation catalyst and good combustion practices.	416	LBS	CALENDAR DAY/PER TURBINE
*IN-0365	MAPLE CREEK ENERGY LLC	06/19/2023	Combined Cycle Turbine CTGB SU/SD	0			310	LB/EVENT	COLD START
VA-0328	C4GT, LLC	04/26/2018	Siemens Combustion Turbine - Tuning & Water Washing	35000	MMCF/YR	Oxidation catalyst and good combustion practices	309	LB/TURBINE/DAY	24 HR AV
MI-0424	HOLLAND BOARD OF PUBLIC WORKS - EAST 5TH STREET	12/05/2016	FGCTGHRSG--Startup/Shutdown (2 combined cycle CTGs with HRSGs; EUCTGHRSG10 & EUCTGHRSG11)	554	MMBTU/H; EACH	Oxidation catalyst technology and good combustion practices.	247.3	LB/H	OPERATING HOUR DURING STARTUP
VA-0332	CHICKAHOMINY POWER LLC	06/24/2019	Three (3) Mitsubishi Hitachi Power Systems Combustion	35000	MMCF/YR	Oxidation catalyst and good combustion practices	214	LB/TURBINE/DAY	24 HR TOTAL
VA-0328	C4GT, LLC	04/26/2018	GE Combustion Turbine - Tuning & Water Washing	34000	MMCF/YR	Oxidation catalyst and good combustion practices	194	LB/TURBINE/DAY	24 HR AV
MD-0045	MATTAWOMAN ENERGY CENTER	11/13/2015	2 COMBINED-CYCLE COMBUSTION TURBINES - SHUTDOWN	286	MW	GOOD COMBUSTION PRACTICES AND OXIDATION CATALYST	156	LB/EVENT	SHUTDOWN

RBLC Search Results - CO

RBLCID	FACILITY NAME	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGHPUT	THROUGHPUT UNIT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	EMISSION LIMIT 1 AVG TIME CONDITION
WI-0306	WPL- RIVERSIDE ENERGY CENTER	02/28/2020	Natural Gas Fired Combustion Turbine (P20, P21) Phase II Commissioning	2208	MMBTU/H		150	PPMVD, 15% OXYGEN	AVG. ANY 24-HR OPERATIONAL PERIOD
LA-0313	ST. CHARLES POWER STATION	08/31/2016	SCPS Combined Cycle Unit 1A	3625	MMBTU/hr	Catalytic Oxidation and good combustion practices during normal operations, and good combustion practices during startup/shutdown operations.	125.21	LB/H	HOURLY MAXIMUM
LA-0313	ST. CHARLES POWER STATION	08/31/2016	SCPS Combined Cycle Unit 1B	3625	MMBTU/hr	Catalytic oxidation and good combustion practices during normal operations, and good combustion practices during startup/shutdown operations.	125.21	LB/H	HOURLY MAXIMUM
KS-0041	HOLLYFRONTIER EL DORADO REFINERY	10/30/2019	L3804	456.5	MMBTU/H	Proper combustion and operation	40	PPMVD	3-HOUR ROLLING AVERAGE
*LA-0365	BIG CAJUN I POWER PLANT	06/27/2019	Combustion Turbine #1 (EQT0002, CTG-1)	1679	MM BTU/hr		25	PPMV	THREE HOUR ROLLING AVERAGE
*LA-0365	BIG CAJUN I POWER PLANT	06/27/2019	Combustion Turbine #2 (EQT0003, CTG-2)	1679	MM BTU/hr		25	PPMV	THREE HOUR ROLLING AVERAGE
TX-0790	PORT ARTHUR LNG EXPORT TERMINAL	02/17/2016	Refrigeration Compression Turbines	10	M TONNES/YR	Dry low NOx burners and good combustion practices	25	PPM	ROLLING 3-HR AVERAGE
TX-0878	LNG EXPORT TERMINAL	09/15/2022	Refrigeration Compression Turbines	26.92	MMTON/Y	good combustion practices.	25	PPM	24-HR AVG
MI-0423	INDECK NILES, LLC	01/04/2017	FGCTGHRSG (2 Combined Cycle CTGs with HRSGs)	8322	MMBTU/H	Oxidation catalyst technology and good combustion practices.	24.7	LB/H	24-H ROLLING AVG
AL-0328	PLANT BARRY	11/09/2020	Two 744 MW Combined Cycle Units	744	MW	Oxidation Catalyst	23.8	LB/HR	3 HOUR AVG
OH-0374	GUERNSEY POWER STATION LLC	10/23/2017	Combined Cycle Combustion Turbines (3, identical) (P001 to P003)	3516	MMBTU/H	oxidation catalyst and good combustion practices as recommended by the manufacturer	20.76	LB/H	WITH DUCT BURNER. SEE NOTES.
*WV-0029	HARRISON COUNTY POWER PLANT	03/27/2018	GE 7HA.02 Turbine	3496.2	mmBtu/hr	Oxidation Catalyst, Good Combustion Practices	20	LB/HR	1-HOUR AVERAGE
OH-0367	SOUTH FIELD ENERGY LLC	09/23/2016	Combined Cycle Combustion Turbines (two, identical) (P001 and P002)	3131	MMBTU/H	Good combustion controls and oxidation catalyst	18.57	LB/H	WITH DUCT BURNER. SEE NOTES.
OH-0377	HARRISON POWER	04/19/2018	General Electric (GE) Combustion Turbines (P005 & P006)	3459.6	MMBTU/H	Good combustion practices and oxidation catalyst	17.9	LB/H	WITH DUCT BURNER. SEE NOTES.
OH-0377	HARRISON POWER	04/19/2018	Mitsubishi Hitachi Power Systems (MHPS) Combustion Turbines (P007 & P008)	3231	MMBTU/H	Good combustion practices and oxidation catalyst	17.1	LB/H	WITH DUCT BURNER. SEE NOTES.
OH-0375	LONG RIDGE ENERGY GENERATION LLC - HANNIBAL POWER	11/07/2017	Siemens Combustion Turbine (P006)	3602	MMBTU/H	oxidation catalyst and shall operate the emissions unit in accordance with good combustion practices as recommended by the manufacturer	16.5	LB/H	WITH DUCT BURNER. SEE NOTES.
OH-0375	LONG RIDGE ENERGY GENERATION LLC - HANNIBAL POWER	11/07/2017	General Electric Combustion Turbine (P004)	3544	MMBTU/H	Oxidation catalyst and good combustion practices as recommended by the manufacturer.	15.9	LB/H	EXCEPT STARTUP AND SHUTDOWN. SEE NOTES
PA-0306	TENASKA PA PARTNERS/WESTMO RELAND GEN FAC	02/12/2016	Large combustion turbine	0		Oxidation Catalyst and good combustion practice	15.9	LB/HR	3 HR AVERAGE
OH-0370	TRUMBULL ENERGY CENTER	09/07/2017	Combined Cycle Combustion Turbines (two, identical) (P001 and P002)	3025	MMBTU/H	Good combustion controls and oxidation catalyst	15.5	LB/H	WITH DUCT BURNER. SEE NOTES.
OH-0372	OREGON ENERGY CENTER	09/27/2017	Combined Cycle Combustion Turbines (two, identical) (P001 and P002)	3055	MMBTU/H	oxidation catalyst and good combustion control	15.5	LB/H	WITH DUCT BURNER. SEE NOTES.
OH-0375	LONG RIDGE ENERGY GENERATION LLC - HANNIBAL POWER	11/07/2017	Mitsubishi Combustion Turbine (P005)	3320	MMBTU/H	oxidation catalyst and shall operate the emissions unit in accordance with good combustion practices as recommended by the manufacturer	15.3	LB/H	WITH DUCT BURNER. SEE NOTES.

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TX-0727	CEDAR BAYOU ELECTRIC GENERATING STATION	03/31/2015	Combined cycle turbines	187	MW/turbine	Oxidation catalyts	15	PPMVD	15%O2
OH-0366	CLEAN ENERGY FUTURE - LORDSTOWN, LLC	08/25/2015	Combined Cycle Combustion Turbines (two, identical) (P001 and P002)	2725	MMBTU/H	Good combustion controls and oxidation catalyst	14.3	LB/H	WITH DUCT BURNER. SEE NOTES.
*WV-0032	BROOKE COUNTY POWER PLANT	09/18/2018	GE 7HA.01 Turbine	2737.7	mmBtu/hr	Oxidation Catalyst, Good Combustion Practices	14.1	LB/HR	
OH-0365	ROLLING HILLS GENERATING, LLC	05/20/2015	Combustion Turbines, Scenario 2 (4, identical) (P001, P002, P004, P005)	2144	MMBTU/H	Oxidation catalyst	12	LB/H	WITH DUCT BURNER. SEE NOTES.
OH-0365	ROLLING HILLS GENERATING, LLC	05/20/2015	Combustion Turbines, Scenario 1 (4, identical) (P001, P002, P004, P005)	2022	MMBTU/H	Oxidation catalyst	10.4	LB/H	WITHOUT DUCT BURNERS. SEE NOTES.
MI-0454	LBWL-ERICKSON STATION	12/20/2022	EUCTGHRSG1	667	MMBTU/H	An oxidation catalyst for CO control for each CTG/HRSG unit, good combustion practices.	9	LB/H	HOURLY EXCEPT DURING SU/SD
AK-0085	GAS TREATMENT PLANT	08/13/2020	Six (6) Cogeneration Gas-Fired Turbines (Treated Gas Compressor Turbines)	576	MMBTu/hr	Oxidation catalyst and good combustion practices	5	PPMV @ 15% O2	3-HOUR AVERAGE
AK-0085	GAS TREATMENT PLANT	08/13/2020	Six (6) Cogeneration Gas-Fired Turbines (CO2 Compressor Turbines))	431	MMBTu/hr	Oxidation catalyst and good combustion control practices	5	PPMV @ 15% O2	3-HOUR AVERAGE
LA-0331	CALCASIEU PASS LNG PROJECT	09/21/2018	Combined Cycle Combustion Turbines (CCCT1 to CCCT5)	921	MM BTU/h	Oxidation Catalyst, Proper Design, Good Combustion Practices.	5	PPMV	30 DAY ROLLING AVERAGE
FL-0356	OKEECHOBEE CLEAN ENERGY CENTER	03/09/2016	Combined-cycle electric generating unit	3096	MMBTu/hr per turbine	Clean burners that prevent CO formation	4.3	PPMVD@15% O2	3-HR AVERAGE, NATURAL GAS OPERATION
FL-0363	DANIA BEACH ENERGY CENTER	12/04/2017	2-on-1 combined cycle unit (GE 7HA)	4000	MMBTu/hr	Clean burning fuel with lean pre-mix turbines	4.3	PPMVD@15% O2	AT LOADS > 90%
FL-0367	SHADY HILLS COMBINED CYCLE FACILITY	07/27/2018	1-on-1 combined cycle unit (GE 7HA)	3266.9	MMBTu/hour	Clean burning fuel with good combustion practices	4.3	PPMVD @15% O2	(TURBINE LOADS @%¥ 90%); THREE 1-HR RUNS
FL-0371	SHADY HILLS COMBINED CYCLE FACILITY	06/07/2021	GE 7HA.02 Combustion Turbine and HRSG with Duct Firing	3622.1	MMBTu/hour	Clean burning fuel with good combustion practices	4.3	PPMVD AT 15% O2	(TURBINE LOADS @%¥ 90%); THREE 1-HR
LA-0364	FG LA COMPLEX	01/06/2020	Cogeneration Units	2222	mm btu/h	Good combustion practices and catalytic oxidation	4	PPMVD	
MI-0424	HOLLAND BOARD OF PUBLIC WORKS - EAST 5TH STREET	12/05/2016	FGCTGHRSG (2 Combined cycle CTGs with HRSGs; EUCTGHRSG10 & EUCTGHRSG11)	554	MMBTU/H, each	Oxidation catalyst technology and good combustion practices.	4	PPM	EACH EU; 24-H ROLL AVG EXCEPT
MI-0427	FILER CITY STATION	11/17/2017	EUCCT (Combined cycle CTG with unfired HRSG)	1934.7	MMBTU/H	Oxidation catalyst technology and good combustion practices.	4	PPM	24-H ROLL.AVG., EXCEPT STARTUP/SHUTDOWN
MI-0433	MEC NORTH, LLC AND MEC SOUTH LLC	06/29/2018	EUCTGHRSG (South Plant): A combined cycle natural gas-fired combustion turbine generator with heat recovery steam generator.	500	MW	Oxidation catalyst technology and good combustion practices.	4	PPMV	AT 15%O2; 240HR ROLL AVG; NOT S.S.
MI-0433	MEC NORTH, LLC AND MEC SOUTH LLC	06/29/2018	EUCTGHRSG (North Plant): A combined-cycle natural gas-fired combustion turbine generator with heat recovery steam generator.	500	MW	Oxidation catalyst technology and good combustion practices.	4	PPMVD	AT 15%O2; 24-H ROLL AVG; NOT INCL ST/SH
MI-0441	LBWL-ERICKSON STATION	12/21/2018	EUCTGHRSG2--A 667 MMBTU/H natural gas fired CTG with a HRSG.	667	MMBTU/H	An oxidation catalyst for CO control for each CTG/HRSG unit, good combustion practices.	4	PPM	PPMVD@15%O2; 24-H AVG; SEE NOTES
MI-0441	LBWL-ERICKSON STATION	12/21/2018	EUCTGHRSG1--A 667 MMBTU/H NG fired combustion turbine generator coupled with a heat recovery steam generator (HRSG)	667	MMBTU/H	An oxidation catalyst for CO control for each CTG/HRSG unit; good combustion practices.	4	PPM	PPMVD@15%O2;24-H ROLL AVG; SEE NOTES
*MI-0445	INDECK NILES, LLC	11/26/2019	FGCTGHRSG	3421	MMBTU/H	Oxidation catalyst technology and good combustion practices.	4	PPM	PPMVD @15% O2. 24HR ROLL AVG EXCEPT SS
MI-0447	LBWL-ERICKSON STATION	01/07/2021	EUCTGHRSG1	667	MMBTU/H	An oxidation catalyst for CO control for each CTG/HRSG unit, good combustion practices.	4	PPM	24-HR ROLL AVG EXCEPT STARTUP/SHUTDOWN
MI-0447	LBWL-ERICKSON STATION	01/07/2021	EUCTGHRSG2	667	MMBTU/H	An oxidation catalyst for CO control for each CTG/HRSG unit, good combustion practices.	4	PPM	24-HR ROLL AVG EXCEPT STARTUP/SHUTDOWN

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MI-0454	LBWL-ERICKSON STATION	12/20/2022	EUCTGHRSG2	667	MMBTU/H	An oxidation catalyst for CO control for each CTG/HRSG unit, good combustion practices.	4	PPM	PPMVD AT 15%O2; 24-HR ROLL AVG EXC SU/SD
TX-0730	COLORADO BEND ENERGY CENTER	04/01/2015	Combined-cycle gas turbine electric generating facility	1100	MW	SCR and oxidation catalyst	4	PPMVD @ 15% O2	3-HR AVERAGE
TX-0788	NECHES STATION	03/24/2016	Combined Cycle & Cogeneration	231	MW	OXIDATION CATALYST	4	PPM	HOURLY
TX-0789	DECORDOVA STEAM ELECTRIC STATION	03/08/2016	Combined Cycle & Cogeneration	231	MW	OXIDATION CATALYST	4	PPM	
TX-0915	UNIT 5	03/17/2021	COMBINED CYCLE TURBINE	0		OXIDATION CATALYST	4	PPMVD	3-HR ROLLING
*TX-1005	FERMI AMERICA PROJECT MATADOR	02/25/2026	COMBINED CYCLE TURBINES	443	MMBTU/HR	CLEAN FUEL, GOOD COMBUSTION, SCR	2.6	PPMVD	15% O2 NORMAL 3-HR AVG
AK-0088	LIQUEFACTION PLANT	07/07/2022	Four Combined Cycle Gas-Fired Turbines	384	MMBTu/hr	Oxidation Catalyst and good combustion practices	2	PPMV @ 15% O2	3-HOURS
IL-0129	CPV THREE RIVERS ENERGY CENTER	07/30/2018	Combined Cycle Combustion Turbines	3474	mmBtu/hr	Oxidation catalyst	2	PPMV @ 15 % O2	3 OPERATING-HOUR, ROLLED HOURLY, AVERAGE
IL-0130	JACKSON ENERGY CENTER	12/31/2018	Combined-Cycle Combustion Turbine	3864	mmBtu/hr	Oxidation catalyst	2	PPMV	3 OPERATING HOUR AVERAGE @ 15% O2
*IN-0365	MAPLE CREEK ENERGY LLC	06/19/2023	Combined Cycle Turbine CTGB	4200	MMBTu per hour	oxidation catalyst	2	PPMVD	@ 15% O2 BASED ON A 3-HR AVERAGE
*IN-0365	MAPLE CREEK ENERGY LLC	06/19/2023	Combined Cycle Turbine CTGA	3800	MMBTu per hour	Oxidation catalyst	2	PPMVD	15% O2 BASED ON A 3-HR AVERAGE
IN-0382	DUKE ENERGY INDIANA, INC.- CAYUGA GENERATING STATION	02/14/2025	Combustion Turbines (6A and 6B)	4254	MMBTu/hr	Oxidation Catalyst and good combustion practices	2	PPMVD@15% O2	3-HOUR ROLLING AVERAGE EXCL. SU/SD
LA-0391	MAGNOLIA POWER GENERATING STATION UNIT 1	06/03/2022	Combined Cycle Gas Turbine w/ Duct Burners and HRSG	5081	mm BTU/h	Catalytic oxidation and good combustion practices.	2	PPMVD	24-HR ROLLING AVG BASED ON 1-HR AVG
MD-0045	MATTAWOMAN ENERGY CENTER	11/13/2015	2 COMBINED-CYCLE COMBUSTION TURBINES	286	MW	GOOD COMBUSTION PRACTICES AND OXIDATION CATALYST	2	PPMVD @ 15% O2	3-HOUR BLOCK AVERAGE (EXCLUDING SU/SD)
MI-0432	NEW COVERT GENERATING FACILITY	07/30/2018	FG-TURB/DB1-3 (3 combined cycle combustion turbine and heat recovery steam generator trains)	1230	MW	Oxidation catalyst technology and good combustion practices.	2	PPMVD	EACH CT/HRSG TRAIN; 24-HR ROLL AVG
MI-0442	THOMAS TOWNSHIP ENERGY, LLC	08/21/2019	FGCTGHRSG	625	MW	Oxidation catalyst and good combustion practices	2	PPM	PPMVD; EACH UNIT; 24-HR AVG, NO START/SH
MI-0451	MEC NORTH, LLC	06/23/2022	EUCTGHRSG (North Plant): A combined cycle natural gas fired combustion turbine generator with heat recovery steam generator	3064	MMBTU/H	Oxidation catalyst technology and good combustion practices.	2	PPM	24-HR ROLLING AVG
MI-0452	MEC SOUTH, LLC	06/23/2022	EUCTGHRSG (South Plant): A combined-cycle natural gas-fired combustion turbine generator with heat recovery steam generator.	3064	MMBTU/H	Oxidation Catalyst Technology and Good Combustion Practices	2	PPM	24-HR ROLLING AVG
MI-0455	MIDLAND COGENERATION VENTURE LIMITED PARTNERSHIP	02/01/2023	EUCTGHRSG1	4197.6	MMBTU/H	Oxidation catalyst	2	PPM	PPMVD AT 15%O2; 24-HR ROLL AVG EXC SU/SD
NJ-0085	MIDDLESEX ENERGY CENTER, LLC	07/19/2016	Combined Cycle Combustion Turbine firing Natural Gas with Duct Burner	4000	h/yr	Oxidation Catalyst and good combustion practices	2	PPMVD@15%O2	3 H ROLLING AV BASED ON ONE H BLOCK AV

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NJ-0085	MIDDLESEX ENERGY CENTER, LLC	07/19/2016	Combined Cycle Combustion Turbine firing Natural Gas without Duct Burner	8040	H/YR	OXIDATION CATALYST AND GOOD COMBUSTION PRACTICES	2	PPMVD@15% O2	3 H ROLLING AV BASED ON ONE H BLOCK AV
PA-0307	YORK ENERGY CENTER BLOCK 2 ELECTRICITY GENERATION PROJECT	06/15/2015	Two Combine Cycle Combustion Turbine with Duct Burner	3001.57	MCF/hr	Oxidation catalyst and good combustion practices	2	PPMDV @ 15% O2	
PA-0309	LACKAWANNA ENERGY CTR/JESSUP	12/23/2015	Combustion turbine with duct burner	3304.3	MMBtu/hr	Oxidation catalyst, combustion controls, exclusive natural gas	2	PPMDV @ 15 % O2	
PA-0310	CPV FAIRVIEW ENERGY CENTER	09/02/2016	Combustion turbine and HRSG with duct burner NG only	3338	MMBtu/hr	Oxidation catalyst operated at all steady state operating loads and good combustion practices	2	PPMDV @ 15% O2	
PA-0311	MOXIE FREEDOM GENERATION PLANT	09/01/2015	Combustion Turbine With Duct Burner	3727	MMBtu/hr	Oxidation catalyst and good combustion practices	2	PPMDV @ 15% O2	
PA-0311	MOXIE FREEDOM GENERATION PLANT	09/01/2015	Combustion Turbine without Duct Burner	0		Oxidation catalyst, good engineering practice	2	PPMDV @ 15% O2	
*PA-0315	HILLTOP ENERGY CENTER, LLC	04/12/2017	Combustion Turbine without Duct Burner	3509	MMBtu/hr	Oxidation Catalyst	2	PPMDV	CORRECTED TO 15% O2
PA-0334	RENOVO ENERGY CENTER LLC/RENOVO PLT	04/29/2021	COMBUSTION TURBINE #2 (ULSD)	3940	MMBtu/Hr	selective catalytic reduction (SCR) system, oxidation catalyst.	2	PPMVD	@ 15% O2 / 1 HR
PA-0334	RENOVO ENERGY CENTER LLC/RENOVO PLT	04/29/2021	COMBUSTION TURBINE #1 (ULSD)	3940	MMBtu/Hr	SCR, Catalytic Oxidizer	2	PPMVD	@ 15% O2 / 1 HR
PA-0336	YORK ENERGY CRT DELTA	12/14/2021	Combined Cycle Combustion Turbines	2512.5	MMBtu/Hr	Oxidation Catalyst	2	PPMVD	>=90% LOAD
TN-0162	JOHNSONVILLE COGENERATION	04/19/2016	Natural Gas-Fired Combustion Turbine with HRSG	1339	MMBtu/hr	Good combustion design and practices, oxidation catalyst	2	PPMVD @ 15% O2	30 UNIT-OPERATING-DAY MOVING AVERAGE
*TN-0164	TVA - JOHNSONVILLE COGENERATION	02/01/2018	Dual-fuel CT and HRSG with duct burner	1020	MMBtu/hr	Oxidation catalyst, good combustion design & practice	2	PPMVD @ 15% O2	30-DAY AVG WHEN BURNING NATURAL GAS
TX-0751	EAGLE MOUNTAIN STEAM ELECTRIC STATION	06/18/2015	Combined Cycle Turbines (>25 MW) â€” natural gas	210	MW	Oxidation catalyst	2	PPM	ROLLING 24-HR AVERAGE
NJ-0088	COGEN TECH LINDEN VENTURE LP	07/30/2019	250 MW COMBINED CYCLE COMBUSTION TURBINE FIRING NATURAL GAS	21042	MMCubic ft/yr	Oxidation catalyst and use of clean burning fuels, natural gas and ULSD	2	PPMVD@15% O2	3 H ROLLING AV BASED ON ONE H BLOCK
TX-0767	LON C. HILL POWER STATION	10/02/2015	Combined Cycle Turbines (>25 MW)	195	MW	Oxidation Catalyst	2	PPM	ROLLING 24-HR AVERAGE
TX-0773	FGE EAGLE PINES PROJECT	11/04/2015	Combined Cycle Turbines (>25 MW)	321	MW	Oxidation Catalyst	2	PPM	3-HR AVERAGE
TX-0819	GAINES COUNTY POWER PLANT	04/28/2017	Combined Cycle Turbine with Heat Recovery Steam Generator, fired Duct Burners, and Steam Turbine Generator	426	MW	Selective Catalytic Reduction (SCR) and Dry Low NOx burners	2	PPMVD	15% O2 3-H AVG
TX-0834	MONTGOMERY COUNTY POWER STATION	03/30/2018	Combined Cycle Turbine	2635	MMBTU/HR/UNIT	OXIDATION CATALYST	2	PPMVD	15% O2 3 HOUR AVERAGE
TX-0939	ORANGE COUNTY ADVANCED POWER STATION	03/13/2023	Combined Cycle Turbines	1215	MW	Oxidation Catalyst and good combustion practices	2	PPMVD	15% O2 24-HR AVERAGE
*VA-0335	PANDA STONEWALL LLC	12/18/2020	Combustion Turbines, Two (2) and HRSG Duct Burners	2.55	MMBTU/H	Catalytic Oxidizer	2	PPMVD @ 15% O2	NORMAL OPERATION W & W/O DUCT BURNING
*PA-0319	RENAISSANCE ENERGY CENTER	08/27/2018	COMBUSTION TURBINE UNIT w/o DUCT BURNERS UNIT	2665.9	MMBtu/hr	Oxidation Catalyst	2	PPPDV	@15% O2

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*WV-0033	MAIDSVILLE	01/05/2022	Combustion Turbine & Duct Burner (CT-01/HRSG1 & CT-02/HRSG2)	1275	mw	Good Combustion Practices and OxCat	2	PPMDV @ 15% O2	3-HOUR BLOCK AVERAGE
*WV-0033	MAIDSVILLE	01/05/2022	Combustion Turbine & Duct Burner (CT-01/HRSG1 & CT-02/HRSG2)	1275	mw	Good Combustion Practices and Oxidation catalyst	2	PPMDV @ 15% O2	3-HOUR BLOCK AVERAGE
*LA-0412	ENERGY LOUISIANA, LLC - FRANKLIN FARMS POWER STATION	12/23/2025	Gas Turbines	4985.3	mm BTU/h	Oxidation catalyst and energy efficiency/waste heat recovery.	2	PPM	
*TX-0994	SL ENERGY POWER PLANT I	10/29/2025	COMBINED CYCLE GAS TURBINES	348	MMBTU	An oxidation catalyst and good combustion practices	2	PPMVD	15% O2
*TX-1007	NRG JEWETT ENERGY CENTER	01/15/2026	Combined Cycle & Cogeneration (>25 MW), Natural Gas (includes propane & liquified petroleum gas)	775	MMBTU/HR	Oxidation catalyst and good operating procedures directed at the most efficient levels of operation, i.e., good combustion practices that include controlled fuel/air mixing and sufficient temperature and gas residence time. MSS: Minimize duration and frequency of MSS activities and engaging the pollution control equipment (i.e., the SCR and oxidation catalyst systems) as soon as practicable, based on vendor recommendations.	2	PPMVD	15% O2 24-HR AVG
VA-0328	C4GT, LLC	04/26/2018	Siemens Combustion Turbine - Option 2 - Normal Operation	35000	MMCF/YR	Oxidation catalyst & good combustion practice	1.8	PPMVD @ 15% O2	3 H AV/WITH OR WITHOUT DB
CT-0161	KILLINGLY ENERGY CENTER	06/30/2017	Natural Gas w/Duct Firing	2639	MMBTU/hr	Oxidation Catalyst	1.7	LB/MMBTU	1 HOUR BLOCK
VA-0325	GREENSVILLE POWER STATION	06/17/2016	COMBUSTION TURBINE GENERATOR WITH DUCT-FIRED HEAT RECOVERY STEAM GENERATORS (3)	3227	MMBTU/HR	Oxidation Catalyst	1.6	PPMVD	3 HR AVG
CA-1251	PALMDALE ENERGY PROJECT	04/25/2018	Combustion Turbines (GEN1 and GEN2)	2217	MMBTU/H	Oxidation Catalyst	1.5	PPM @ 15% O2	1-HR, DEMO LIMIT, W/O DUCT FIRING
IL-0133	LINCOLN LAND ENERGY CENTER	07/29/2022	Combined-Cycle Combustion Turbines	3647	mmBtu/hour	Oxidation catalyst and good combustion practices	1.5	PPMV @ 15% O2	TURBINE LOAD > OR = 60% W/O DUCT BURNERS
PA-0333	ESC TIOGA COUNTY POWER LLC/ELEC PWR GEN FAC	08/20/2019	COMBUSTION TURBINE/DUCT BURNER	4469	MMBTU/Hr		1.5	PPMVD	@ 15% O2 / 1 HR
PA-0334	RENOVO ENERGY CENTER LLC/RENOVO PLT	04/29/2021	COMBUSTION TURBINE w DUCT BURNER #2 (Natural Gas)	4546	MMBTU/Hr	SCR, CATALYTIC OXIDIZER	1.5	PPMVD	@ 15% O2 / 1 HR
PA-0334	RENOVO ENERGY CENTER LLC/RENOVO PLT	04/29/2021	COMBUSTION TURBINE w DUCT BURNER #1 (Natural Gas)	4546	MMBTU/Hr	SCR, Catalytic Oxidizer	1.5	PPMVD	@ 15% O2 / 1 HR
WI-0300	NEMADJI TRAIL ENERGY CENTER	09/01/2020	Natural-Gas-Fired Combined-Cycle Turbine (P01)	4671	MMBTU/H	Oxidation Catalyst and good combustion controls	1.5	PPM AT 15% O2	168-HR ROLLING AVG., NATURAL GAS
*WI-0326	NEMADJI TRAIL ENERGY CENTER	09/19/2023	Combustion Turbine; S01/P01/C01a (SCR)/C01b (oxidation catalyst)	4671	MMBTU/hr	Except during start-up and shutdown, BACT has been determined to be: (a) An oxidation catalyst shall be used to control emissions from P01 while P01 is in operation. (b) The permittee shall use good combustion control according to the manufacturer's recommendations.	1.5	PPM	168-HOUR ROLLING AVE, FIRING NATURAL GAS
VA-0328	C4GT, LLC	04/26/2018	GE Combustion Turbine - Option 1 - Normal Operation	34000	MMCF/YR	Oxidation catalyst and good combustion practices	1	PPMVD @ 15% O2	3 HR AV/WITHOUT DB
VA-0332	CHICKAHOMINY POWER LLC	06/24/2019	Three (3) Mitsubishi Hitachi Power Systems combustion turbine generators	35000	MMCF/YR	Controlled by an oxidation catalyst and good combustion practices (e.g. controlled fuel/air mixing, adequate temperature, and gas residence time).	1	PPMVD @ 15% O2	3 HR AVG

RBLC Search Results - CO

RBLCID	FACILITY NAME	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGHPUT	THROUGHPUT UNIT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	EMISSION LIMIT 1 AVG TIME CONDITION
CT-0157	CPV TOWANTIC, LLC	11/30/2015	Combined Cycle Power Plant	21200000	MMBtu/12 months	Oxidation Catalyst	0.9	PPMVD @15% O2	1 HR BLOCK
CT-0158	CPV TOWANTIC, LLC	11/30/2015	Combined Cycle Power Plant	21200000	MMBtu/yr	Oxidation Catalyst	0.9	PPMVD @15% O2	1 HR BLOCK
CT-0161	KILLINGLY ENERGY CENTER	06/30/2017	Natural Gas w/o Duct Firing	2969	MMBtu/hr	Oxidation Catalyst	0.9	PPMVD @15% O2	1 HOUR BLOCK
OK-0169	PSO COMANCHE POWER STATION	10/08/2015	COMBINED CYCLE COMBUSTION TURBINE	1250	MMBTUH	Controlled Startup and Shutdown procedures with respect to Dry Low NOx Burners.	0.0785	LB/MMBTU	3-HR AVG NORMAL OPERATION
*PA-0315	HILLTOP ENERGY CENTER, LLC	04/12/2017	Flue Gas Heater	0			0.037	LB	MMBTU
MI-0435	BELLE RIVER COMBINED CYCLE POWER PLANT	07/16/2018	FGCTGHRSG (EUCTGHRSG1 & EUCTGHRSG2)	0		Oxidation catalyst technology and good combustion practices.	0.0045	LB/MMBTU	EACH UNIT; 24-H ROLL AVG; NOT S.S.
*TX-1000	ANTELOPE ELK ENERGY CENTER	08/14/2025	FUEL GAS HEATER	5.5	MMBTU/HR	GOOD COMBUSTION PRACTICES	0		
TX-0939	ORANGE COUNTY ADVANCED POWER STATION	03/13/2023	TURBINE MSS	0		On-line turbine washing, turbine filter changeouts, catalyst handling, fuel venting, CEMS calibration, fugitive/small equipment maintenance Good air pollution control practices and safe operating practices.	0		

RBLC Search Results - PM

RBLCID	FACILITY NAME	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGHPUT	THROUGHPUT UNIT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	EMISSION LIMIT 1 AVG TIME CONDITION
TX-0834	MONTGOMERY COUNTY POWER STATION	03/30/2018	Combined Cycle Turbine	2635	MMBTU/HR/UNIT	PIPELINE NATURAL GAS, GOOD COMBUSTION	125.7	TON/YR	
TX-0834	MONTGOMERY COUNTY POWER STATION	03/30/2018	Combined Cycle Turbine	2635	MMBTU/HR/UNIT	PIPELINE NATURAL GAS, GOOD COMBUSTION	125.7	TON/YR	
TX-0834	MONTGOMERY COUNTY POWER STATION	03/30/2018	Combined Cycle Turbine	2635	MMBTU/HR/UNIT	PIPELINE NATURAL GAS, GOOD COMBUSTION	125.7	TON/YR	
WI-0300	NEMADJI TRAIL ENERGY CENTER	09/01/2020	Natural-Gas-Fired Combined-Cycle Turbine (P01) Start-Up and Shutdown (diesel)	0			78.9	LB/START-UP	
WI-0300	NEMADJI TRAIL ENERGY CENTER	09/01/2020	Natural-Gas-Fired Combined-Cycle Turbine (P01) Start-Up and Shutdown (diesel)	0			78.9	LB/START-UP	
WI-0300	NEMADJI TRAIL ENERGY CENTER	09/01/2020	Natural-Gas-Fired Combined-Cycle Turbine (P01) Start-Up and Shutdown (diesel)	0			78.9	LB/START-UP	
WI-0300	NEMADJI TRAIL ENERGY CENTER	09/01/2020	Natural Gas-Fired Combined-Cycle Turbine (P01) Start-up and Shutdown (Natural Gas)	0			43.6	LB/START-UP	
WI-0300	NEMADJI TRAIL ENERGY CENTER	09/01/2020	Natural Gas-Fired Combined-Cycle Turbine (P01) Start-up and Shutdown (Natural Gas)	0			43.6	LB/START-UP	
WI-0300	NEMADJI TRAIL ENERGY CENTER	09/01/2020	Natural Gas-Fired Combined-Cycle Turbine (P01) Start-up and Shutdown (Natural Gas)	0			43.6	LB/START-UP	
TX-0730	COLORADO BEND ENERGY CENTER	04/01/2015	Combined-cycle gas turbine electric generating facility	1100	MW	efficient combustion, natural gas fuel	43	LB/H	
TX-0730	COLORADO BEND ENERGY CENTER	04/01/2015	Combined-cycle gas turbine electric generating facility	1100	MW	efficient combustion, natural gas fuel	43	LB/H	
TX-0730	COLORADO BEND ENERGY CENTER	04/01/2015	Combined-cycle gas turbine electric generating facility	1100	MW	efficient combustion, natural gas fuel	43	LB/H	
WI-0300	NEMADJI TRAIL ENERGY CENTER	09/01/2020	Natural-Gas-Fired Combined-Cycle Turbine (P01)	4671	MMBTU/H	Only combust pipeline quality natural gas and diesel fuel oil and use good combustion control according to the manufacturer's recommendations.	36.3	LB/H	NATURAL GAS, DUCT FIRING
WI-0300	NEMADJI TRAIL ENERGY CENTER	09/01/2020	Natural-Gas-Fired Combined-Cycle Turbine (P01)	4671	MMBTU/H	Only pipeline quality natural gas and diesel fuel oil may be combusted and use good combustion control according to the manufacturer's recommendations.	36.3	LB/H	NATURAL GAS, DUCT FIRING
WI-0300	NEMADJI TRAIL ENERGY CENTER	09/01/2020	Natural-Gas-Fired Combined-Cycle Turbine (P01)	4671	MMBTU/H	Only combust pipeline quality natural gas and diesel fuel oil and use good combustion control according to the manufacturer's recommendations.	36.3	LB/H	NATURAL GAS, DUCT FIRING
*WI-0326	NEMADJI TRAIL ENERGY CENTER	09/19/2023	Combustion Turbine; S01/P01/C01a (SCR)/C01b (oxidation catalyst)	4671	MMBTU/hr	Firing fuels with low ash content (e.g. natural gas) & good combustion control	36.3	LB/HR	FIRING NATURAL GAS AND WITH DUCT FIRING
TX-0751	EAGLE MOUNTAIN STEAM ELECTRIC STATION	06/18/2015	Combined Cycle Turbines (>25 MW) & natural gas	210	MW		35.47	LB/H	
TX-0751	EAGLE MOUNTAIN STEAM ELECTRIC STATION	06/18/2015	Combined Cycle Turbines (>25 MW) & natural gas	210	MW		35.47	LB/H	
TX-0789	DECORDOVA STEAM ELECTRIC STATION	03/08/2016	Combined Cycle & Cogeneration	231	MW	GOOD COMBUSTION PRACTICES AND LOW SULFUR FUEL	35.47	LB/H	
TX-0789	DECORDOVA STEAM ELECTRIC STATION	03/08/2016	Combined Cycle & Cogeneration	231	MW	GOOD COMBUSTION PRACTICES AND LOW SULFUR FUEL	35.47	LB/H	
MI-0455	MIDLAND COGENERATION VENTURE LIMITED PARTNERSHIP	02/01/2023	EUCTGHRSG1	4197.6	MMBTU/H	Use of pipeline quality natural gas and good combustion practices.	34.4	LB/H	HOURLY
MI-0455	MIDLAND COGENERATION VENTURE LIMITED PARTNERSHIP	02/01/2023	EUCTGHRSG1	4197.6	MMBTU/H	Use of pipeline quality natural gas and good combustion practices.	34.4	LB/H	HOURLY
MI-0455	MIDLAND COGENERATION VENTURE LIMITED PARTNERSHIP	02/01/2023	EUCTGHRSG1	4197.6	MMBTU/H	Use of pipeline quality natural gas and good combustion practices.	34.4	LB/H	HOURLY
KS-0029	THE EMPIRE DISTRICT ELECTRIC COMPANY	07/14/2015	Combined cycle combustion turbine	250	MW	dry low NOx burners heat recovery steam generator (HRSG)	30.2	LB/H	
KS-0029	THE EMPIRE DISTRICT ELECTRIC COMPANY	07/14/2015	Combined cycle combustion turbine	250	MW	dry low NOx burners heat recovery steam generator (HRSG)	30.2	LB/H	
KS-0029	THE EMPIRE DISTRICT ELECTRIC COMPANY	07/14/2015	Combined cycle combustion turbine	250	MW	dry low NOx burners heat recovery steam generator (HRSG)	30.2	LB/H	
OH-0367	SOUTH FIELD ENERGY LLC	09/23/2016	Combined Cycle Combustion Turbines (two, identical) (P001 and P002)	3131	MMBTU/H	Good combustion controls	25	LB/H	NAT GAS, WITH DUCT BURNER. SEE NOTES.
OH-0367	SOUTH FIELD ENERGY LLC	09/23/2016	Combined Cycle Combustion Turbines (two, identical) (P001 and P002)	3131	MMBTU/H	Good combustion controls	25	LB/H	NAT GAS, WITH DUCT BURNER. SEE NOTES.
TX-0773	FGE EAGLE PINES PROJECT	11/04/2015	Combined Cycle Turbines (>25 MW)	321	MW		21.4	LB/H	
TX-0773	FGE EAGLE PINES PROJECT	11/04/2015	Combined Cycle Turbines (>25 MW)	321	MW		21.4	LB/H	
MI-0423	INDECK NILES, LLC	01/04/2017	FGCTGHRSG (2 Combined Cycle CTGs with HRSGs)	8322	MMBTU/H	Good combustion practices, inlet air conditioning, and the use of pipeline quality natural gas.	19.8	LB/H	TEST PROTOCOL WILL SPECIFY AVG TIME
MI-0423	INDECK NILES, LLC	01/04/2017	FGCTGHRSG (2 Combined Cycle CTGs with HRSGs)	8322	MMBTU/H	Good Combustion Practices, inlet air conditioning, and the use of pipeline quality natural gas.	19.8	LB/H	TEST PROTOCOL WILL SPECIFY AVG TIME
*MI-0445	INDECK NILES, LLC	11/26/2019	FGCTGHRSG	3421	MMBTU/H	Good combustion practices, inlet air conditioning, and the use of pipeline quality natural gas.	19.8	LB/H	HOURLY; EACH CTGHRSG
*MI-0445	INDECK NILES, LLC	11/26/2019	FGCTGHRSG	3421	MMBTU/H	Good combustion practices, inlet air conditioning, and the use of pipeline quality natural gas.	19.8	LB/H	HOURLY; EACH CTGHRSG
TX-0788	NECHES STATION	03/24/2016	Combined Cycle & Cogeneration	231	MW	GOOD COMBUSTION PRACTICES, LOW SULFUR FUEL	19.35	LB/H	
TX-0788	NECHES STATION	03/24/2016	Combined Cycle & Cogeneration	231	MW	GOOD COMBUSTION PRACTICES AND LOW SULFUR FUEL	19.35	LB/H	

RBLC Search Results - PM

RBLCID	FACILITY NAME	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGHPUT	THROUGHPUT UNIT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	EMISSION LIMIT 1 AVG TIME CONDITION
MI-0433	MEC NORTH, LLC AND MEC SOUTH LLC	06/29/2018	EUCTGHRSG (South Plant): A combined cycle natural gas-fired combustion turbine generator with heat recovery steam generator.	500	MW	Good combustion practices, inlet air conditioning, and the use of pipeline quality natural gas.	19.1	LB/H	HOURLY
MI-0433	MEC NORTH, LLC AND MEC SOUTH LLC	06/29/2018	EUCTGHRSG (South Plant): A combined cycle natural gas-fired combustion turbine generator with heat recovery steam generator.	500	MW	Good combustion practices, inlet air conditioning and the use of pipeline quality natural gas.	19.1	LB/H	HOURLY
MI-0433	MEC NORTH, LLC AND MEC SOUTH LLC	06/29/2018	EUCTGHRSG (North Plant): A combined-cycle natural gas-fired combustion turbine generator with heat recovery steam generator.	500	MW	Good combustion practices, inlet air conditioning, and the use of pipeline quality natural gas.	19.1	LB/H	HOURLY
MI-0433	MEC NORTH, LLC AND MEC SOUTH LLC	06/29/2018	EUCTGHRSG (North Plant): A combined-cycle natural gas-fired combustion turbine generator with heat recovery steam generator.	500	MW	Good combustion practices, inlet air conditioning, and the use of pipeline quality natural gas.	19.1	LB/H	HOURLY
MI-0451	MEC NORTH, LLC	06/23/2022	EUCTGHRSG (North Plant): A combined cycle natural gas fired combustion turbine generator with heat recovery steam generator	3064	MMBTU/H	Good combustion practices, inlet air conditioning and the use of pipeline quality natural gas.	19.1	LB/H	HOURLY
MI-0451	MEC NORTH, LLC	06/23/2022	EUCTGHRSG (North Plant): A combined cycle natural gas fired combustion turbine generator with heat recovery steam generator	3064	MMBTU/H	Good combustion practices, inlet air conditioning, and the use of pipeline quality natural gas.	19.1	LB/H	HOURLY
MI-0452	MEC SOUTH, LLC	06/23/2022	EUCTGHRSG (South Plant): A combined-cycle natural gas-fired combustion turbine generator with heat recovery steam generator.	3064	MMBTU/H	Good Combustion Practices, inlet air conditioning, and the use of pipeline quality natural gas	19.1	LB/H	HOURLY
MI-0452	MEC SOUTH, LLC	06/23/2022	EUCTGHRSG (South Plant): A combined-cycle natural gas-fired combustion turbine generator with heat recovery steam generator.	3064	MMBTU/H	Good Combustion Practices, inlet air conditioning, and the use of pipeline quality natural gas	19.1	LB/H	HOURLY
*LA-0365	BIG CAJUN I POWER PLANT	06/27/2019	Combustion Turbine #1 (EQT0002, CTG-1)	1679	MM BTU/hr	Good Combustion Controls	19	LB/HR	HOURLY MAXIMUM
*LA-0365	BIG CAJUN I POWER PLANT	06/27/2019	Combustion Turbine #2 (EQT0003, CTG-2)	1679	MM BTU/hr	Good Combustion Controls	19	LB/HR	HOURLY MAXIMUM
NJ-0085	MIDDLESEX ENERGY CENTER, LLC	07/19/2016	Combined Cycle Combustion Turbine firing Natural Gas with Duct Burner	4000	h/yr	COMPLIANCE BY STACK TESTING	18.3	LB/H	AV OF THREE ONE H STACK TESTS EVERY 5 YR
NJ-0085	MIDDLESEX ENERGY CENTER, LLC	07/19/2016	Combined Cycle Combustion Turbine firing Natural Gas with Duct Burner	4000	h/yr	COMPLIANCE BY STACK TESTING	18.3	LB/H	AV OF THREE ONE H STACK TESTS EVERY 5 YR
*WV-0029	HARRISON COUNTY POWER PLANT	03/27/2018	GE 7HA.02 Turbine	3496.2	mmBtu/hr	Air Filter, Use of Natural Gas, Good Combustion Practices	18.2	LB/HR	
LA-0391	MAGNOLIA POWER GENERATING STATION UNIT 1	06/03/2022	Combined Cycle Gas Turbine Startup and Shutdown	5081	mm BTU/h	Good combustion practices.	18	LB/HR	
LA-0391	MAGNOLIA POWER GENERATING STATION UNIT 1	06/03/2022	Combined Cycle Gas Turbine Startup and Shutdown	5081	mm BTU/h	Good combustion practices	18	LB/HR	
MD-0045	MATTAWOMAN ENERGY CENTER	11/13/2015	2 COMBINED-CYCLE COMBUSTION TURBINES	286	MW	USE OF PIPELINE QUALITY NATURAL GAS EXCLUSIVELY AND GOOD COMBUSTION PRACTICES	17.9	LB/H	W/OUT DUCT FIRING, AVG. OF 3 STACK TESTS
MD-0045	MATTAWOMAN ENERGY CENTER	11/13/2015	2 COMBINED-CYCLE COMBUSTION TURBINES	286	MW	USE OF PIPELINE QUALITY NATURAL GAS EXCLUSIVELY AND GOOD COMBUSTION PRACTICES.	17.9	LB/H	W/OUT DUCT FIRING, AVG. OF 3 STACK TESTS
LA-0313	ST. CHARLES POWER STATION	08/31/2016	SCPS Combined Cycle Unit 1A	3625	MMBTU/hr	Good combustion practices and clean burning fuels (natural gas)	17.52	LB/H	HOURLY MAXIMUM
LA-0313	ST. CHARLES POWER STATION	08/31/2016	SCPS Combined Cycle Unit 1A	3625	MMBTU/hr	Good combustion practices and clean burning fuels (natural gas)	17.52	LB/H	HOURLY MAXIMUM
LA-0313	ST. CHARLES POWER STATION	08/31/2016	SCPS Combined Cycle Unit 1B	3625	MMBTU/hr	Good combustion practices and clean burning fuels (natural gas)	17.52	LB/H	HOURLY MAXIMUM
LA-0313	ST. CHARLES POWER STATION	08/31/2016	SCPS Combined Cycle Unit 1B	3625	MMBTU/hr	Good combustion practices and clean burning fuel (natural gas)	17.52	LB/H	HOURLY MAXIMUM
*WV-0032	BROOKE COUNTY POWER PLANT	09/18/2018	GE 7HA.01 Turbine	2737.7	mmBtu/hr	Air Filter, Use of Natural Gas, Good Combustion Practices	16.9	LB/HR	
MI-0435	BELLE RIVER COMBINED CYCLE POWER PLANT	07/16/2018	FGCTGHRSG (EUCTGHRSG1 & EUCTGHRSG2)	0		Good combustion practices, inlet air conditioning, and the use of pipeline quality natural gas.	16	LB/H	HOURLY; EACH UNIT
MI-0435	BELLE RIVER COMBINED CYCLE POWER PLANT	07/16/2018	FGCTGHRSG (EUCTGHRSG1 & EUCTGHRSG2)	0		Good combustion practices, inlet air conditioning, and the use of pipeline quality natural gas.	16	LB/H	HOURLY; EACH UNIT
MI-0435	BELLE RIVER COMBINED CYCLE POWER PLANT	07/16/2018	FGCTGHRSG (EUCTGHRSG1 & EUCTGHRSG2)	0		Good combustion practices, inlet air conditioning and the use of pipeline quality natural gas.	16	LB/H	HOURLY; EACH UNIT
TX-0767	LON C. HILL POWER STATION	10/02/2015	Combined Cycle Turbines (>25 MW)	195	MW	Good combustion practices and use of pipeline quality natural gas	16	LB/HR	
TX-0767	LON C. HILL POWER STATION	10/02/2015	Combined Cycle Turbines (>25 MW)	195	MW	Good combustion practices and use of pipeline quality natural gas	16	LB/HR	
OH-0372	OREGON ENERGY CENTER	09/27/2017	Combined Cycle Combustion Turbines (two, identical) (P001 and P002)	3055	MMBTU/H	good combustion practices and pipeline quality natural gas	15.4	LB/H	WITH DUCT BURNER. SEE NOTES.
OH-0372	OREGON ENERGY CENTER	09/27/2017	Combined Cycle Combustion Turbines (two, identical) (P001 and P002)	3055	MMBTU/H	good combustion practices and pipeline quality natural gas	15.4	LB/H	WITH DUCT BURNER. SEE NOTES.
OH-0370	TRUMBULL ENERGY CENTER	09/07/2017	Combined Cycle Combustion Turbines (two, identical) (P001 and P002)	3025	MMBTU/H	Good combustion controls and low sulfur fuel	15.2	LB/H	WITH DUCT BURNER. SEE NOTES.
OH-0370	TRUMBULL ENERGY CENTER	09/07/2017	Combined Cycle Combustion Turbines (two, identical) (P001 and P002)	3025	MMBTU/H	Good combustion controls and low sulfur fuel	15.2	LB/H	WITH DUCT BURNER. SEE NOTES.
OH-0366	CLEAN ENERGY FUTURE - LORDSTOWN, LLC	08/25/2015	Combined Cycle Combustion Turbines (two, identical) (P001 and P002)	2725	MMBTU/H	Low sulfur fuel	14.9	LB/H	WITH DUCT BURNER. SEE NOTES.
OH-0366	CLEAN ENERGY FUTURE - LORDSTOWN, LLC	08/25/2015	Combined Cycle Combustion Turbines (two, identical) (P001 and P002)	2725	MMBTU/H	Low sulfur fuel	14.9	LB/H	WITH DUCT BURNER. SEE NOTES.
*IN-0365	MAPLE CREEK ENERGY LLC	06/19/2023	Combined Cycle Turbine CTGB SU/SD	0			14	LB/EVENT	HOT START
*IN-0365	MAPLE CREEK ENERGY LLC	06/19/2023	Combined Cycle Turbine CTGB SU/SD	0			14	LB/EVENT	HOT START
LA-0364	FG LA COMPLEX	01/06/2020	Cogeneration Units	2222	mm btu/h	Use of pipeline quality natural gas or fuel gas and good combustion practices.	12.46	LB/H	

RBLC Search Results - PM

RBLCID	FACILITY NAME	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGHPUT	THROUGHPUT UNIT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	EMISSION LIMIT 1 AVG TIME CONDITION
LA-0364	FG LA COMPLEX	01/06/2020	Cogeneration Units	2222	mm btu/h	Use of pipeline quality natural gas or fuel gas and good combustion practices.	12.46	LB/H	
NJ-0085	MIDDLESEX ENERGY CENTER, LLC	07/19/2016	Combined Cycle Combustion Turbine firing Natural Gas without Duct Burner	8040	H/YR	USE OF NATURAL GAS A CLEAN BURNING FUEL	11.7	LB/H	AV OF THREE ONE H STACK TESTS EVERY 5 YR
NJ-0085	MIDDLESEX ENERGY CENTER, LLC	07/19/2016	Combined Cycle Combustion Turbine firing Natural Gas without Duct Burner	8040	H/YR	USE OF NATURAL GAS A CLEAN BURNING FUEL	11.7	LB/H	AV OF THREE ONE H STACK TESTS EVERY 5 YR
NJ-0088	COGEN TECH LINDEN VENTURE LP	07/30/2019	250 MW COMBINED CYCLE COMBUSTION TURBINE FIRING NATURAL GAS	21042	MMcubic ft/yr	USE OF NATURAL GAS AND ULSD; BOTH CLEAN BURNING FUELS	11.58	LB/H	AV OF THREE ONE H STACK TESTS EVERY 5 YR
NJ-0088	COGEN TECH LINDEN VENTURE LP	07/30/2019	250 MW COMBINED CYCLE COMBUSTION TURBINE FIRING NATURAL GAS	21042	MMcubic ft/yr	USE OF NATURAL GAS AND ULSD; BOTH CLEAN BURNING FUELS	11.58	LB/H	AV OF THREE ONE H STACK TESTS EVERY 5 YR
TX-0790	PORT ARTHUR LNG EXPORT TERMINAL	02/17/2016	Refrigeration Compression Turbines	10	M TONNES/YR		11.07	LB/H	
TX-0790	PORT ARTHUR LNG EXPORT TERMINAL	02/17/2016	Refrigeration Compression Turbines	10	M TONNES/YR		11.07	LB/H	
TX-0878	LNG EXPORT TERMINAL	09/15/2022	Refrigeration Compression Turbines	26.92	MMTON/Y	Dry low NOx burners and good combustion practices.	11	LB/HR	
MI-0432	NEW COVERT GENERATING FACILITY	07/30/2018	FG-TURB/DB1-3 (3 combined cycle combustion turbine and heat recovery steam generator trains)	1230	MW	Use clean fuel (natural gas) and good combustion practices.	10.7	LB/H	HOURLY; EACH CT/HRSG TRAIN
MI-0432	NEW COVERT GENERATING FACILITY	07/30/2018	FG-TURB/DB1-3 (3 combined cycle combustion turbine and heat recovery steam generator trains)	1230	MW	Use clean fuel (natural gas) and good combustion practices.	10.7	LB/H	HOURLY; EACH CT/HRSG TRAIN
NJ-0085	MIDDLESEX ENERGY CENTER, LLC	07/19/2016	Combined Cycle Combustion Turbine firing Natural Gas with Duct Burner	4000	h/yr	USE OF NATURAL GAS A CLEAN BURNING FUEL	10.4	LB/H	AV OF THREE ONE H STACK TESTS EVERY 5 YR
MI-0423	INDECK NILES, LLC	01/04/2017	FGCTGHRSG (2 Combined Cycle CTGs with HRSGs)	8322	MMBTU/H	Good combustion practices, inlet air conditioning, and the use of pipeline quality natural gas.	9.9	LB/H	TEST PROTOCOL WILL SPECIFY AVG TIME
*MI-0445	INDECK NILES, LLC	11/26/2019	FGCTGHRSG	3421	MMBTU/H	Good combustion practices, inlet air conditioning, and the use of pipeline quality natural gas.	9.9	LB/H	HOURLY; EACH CTGHRSG
CT-0157	CPV TOWANTIC, LLC	11/30/2015	Combined Cycle Power Plant	21200000	MMBtu/12 months		9.73	LB/H	
CT-0158	CPV TOWANTIC, LLC	11/30/2015	Combined Cycle Power Plant	21200000	MMBtu/yr		9.73	LB/H	
LA-0331	CALCASIEU PASS LNG PROJECT	09/21/2018	Combined Cycle Combustion Turbines (CCCT1 to CCCT5)	921	MM BTU/h	Exclusive Combustion of Fuel Gas and Good Combustion Practices.	9.53	LB/H	3 HOUR AVERAGE
LA-0331	CALCASIEU PASS LNG PROJECT	09/21/2018	Combined Cycle Combustion Turbines (CCCT1 to CCCT5)	921	MM BTU/h	Exclusive Combustion of Fuel Gas and Good Combustion Practices.	9.53	LB/H	3 HOUR AVERAGE
NJ-0088	COGEN TECH LINDEN VENTURE LP	07/30/2019	250 MW COMBINED CYCLE COMBUSTION TURBINE FIRING NATURAL GAS	21042	MMcubic ft/yr	USE OF CLEAN NATURAL GAS AND ULSD CLEAN BURNING FUELS	9.3	LB/H	AV OF THREE ONE H STACK TESTS EVERY 5 YR
MD-0045	MATTAWOMAN ENERGY CENTER	11/13/2015	2 COMBINED-CYCLE COMBUSTION TURBINES	286	MW	USE OF PIPELINE-QUALITY NATURAL GAS EXCLUSIVELY AND GOOD COMBUSTION PRACTICE	8.9	LB/H	3-HOUR BLOCK AVERAGE (W/OUT DUCT FIRING)
TX-0817	CHOCOLATE BAYOU STEAM GENERATING (CBSG) STATION	02/17/2017	Combined Cycle Cogeneration	50	MW		6.98	LB/H	
TX-0817	CHOCOLATE BAYOU STEAM GENERATING (CBSG) STATION	02/17/2017	Combined Cycle Cogeneration	50	MW		6.98	LB/H	
TX-0817	CHOCOLATE BAYOU STEAM GENERATING (CBSG) STATION	02/17/2017	Combined Cycle Cogeneration	50	MW		6.98	LB/H	
MI-0441	LBWL--ERICKSON STATION	12/21/2018	EUCTGHRSG2--A 667 MMBTU/H natural gas fired CTG with a HRSG.	667	MMBTU/H	Pipeline quality natural gas, inlet air conditioning, and good combustion practices.	6.02	LB/H	HOURLY
MI-0441	LBWL--ERICKSON STATION	12/21/2018	EUCTGHRSG2--A 667 MMBTU/H natural gas fired CTG with a HRSG.	667	MMBTU/H	Pipeline quality natural gas, inlet air conditioning, and good combustion practices.	6.02	LB/H	HOURLY
MI-0441	LBWL--ERICKSON STATION	12/21/2018	EUCTGHRSG1--A 667 MMBTU/H NG fired combustion turbine generator coupled with a heat recovery steam generator (HRSG)	667	MMBTU/H	Pipeline quality natural gas, inlet air conditioning, and good combustion practices.	6.02	LB/H	HOURLY
MI-0441	LBWL--ERICKSON STATION	12/21/2018	EUCTGHRSG1--A 667 MMBTU/H NG fired combustion turbine generator coupled with a heat recovery steam generator (HRSG)	667	MMBTU/H	Pipeline quality natural gas, inlet air conditioning and good combustion practices.	6.02	LB/H	HOURLY
MI-0447	LBWL--ERICKSON STATION	01/07/2021	EUCTGHRSG1	667	MMBTU/H	Pipeline quality natural gas, inlet air conditioning, and good combustion practices.	6.02	LB/H	HOURLY; APPLIES DURING ALL OPERAT. MODES
MI-0447	LBWL--ERICKSON STATION	01/07/2021	EUCTGHRSG1	667	MMBTU/H	Pipeline quality natural gas, inlet air conditioning, and good combustion practices.	6.02	LB/H	HOURLY; APPLIES DURING ALL OPERAT. MODES
MI-0447	LBWL--ERICKSON STATION	01/07/2021	EUCTGHRSG2	667	MMBTU/H	Pipeline quality natural gas, inlet air conditioning, and good combustion practices.	6.02	LB/H	HOURLY; APPLIES DURING ALL OPERAT. MODES
MI-0447	LBWL--ERICKSON STATION	01/07/2021	EUCTGHRSG2	667	MMBTU/H	Pipeline quality natural gas, inlet air conditioning, and good combustion practices.	6.02	LB/H	HOURLY; APPLIES DURING ALL OPERAT. MODES
MI-0454	LBWL-ERICKSON STATION	12/20/2022	EUCTGHRSG1	667	MMBTU/H	Pipeline quality natural gas, inlet air conditioning, and good combustion practices.	6.02	LB/H	HOURLY; APPLIES DURING ALL OPER. MODES
MI-0454	LBWL-ERICKSON STATION	12/20/2022	EUCTGHRSG1	667	MMBTU/H	Pipeline quality natural gas, inlet air conditioning, and good combustion practices.	6.02	LB/H	HOURLY; APPLIES DURING ALL OPERAT. MODES

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RBLCID	FACILITY NAME	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGHPUT	THROUGHPUT UNIT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	EMISSION LIMIT 1 AVG TIME CONDITION
MI-0454	LBWL-ERICKSON STATION	12/20/2022	EUCTGHRSG2	667	MMBTU/H	Pipeline quality natural gas, inlet air conditioning, and good combustion practices.	6.02	LB/H	HOURLY; APPLIES DURING ALL MODES
MI-0454	LBWL-ERICKSON STATION	12/20/2022	EUCTGHRSG2	667	MMBTU/H	Pipeline quality natural gas, inlet air conditioning, and good combustion practices.	6.02	LB/H	HOURLY, APPLY DURING ALL OPERATING MODES
MI-0433	MEC NORTH, LLC AND MEC SOUTH LLC	06/29/2018	EUCTGHRSG (South Plant): A combined cycle natural gas-fired combustion turbine generator with heat recovery steam generator.	500	MW	Good combustion practices, inlet air conditioning, and the use of pipeline quality natural gas.	5.8	LB/H	HOURLY
MI-0433	MEC NORTH, LLC AND MEC SOUTH LLC	06/29/2018	EUCTGHRSG (North Plant): A combined-cycle natural gas-fired combustion turbine generator with heat recovery steam generator.	500	MW	Good combustion practices, inlet air conditioning, and the use of pipeline quality natural gas.	5.8	LB/H	HOURLY
MI-0451	MEC NORTH, LLC	06/23/2022	EUCTGHRSG (North Plant): A combined cycle natural gas fired combustion turbine generator with heat recovery steam generator	3064	MMBTU/H	Good combustion practices, inlet air conditioning, and the use of pipeline quality natural gas.	5.7	LB/H	HOURLY
MI-0452	MEC SOUTH, LLC	06/23/2022	EUCTGHRSG (South Plant): A combined-cycle natural gas-fired combustion turbine generator with heat recovery steam generator.	3064	MMBTU/H	Good Combustion Practices, inlet air conditioning, and the use of pipeline quality natural gas	5.7	LB/H	HOURLY
*IN-0365	MAPLE CREEK ENERGY LLC	06/19/2023	Combined Cycle Turbine CTGA SU/SD	3800	MMBtu per hour		5.3	LB/EVENT	
*IN-0365	MAPLE CREEK ENERGY LLC	06/19/2023	Combined Cycle Turbine CTGA SU/SD	3800	MMBtu per hour		5.3	LB/EVENT	
MI-0439	JACKSON GENERATING STATION	04/02/2019	FGLMDB1-6 (6 combined cycle natural gas fired CTG each equipped with a HRSG)	420	MW	Combustion inlet air filters, good combustion practices and only combust natural gas.	4.9	LB/HR	24 HR AVG. DET. EACH OPERATING HR; EACH UNIT OPERATES, EACH
MI-0439	JACKSON GENERATING STATION	04/02/2019	FGLMDB1-6 (6 combined cycle natural gas fired CTG each equipped with a HRSG)	420	MW	Combustion inlet air filters, good combustion practices and only combust natural gas.	4.9	LB/H	24-HR AVG. EACH HR UNIT OPERATES, EACH
NJ-0085	MIDDLESEX ENERGY CENTER, LLC	07/19/2016	Combined Cycle Combustion Turbine firing Natural Gas without Duct Burner	8040	H/YR	USE OF NATURAL GAS A CLEAN BURNING FUEL	4.4	LB/H	AV OF THREE ONE H STACK TESTS EVERY 5 YR
FL-0356	OKEECHOBEE CLEAN ENERGY CENTER	03/09/2016	Combined-cycle electric generating unit	3096	MMBtu/hr per turbine	Use of clean fuels	2	GRAIN S/100 SCF GAS	FOR NATURAL GAS
FL-0356	OKEECHOBEE CLEAN ENERGY CENTER	03/09/2016	Combined-cycle electric generating unit	3096	MMBtu/hr per turbine	Use of clean fuels	2	GR. S/100 SCF GAS	FOR NATURAL GAS
FL-0356	OKEECHOBEE CLEAN ENERGY CENTER	03/09/2016	Combined-cycle electric generating unit	3096	MMBtu/hr per turbine	Use of clean fuels	2	GR. S/100 SCF GAS	FOR NATURAL GAS
FL-0371	SHADY HILLS COMBINED CYCLE FACILITY	06/07/2021	GE 7HA.02 Combustion Turbine and HRSG with Duct Firing	3622.1	MMBTU/hour	Low sulfur fuel	1.4	GR. S/100 SCF NG	
FL-0371	SHADY HILLS COMBINED CYCLE FACILITY	06/07/2021	GE 7HA.02 Combustion Turbine and HRSG with Duct Firing	3622.1	MMBTU/hour	Clean fuels	1.4	GR. S/100 SCF NG	
FL-0371	SHADY HILLS COMBINED CYCLE FACILITY	06/07/2021	GE 7HA.02 Combustion Turbine and HRSG with Duct Firing	3622.1	MMBTU/hour	Clean fuels	1.4	GR. S/100 SCF NG	
CT-0161	KILLINGLY ENERGY CENTER	06/30/2017	Natural Gas w/o Duct Firing	2969	MMBTU/hr	Good Combustion	0.044	LB/MMBTU	
MI-0424	HOLLAND BOARD OF PUBLIC WORKS - EAST 5TH STREET	12/05/2016	FGCTGHRSG (2 Combined cycle CTGs with HRSGs; EUCTGHRSG10 & EUCTGHRSG11)	554	MMBTU/H, each	Good combustion practices and the use of pipeline quality natural gas.	0.014	LB/MMBTU	TEST PROTOCOL WILL SPECIFY AVG TIME
MI-0424	HOLLAND BOARD OF PUBLIC WORKS - EAST 5TH STREET	12/05/2016	FGCTGHRSG (2 Combined cycle CTGs with HRSGs; EUCTGHRSG10 & EUCTGHRSG11)	554	MMBTU/H, each	Good combustion practices and the use of pipeline quality natural gas.	0.014	LB/MMBTU	TEST PROTOCOL WILL SPECIFY AVG TIME
PA-0334	RENOVO ENERGY CENTER LLC/RENOVO PLT	04/29/2021	COMBUSTION TURBINE #2 (ULSD)	3940	MMBTU/Hr	selective catalytic reduction (SCR) system, oxidation catalyst.	0.0122	LB/MMBTU	
PA-0334	RENOVO ENERGY CENTER LLC/RENOVO PLT	04/29/2021	COMBUSTION TURBINE #1 (ULSD)	3940	MMBTU/Hr	SCR, Catalytic Oxidizer	0.0122	LB/MMBTU	
*LA-0412	ENTERGY LOUISIANA, LLC - FRANKLIN FARMS POWER STATION	12/23/2025	Gas Turbines	4985.3	mm BTU/h	Good combustion practices, energy efficiency and waste heat recovery, and use of natural gas as fuel.	0.01	LB/MM BTU	
*LA-0412	ENTERGY LOUISIANA, LLC - FRANKLIN FARMS POWER STATION	12/23/2025	Gas Turbines	4985.3	mm BTU/h	Good combustion practices, energy efficiency and waste heat recovery, and use of natural gas as fuel.	0.01	LB/MM BTU	
OH-0365	ROLLING HILLS GENERATING, LLC	05/20/2015	Combustion Turbines, Scenario 2 (4, identical) (P001, P002, P004, P005)	2144	MMBTU/H	good combustion practices along with clean fuels	0.0085	LB/MMBTU	HHV, 3 HR AVG. SEE NOTES.
OH-0365	ROLLING HILLS GENERATING, LLC	05/20/2015	Combustion Turbines, Scenario 2 (4, identical) (P001, P002, P004, P005)	2144	MMBTU/H	good combustion practices along with clean fuels	0.0085	LB/MMBTU	HHV, 3 HR AVG. SEE NOTES.
OH-0365	ROLLING HILLS GENERATING, LLC	05/20/2015	Combustion Turbines, Scenario 2 (4, identical) (P001, P002, P004, P005)	2144	MMBTU/H	good combustion practices along with clean fuels	0.0085	LB/MMBTU	HHV, 3 HR AVG. SEE NOTES.
LA-0391	MAGNOLIA POWER GENERATING STATION UNIT 1	06/03/2022	Combined Cycle Gas Turbine w/ Duct Burners and HRSG	5081	mm BTU/h	Use of gaseous fuel (pipeline-quality natural gas) and good combustion practices.	0.008	LB/MM BTU	3 ONE-HOUR TEST AVERAGE
LA-0391	MAGNOLIA POWER GENERATING STATION UNIT 1	06/03/2022	Combined Cycle Gas Turbine w/ Duct Burners and HRSG	5081	mm BTU/h	Use of gaseous fuel (pipeline-quality natural gas) and good combustion practices.	0.008	LB/MM BTU	3 ONE-HOUR TEST AVERAGE
*IN-0365	MAPLE CREEK ENERGY LLC	06/19/2023	Combined Cycle Turbine CTGB	4200	MMBTu per hour		0.0074	LB PER MMBTU	
*IN-0365	MAPLE CREEK ENERGY LLC	06/19/2023	Combined Cycle Turbine CTGB	4200	MMBTu per hour		0.0074	LB PER MMBTU	
*IN-0365	MAPLE CREEK ENERGY LLC	06/19/2023	Combined Cycle Turbine CTGB	4200	MMBTu per hour		0.0074	POUND PER MMBTU	
OH-0374	GUERNSEY POWER STATION LLC	10/23/2017	Combined Cycle Combustion Turbines (3, identical) (P001 to P003)	3516	MMBTU/H	pipeline quality natural gas	0.0073	LB/MMBTU	SEE NOTES.
OH-0374	GUERNSEY POWER STATION LLC	10/23/2017	Combined Cycle Combustion Turbines (3, identical) (P001 to P003)	3516	MMBTU/H	pipeline quality natural gas	0.0073	LB/MMBTU	SEE NOTES.
OH-0374	GUERNSEY POWER STATION LLC	10/23/2017	Combined Cycle Combustion Turbines (3, identical) (P001 to P003)	3516	MMBTU/H	pipeline quality natural gas	0.0073	LB/MMBTU	SEE NOTES.
*PA-0315	HILLTOP ENERGY CENTER, LLC	04/12/2017	Combustion Turbine without Duct Burner	3509	MMBTu/hr		0.0072	LB	MMBTU
*PA-0315	HILLTOP ENERGY CENTER, LLC	04/12/2017	Combustion Turbine without Duct Burner	3509	MMBTu/hr		0.0072	LB	MMBTU
*PA-0315	HILLTOP ENERGY CENTER, LLC	04/12/2017	Combustion Turbine without Duct Burner	3509	MMBTu/hr		0.0072	LB	MMBTU

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AK-0088	LIQUEFACTION PLANT	07/07/2022	Four Combined Cycle Gas-Fired Turbines	384	MMBtu/hr	Good combustion practices and burning clean fuel (natural gas)	0.007	LB/MMBTU	3-HOURS
AK-0088	LIQUEFACTION PLANT	07/07/2022	Four Combined Cycle Gas-Fired Turbines	384	MMBtu/hr	Good combustion practices and burning clean fuel (natural gas)	0.007	LB/MMBTU	3-HOURS
AK-0088	LIQUEFACTION PLANT	07/07/2022	Four Combined Cycle Gas-Fired Turbines	384	MMBtu/hr	Good combustion practices and burning clean fuel (natural gas)	0.007	LB/MMBTU	3-HOURS
MI-0424	HOLLAND BOARD OF PUBLIC WORKS - EAST 5TH STREET	12/05/2016	FGCTGHRSG (2 Combined cycle CTGs with HRSGs; EUCTGHRSG10 & EUCTGHRSG11)	554	MMBTU/H, each	Good combustion practices and the use of pipeline quality natural gas.	0.007	LB/MMBTU	TEST PROTOCOL WILL SPECIFY AVG TIME
IL-0129	CPV THREE RIVERS ENERGY CENTER	07/30/2018	Combined Cycle Combustion Turbines	3474	mmBtu/hr	Good combustion practice	0.0069	LB/MMBTU	3-HOUR BLOCK AVERAGE
VA-0328	C4GT, LLC	04/26/2018	GE Combustion Turbine - Option 1 - Normal Operation	34000	MMCF/YR	good combustion practices and the use of pipeline quality natural gas with a maximum sulfur content of 0.4 gr/100 scf on a 12-month rolling average.	0.0069	LB/MMBTU WITHOUT DUC	AV OF 3 TEST RUNS
VA-0328	C4GT, LLC	04/26/2018	GE Combustion Turbine - Option 1 - Normal Operation	34000	MMCF/YR	good combustion practices and the use of pipeline quality natural gas with a maximum sulfur content of 0.4 gr/100 scf on a 12-month rolling average.	0.0069	LB/MMBTU WITHOUT DUC	AV OF 3 TEST RUNS
OH-0365	ROLLING HILLS GENERATING, LLC	05/20/2015	Combustion Turbines, Scenario 1 (4, identical) (P001, P002, P004, P005)	2022	MMBTU/H	good combustion practices along with clean fuels	0.0068	LB/MMBTU	HHV, 3 HR AVG. SEE NOTES.
OH-0365	ROLLING HILLS GENERATING, LLC	05/20/2015	Combustion Turbines, Scenario 1 (4, identical) (P001, P002, P004, P005)	2022	MMBTU/H	good combustion practices along with clean fuels	0.0068	LB/MMBTU	HHV, 3 HR AVG. SEE NOTES.
OH-0365	ROLLING HILLS GENERATING, LLC	05/20/2015	Combustion Turbines, Scenario 1 (4, identical) (P001, P002, P004, P005)	2022	MMBTU/H	good combustion practices along with clean fuels	0.0068	LB/MMBTU	HHV, 3 HR AVG. SEE NOTES.
PA-0307	YORK ENERGY CENTER BLOCK 2 ELECTRICITY GENERATION PROJECT	06/15/2015	Two combined cycle turbines with out duct burner	2291.64	MCF/hr	Good combustion practices and low sulfur fuels	0.0068	LB/MMBTU	
PA-0307	YORK ENERGY CENTER BLOCK 2 ELECTRICITY GENERATION PROJECT	06/15/2015	Two combined cycle turbines with out duct burner	2291.64	MCF/hr	Good combustion practices and low sulfur fuels	0.0068	LB/MMBTU	
PA-0307	YORK ENERGY CENTER BLOCK 2 ELECTRICITY GENERATION PROJECT	06/15/2015	Two combined cycle turbines with out duct burner	2291.64	MCF/hr	Good combustion practices and low sulfur fuels	0.0068	LB/MMBTU	
PA-0310	CPV FAIRVIEW ENERGY CENTER	09/02/2016	Combustion turbine and HRSG without duct burner NG only	0		Low sulfur fuels and good combustion practices	0.0068	LB/MMBTU	
PA-0310	CPV FAIRVIEW ENERGY CENTER	09/02/2016	Combustion turbine and HRSG without duct burner NG only	0		Low sulfur fuels and good combustion practices	0.0068	LB/MMBTU	
PA-0310	CPV FAIRVIEW ENERGY CENTER	09/02/2016	Combustion turbine and HRSG without duct burner NG only	0		Low sulfur fuels and good combustion practices	0.0068	LB/MMBTU	
KS-0041	HOLLYFRONTIER EL DORADO REFINERY	10/30/2019	L3804	456.5	MMBTU/H	Proper combustion and operation	0.0066	LB/MMBTU	3-HOUR ROLLING AVERAGE
KS-0041	HOLLYFRONTIER EL DORADO REFINERY	10/30/2019	L3804	456.5	MMBTU/H	Proper combustion and operation	0.0066	LB/MMBTU	3-HOUR ROLLING AVERAGE
KS-0041	HOLLYFRONTIER EL DORADO REFINERY	10/30/2019	L3804	456.5	MMBTU/H	Proper combustion and operation	0.0066	LB/MMBTU	3-HOUR ROLLING AVERAGE
MI-0427	FILER CITY STATION	11/17/2017	EUCC (Combined cycle CTG with unfired HRSG)	1934.7	MMBTU/H	Good combustion practices and the use of pipeline quality natural gas, combustion inlet air filter.	0.0066	LB/MMBTU	
MI-0427	FILER CITY STATION	11/17/2017	EUCC (Combined cycle CTG with unfired HRSG)	1934.7	MMBTU/H	Good combustion practices and the use of pipeline quality natural gas, combustion inlet air filter.	0.0066	LB/MMBTU	
PA-0307	YORK ENERGY CENTER BLOCK 2 ELECTRICITY GENERATION PROJECT	06/15/2015	Two Combine Cycle Combustion Turbine with Duct Burner	3001.57	MCF/hr	Good combustion practices and low sulfur fuels	0.0066	LB/MMBTU	
PA-0307	YORK ENERGY CENTER BLOCK 2 ELECTRICITY GENERATION PROJECT	06/15/2015	Two Combine Cycle Combustion Turbine with Duct Burner	3001.57	MCF/hr	Good combustion practices and low sulfur fuels	0.0066	LB/MMBTU	
PA-0307	YORK ENERGY CENTER BLOCK 2 ELECTRICITY GENERATION PROJECT	06/15/2015	Two Combine Cycle Combustion Turbine with Duct Burner	3001.57	MCF/hr	Good combustion practices and low sulfur fuels	0.0066	LB/MMBTU	
VA-0328	C4GT, LLC	04/26/2018	Siemens Combustion Turbine - Option 2 - Normal Operation	35000	MMCF/YR	good combustion practices and the use of pipeline quality natural gas with a maximum sulfur content of 0.4 gr/100 scf on a 12 mo rolling av.	0.0065	LB/MMBTU	AV OF 3 TEST RUNS/WITHOUT DUCT BURNING
VA-0328	C4GT, LLC	04/26/2018	Siemens Combustion Turbine - Option 2 - Normal Operation	35000	MMCF/YR	good combustion practices and the use of pipeline quality natural gas with a maximum sulfur content of 0.4 gr/100 scf on a 12-month rolling average.	0.0065	LB/MMBTU	AV OF 3 TEST RUNS/WITHOUT DUCT BURNING
AK-0085	GAS TREATMENT PLANT	08/13/2020	Six (6) Cogeneration Gas-Fired Turbines (Treated Gas Compressor Turbines)	576	MMBtu/hr	Good Combustion Practices and burning clean fuels (NG)	0.0063	LB/MMBTU	3-HOUR AVERAGE
AK-0085	GAS TREATMENT PLANT	08/13/2020	Six (6) Cogeneration Gas-Fired Turbines (Treated Gas Compressor Turbines)	576	MMBtu/hr	Good combustion practices and burning clean fuel (NG)	0.0063	LB/MMBTU	3-HOUR AVERAGE
AK-0085	GAS TREATMENT PLANT	08/13/2020	Six (6) Cogeneration Gas-Fired Turbines (Treated Gas Compressor Turbines)	576	MMBtu/hr	Good combustion practices and clean burning fuel (NG)	0.0063	LB/MMBTU	3-HOUR AVERAGE
AK-0085	GAS TREATMENT PLANT	08/13/2020	Six (6) Cogeneration Gas-Fired Turbines (CO2 Compressor Turbines))	431	MMBtu/hr	Good Combustion Practices and burning clean fuels (NG)	0.0063	LB/MMBTU	3-HOUR AVERAGE
AK-0085	GAS TREATMENT PLANT	08/13/2020	Six (6) Cogeneration Gas-Fired Turbines (CO2 Compressor Turbines))	431	MMBtu/hr	Good Combustion Practices and burning clean fuels (NG)	0.0063	LB/MMBTU	3-HOUR AVERAGE
AK-0085	GAS TREATMENT PLANT	08/13/2020	Six (6) Cogeneration Gas-Fired Turbines (CO2 Compressor Turbines))	431	MMBtu/hr	Good Combustion Practices and burning clean fuels (NG)	0.0063	LB/MMBTU	3-HOUR AVERAGE
PA-0311	MOXIE FREEDOM GENERATION PLANT	09/01/2015	Combustion Turbine With Duct Burner	3727	MMBtu/hr		0.0063	LB/MMBTU	
PA-0311	MOXIE FREEDOM GENERATION PLANT	09/01/2015	Combustion Turbine With Duct Burner	3727	MMBtu/hr		0.0063	LB/MMBTU	

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PA-0311	MOXIE FREEDOM GENERATION PLANT	09/01/2015	Combustion Turbine With Duct Burner	3727	MMBtu/hr		0.0063	LB/MMBTU	
PA-0311	MOXIE FREEDOM GENERATION PLANT	09/01/2015	Combustion Turbine without Duct Burner	0			0.0063	LB/MMBTU	
PA-0311	MOXIE FREEDOM GENERATION PLANT	09/01/2015	Combustion Turbine without Duct Burner	0			0.0063	LB/MMBTU	
PA-0311	MOXIE FREEDOM GENERATION PLANT	09/01/2015	Combustion Turbine without Duct Burner	0			0.0063	LB/MMBTU	
MI-0442	THOMAS TOWNSHIP ENERGY, LLC	08/21/2019	FGCTGHRSG	625	MW	Low sulfur fuel and good combustion practices.	0.006	LB/MMBTU	HOURLY; EACH UNIT
MI-0442	THOMAS TOWNSHIP ENERGY, LLC	08/21/2019	FGCTGHRSG	625	MW	Low sulfur fuel and good combustion practices.	0.006	LB/MMBTU	HOURLY; EACH UNIT
*WV-0033	MAIDSVILLE	01/05/2022	Combustion Turbine & Duct Burner (CT-01/HRSG1 & CT-02/HRSG2)	1275	mw	Clean Fuels and Good Combustion Practice	0.006	LB/MMBTU	AVG OF 3 4-HR TEST RUNS
*WV-0033	MAIDSVILLE	01/05/2022	Combustion Turbine & Duct Burner (CT-01/HRSG1 & CT-02/HRSG2)	1275	mw	Good Combustion Practice and Clean Fuel	0.006	LB/MMBTU	AVG OF 3 4-HR TEST RUNS
PA-0309	LACKAWANNA ENERGY CTR/JESSUP	12/23/2015	Combustion turbine with duct burner	3304.3	MMBtu/hr	Exclusive natural gas, high-efficiency inlet air filters and DLN	0.0059	LB/MMBTU	
PA-0309	LACKAWANNA ENERGY CTR/JESSUP	12/23/2015	Combustion turbine with duct burner	3304.3	MMBtu/hr	Exclusive natural gas, high-efficiency inlet air filters and DLN	0.0059	LB/MMBTU	
OH-0375	LONG RIDGE ENERGY GENERATION LLC - HANNIBAL POWER	11/07/2017	Siemens Combustion Turbine (P006)	3602	MMBTU/H	natural gas or a natural gas and ethane mixture only	0.0057	LB/MMBTU	WITH DUCT BURNER. SEE NOTES.
OH-0375	LONG RIDGE ENERGY GENERATION LLC - HANNIBAL POWER	11/07/2017	Siemens Combustion Turbine (P006)	3602	MMBTU/H	natural gas or a natural gas and ethane mixture only	0.0057	LB/MMBTU	WITH DUCT BURNER. SEE NOTES.
OH-0375	LONG RIDGE ENERGY GENERATION LLC - HANNIBAL POWER	11/07/2017	Siemens Combustion Turbine (P006)	3602	MMBTU/H	natural gas or a natural gas and ethane mixture only	0.0057	LB/MMBTU	WITH DUCT BURNER. SEE NOTES.
OH-0377	HARRISON POWER	04/19/2018	General Electric (GE) Combustion Turbines (P005 & P006)	3459.6	MMBTU/H	Good combustion practices and pipeline quality natural gas	0.0052	LB/MMBTU	WITH DUCT BURNER. SEE NOTES.
OH-0377	HARRISON POWER	04/19/2018	General Electric (GE) Combustion Turbines (P005 & P006)	3459.6	MMBTU/H	Good combustion practices and pipeline quality natural gas	0.0052	LB/MMBTU	WITH DUCT BURNER. SEE NOTES.
OH-0377	HARRISON POWER	04/19/2018	General Electric (GE) Combustion Turbines (P005 & P006)	3459.6	MMBTU/H	Good combustion practices and pipeline quality natural gas	0.0052	LB/MMBTU	WITH DUCT BURNER. SEE NOTES.
VA-0332	CHICKAHOMINY POWER LLC	06/24/2019	Three (3) Mitsubishi Hitachi Power Systems combustion turbine generators	35000	MMCF/YR	Controlled by good combustion practices (e.g. controlled fuel/air mixing, adequate temperature, and gas residence time) and the use of pipeline-quality natural gas with a maximum sulfur content of 0.4 grains per 100 scf, on a 12-month rolling average.	0.0052	LB/MMBTU	AVG. OF 3 TEST RUNS
VA-0332	CHICKAHOMINY POWER LLC	06/24/2019	Three (3) Mitsubishi Hitachi Power Systems combustion turbine generators	35000	MMCF/YR	Controlled by good combustion practices (e.g. controlled fuel/air mixing, adequate temperature, and gas residence time) and the use of pipeline-quality natural gas with a maximum sulfur content of 0.4 grains per 100 scf, on a 12-month rolling average.	0.0052	LB/MMBTU	AVG OF 3 TEST RUNS
VA-0332	CHICKAHOMINY POWER LLC	06/24/2019	Three (3) Mitsubishi Hitachi Power Systems combustion turbine generators	35000	MMCF/YR	Controlled by good combustion practices (e.g. controlled fuel/air mixing, adequate temperature, and gas residence time) and the use of pipeline-quality natural gas with a maximum sulfur content of 0.4 grains per 100 scf, on a 12-month rolling average.	0.0052	LB/MMBTU	AVG OF 3 TEST RUNS
CT-0161	KILLINGLY ENERGY CENTER	06/30/2017	Natural Gas w/Duct Firing	2639	MMBtu/hr	Good Combustion	0.005	LB/MMBTU	
CT-0161	KILLINGLY ENERGY CENTER	06/30/2017	Natural Gas w/Duct Firing	2639	MMBtu/hr	Good Combustion	0.005	LB/MMBTU	
OH-0377	HARRISON POWER	04/19/2018	Mitsubishi Hitachi Power Systems (MHPS) Combustion Turbines (P007 & P008)	3231	MMBTU/H	Good combustion practices and pipeline quality natural gas	0.005	LB/MMBTU	WITH DUCT BURNER. SEE NOTES.
OH-0377	HARRISON POWER	04/19/2018	Mitsubishi Hitachi Power Systems (MHPS) Combustion Turbines (P007 & P008)	3231	MMBTU/H	Good combustion practices and pipeline quality natural gas	0.005	LB/MMBTU	WITH DUCT BURNER. SEE NOTES.
OH-0377	HARRISON POWER	04/19/2018	Mitsubishi Hitachi Power Systems (MHPS) Combustion Turbines (P007 & P008)	3231	MMBTU/H	Good combustion practices and pipeline quality natural gas	0.005	LB/MMBTU	WITH DUCT BURNER. SEE NOTES.
PA-0310	CPV FAIRVIEW ENERGY CENTER	09/02/2016	Combustion turbine and HRSG with duct burner NG only	3338	MMBtu/hr	Low sulfur fuel, good combustion practices	0.005	LB/MMBTU	
PA-0310	CPV FAIRVIEW ENERGY CENTER	09/02/2016	Combustion turbine and HRSG with duct burner NG only	3338	MMBtu/hr	Low sulfur fuel, good combustion practices	0.005	LB/MMBTU	
PA-0310	CPV FAIRVIEW ENERGY CENTER	09/02/2016	Combustion turbine and HRSG with duct burner NG only	3338	MMBtu/hr	Low sulfur fuel, good combustion practices	0.005	LB/MMBTU	
PA-0334	RENOVO ENERGY CENTER LLC/RENOVO PLT	04/29/2021	COMBUSTION TURBINE w DUCT BURNER #2 (Natural Gas)	4546	MMBtu/Hr	SCR, CATALYTIC OXIDIZER	0.005	LB/MMBTU	
PA-0334	RENOVO ENERGY CENTER LLC/RENOVO PLT	04/29/2021	COMBUSTION TURBINE w DUCT BURNER #1 (Natural Gas)	4546	MMBtu/Hr	SCR, Catalytic Oxidizer	0.005	LB/MMBTU	
TN-0162	JOHNSONVILLE COGENERATION	04/19/2016	Natural Gas-Fired Combustion Turbine with HRSG	1339	MMBtu/hr	Good combustion design and practices	0.005	LB/MMBTU	
*TN-0164	TVA - JOHNSONVILLE COGENERATION	02/01/2018	Dual-fuel CT and HRSG with duct burner	1020	MMBtu/hr	Good combustion design & practice	0.005	LB/MMBTU	WHEN BURNING NATURAL GAS
TX-0939	ORANGE COUNTY ADVANCED POWER STATION	03/13/2023	Combined Cycle Turbines	1215	MW	good combustion practices	0.005	LB/MMBTU	
TX-0939	ORANGE COUNTY ADVANCED POWER STATION	03/13/2023	Combined Cycle Turbines	1215	MW	good combustion practices	0.005	LB/MMBTU	
TX-0939	ORANGE COUNTY ADVANCED POWER STATION	03/13/2023	Combined Cycle Turbines	1215	MW	good combustion practices	0.005	LB/MMBTU	

RBLC Search Results - PM

RBLCID	FACILITY NAME	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGHPUT	THROUGHPUT UNIT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	EMISSION LIMIT 1 AVG TIME CONDITION
*IN-0365	MAPLE CREEK ENERGY LLC	06/19/2023	Combined Cycle Turbine CTGA	3800	MMBtu per hour		0.0049	POUND PER MMBTU	
*IN-0365	MAPLE CREEK ENERGY LLC	06/19/2023	Combined Cycle Turbine CTGA	3800	MMBtu per hour		0.0049	LB PER MMBTU	
*IN-0365	MAPLE CREEK ENERGY LLC	06/19/2023	Combined Cycle Turbine CTGA	3800	MMBtu per hour		0.0049	LB PER MMBTU	
CA-1251	PALMDALE ENERGY PROJECT	04/25/2018	Combustion Turbines (GEN1 and GEN2)	2217	MMBTU/H	Clean fuel and good combustion practices	0.0048	LB/MMBTU	TEST AVERAGE
CA-1251	PALMDALE ENERGY PROJECT	04/25/2018	Combustion Turbines (GEN1 and GEN2)	2217	MMBTU/H	Clean fuel and good combustion practices	0.0048	LB/MMBTU	TEST AVERAGE
CA-1251	PALMDALE ENERGY PROJECT	04/25/2018	Combustion Turbines (GEN1 and GEN2)	2217	MMBTU/H	Clean fuel and good combustion practices	0.0048	LB/MMBTU	TEST AVERAGE
*TX-0994	SL ENERGY POWER PLANT I	10/29/2025	COMBINED CYCLE GAS TURBINES	348	MMBTU	Pipeline quality natural gas and good combustion practices are used to limit particulate matter emissions	0.0046	LB/MMBTU	
*TX-0994	SL ENERGY POWER PLANT I	10/29/2025	COMBINED CYCLE GAS TURBINES	348	MMBTU	Pipeline quality natural gas and good combustion practices are used to limit particulate matter emissions	0.0046	LB/MMBTU	
*TX-0994	SL ENERGY POWER PLANT I	10/29/2025	COMBINED CYCLE GAS TURBINES	348	MMBTU	Pipeline quality natural gas and good combustion practices are used to limit particulate matter emissions	0.0046	LB/MMBTU	
CT-0161	KILLINGLY ENERGY CENTER	06/30/2017	Natural Gas w/o Duct Firing	2969	MMBtu/hr	Good Combustion	0.0044	LB/MMBTU	
*PA-0319	RENAISSANCE ENERGY CENTER	08/27/2018	COMBUSTION TURBINE UNIT w/o DUCT BURNERS UNIT	2665.9	MMBtu/hr		0.0043	LB/MMBTU	
*PA-0319	RENAISSANCE ENERGY CENTER	08/27/2018	COMBUSTION TURBINE UNIT w/o DUCT BURNERS UNIT	2665.9	MMBtu/hr		0.0043	LB/MMBTU	HR
*PA-0319	RENAISSANCE ENERGY CENTER	08/27/2018	COMBUSTION TURBINE UNIT w/o DUCT BURNERS UNIT	2665.9	MMBtu/hr		0.0043	LB/MMBTU	HR
IN-0382	DUKE ENERGY INDIANA, INC. - CAYUGA GENERATING STATION	02/14/2025	Combustion Turbines (6A and 6B)	4254	MMBtu/hr	Good Combustion Practices and combustng pipeline-quality natural gas	0.0042	LB/MMBTU	3-HOUR AVERAGE EXCL. SU/SD
IL-0133	LINCOLN LAND ENERGY CENTER	07/29/2022	Combined-Cycle Combustion Turbines	3647	mmBtu/hour	Good combustion practices.	0.0041	POUNDS/MMBTU	ROLLING 3-OPERATING HOUR
AL-0328	PLANT BARRY	11/09/2020	Two 744 MW Combined Cycle Units	744	MW		0.004	LB/MMBTU	3 HOUR AVG
AL-0328	PLANT BARRY	11/09/2020	Two 744 MW Combined Cycle Units	744	MW		0.004	LB/MMBTU	3 HOUR AVG
OH-0375	LONG RIDGE ENERGY GENERATION LLC - HANNIBAL POWER	11/07/2017	Mitsubishi Combustion Turbine (P005)	3320	MMBTU/H	natural gas or a natural gas and ethane mixture only	0.004	LB/MMBTU	WITH DUCT BURNER. SEE NOTES.
OH-0375	LONG RIDGE ENERGY GENERATION LLC - HANNIBAL POWER	11/07/2017	Mitsubishi Combustion Turbine (P005)	3320	MMBTU/H	natural gas or a natural gas and ethane mixture only	0.004	LB/MMBTU	WITH DUCT BURNER. SEE NOTES.
OH-0375	LONG RIDGE ENERGY GENERATION LLC - HANNIBAL POWER	11/07/2017	Mitsubishi Combustion Turbine (P005)	3320	MMBTU/H	natural gas or a natural gas and ethane mixture only	0.004	LB/MMBTU	WITH DUCT BURNER. SEE NOTES.
PA-0306	TENASKA PA PARTNERS/WESTMORELAND GEN FAC	02/12/2016	Large combustion turbine	0		Good combustion practices with the use of low ash/sulfur fuels	0.0039	LB/MMBTU	
PA-0306	TENASKA PA PARTNERS/WESTMORELAND GEN FAC	02/12/2016	Large combustion turbine	0		Good combustion practices with the use of low ash/sulfur fuels	0.0039	LB/MMBTU	
PA-0306	TENASKA PA PARTNERS/WESTMORELAND GEN FAC	02/12/2016	Large combustion turbine	0		Good combustion practices	0.0039	LB/MMBTU	
VA-0325	GREENSVILLE POWER STATION	06/17/2016	COMBUSTION TURBINE GENERATOR WITH DUCT-FIRED HEAT RECOVERY STEAM GENERATORS (3)	3227	MMBTU/HR	Pipeline Quality Natural Gas	0.0039	LB/MMBTU	AVG OF 3 TEST RUNS
VA-0325	GREENSVILLE POWER STATION	06/17/2016	COMBUSTION TURBINE GENERATOR WITH DUCT-FIRED HEAT RECOVERY STEAM GENERATORS (3)	3227	MMBTU/HR	Low sulfur/carbon fuel and good combustion practices	0.0039	LB/MMBTU	AVG OF 3 TEST RUNS
IL-0129	CPV THREE RIVERS ENERGY CENTER	07/30/2018	Combined Cycle Combustion Turbines	3474	mmBtu/hr	Good combustion practices	0.0037	LB/MMBTU	3-HOUR BLOCK AVERAGE
*VA-0335	PANDA STONEWALL LLC	12/18/2020	Combustion Turbines, Two (2) and HRSG Duct Burners	2.55	MMBTU/H	Good combustion practices and use of low-sulfur fuels	0.0037	LB/MMBTU	AT FULL LOAD W & W/O DB
OH-0375	LONG RIDGE ENERGY GENERATION LLC - HANNIBAL POWER	11/07/2017	General Electric Combustion Turbine (P004)	3544	MMBTU/H	natural gas or a natural gas and ethane mixture only	0.0036	LB/MMBTU	
OH-0375	LONG RIDGE ENERGY GENERATION LLC - HANNIBAL POWER	11/07/2017	General Electric Combustion Turbine (P004)	3544	MMBTU/H	natural gas or a natural gas and ethane mixture only	0.0036	LB/MMBTU	
OH-0375	LONG RIDGE ENERGY GENERATION LLC - HANNIBAL POWER	11/07/2017	General Electric Combustion Turbine (P004)	3544	MMBTU/H	natural gas or a natural gas and ethane mixture only	0.0036	LB/MMBTU	
MI-0442	THOMAS TOWNSHIP ENERGY, LLC	08/21/2019	FGCTGHRSG	625	MW	Low sulfur fuel and good combustion practices.	0.0034	LB/MMBTU	HOURLY; EACH UNIT
IL-0133	LINCOLN LAND ENERGY CENTER	07/29/2022	Combined-Cycle Combustion Turbines	3647	mmBtu/hour	Good combustion practices	0.0032	POUNDS/MMBTU	WITH DUCT BURNER; ROLLING 3-OPERATING HR
PA-0309	LACKAWANNA ENERGY CTR/JESSUP	12/23/2015	Combustion turbine with duct burner	3304.3	MMBtu/hr	Exclusive natural gas, high-efficiency inlet air filters and DLN	0.003	LB/MMBTU	
IL-0130	JACKSON ENERGY CENTER	12/31/2018	Combined-Cycle Combustion Turbine	3864	mmBtu/hr	Good combustion practices	0.0026	LB/MMBTU	3-HR BLOCK AVERAGE
MI-0427	FILER CITY STATION	11/17/2017	EUCCT (Combined cycle CTG with unfired HRSG)	1934.7	MMBTU/H	Good combustion practices and the use of pipeline quality natural gas, combustion inlet air filter.	0.0025	LB/MMBTU	
FL-0363	DANIA BEACH ENERGY CENTER	12/04/2017	2-on-1 combined cycle unit (GE 7HA)	4000	MMBtu/hr	Clean fuels	0		
FL-0363	DANIA BEACH ENERGY CENTER	12/04/2017	2-on-1 combined cycle unit (GE 7HA)	4000	MMBtu/hr	Clean fuels	0		
FL-0363	DANIA BEACH ENERGY CENTER	12/04/2017	2-on-1 combined cycle unit (GE 7HA)	4000	MMBtu/hr	Clean fuels	0		
FL-0367	SHADY HILLS COMBINED CYCLE FACILITY	07/27/2018	1-on-1 combined cycle unit (GE 7HA)	3266.9	MMBtu/hour	Clean fuels	0		

RBLC Search Results - PM

RBLCID	FACILITY NAME	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGHPUT	THROUGHPUT UNIT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	EMISSION LIMIT 1 AVG TIME CONDITION
FL-0367	SHADY HILLS COMBINED CYCLE FACILITY	07/27/2018	1-on-1 combined cycle unit (GE 7HA)	3266.9	MMBtu/hour	Clean fuels	0		
FL-0367	SHADY HILLS COMBINED CYCLE FACILITY	07/27/2018	1-on-1 combined cycle unit (GE 7HA)	3266.9	MMBtu/hour	Clean fuels	0		
IN-0382	DUKE ENERGY INDIANA, INC.- CAYUGA GENERATING STATION	02/14/2025	Lube Oil Demister Vents	0		good engineering design and operating practices	0		
TX-0819	GAINES COUNTY POWER PLANT	04/28/2017	Combined Cycle Turbine with Heat Recovery Steam Generator, fired Duct Burners, and Steam Turbine Generator	426	MW	Pipeline quality natural gas; good combustion practices	0		
TX-0819	GAINES COUNTY POWER PLANT	04/28/2017	Combined Cycle Turbine with Heat Recovery Steam Generator, fired Duct Burners, and Steam Turbine Generator	426	MW	Pipeline quality natural gas; good combustion practices	0		
TX-0819	GAINES COUNTY POWER PLANT	04/28/2017	Combined Cycle Turbine with Heat Recovery Steam Generator, fired Duct Burners, and Steam Turbine Generator	426	MW	Pipeline quality natural gas; good combustion practices	0		
TX-0878	LNG EXPORT TERMINAL	09/15/2022	Refrigeration Compression Turbines	26.92	MMTON/Y	Good combustion practices and use of pipeline quality natural gas	0		
TX-0878	LNG EXPORT TERMINAL	09/15/2022	Refrigeration Compression Turbines	26.92	MMTON/Y	Good combustion practices and use of pipeline quality natural gas	0		
TX-0915	UNIT 5	03/17/2021	COMBINED CYCLE TURBINE	0		Low sulfur natural gas fuel	0		
TX-0915	UNIT 5	03/17/2021	COMBINED CYCLE TURBINE	0		Low sulfur natural gas fuel	0		
TX-0915	UNIT 5	03/17/2021	COMBINED CYCLE TURBINE	0		Low sulfur natural gas fuel	0		
TX-0939	ORANGE COUNTY ADVANCED POWER STATION	03/13/2023	TURBINE MSS	0		On-line turbine washing, turbine filter changeouts, catalyst handling, fuel venting, CEMS calibration, fugitive/small equipment maintenance Good air pollution control practices and safe operating practices.	0		
TX-0939	ORANGE COUNTY ADVANCED POWER STATION	03/13/2023	TURBINE MSS	0		On-line turbine washing, turbine filter changeouts, catalyst handling, fuel venting, CEMS calibration, fugitive/small equipment maintenance Good air pollution control practices and safe operating practices.	0		
TX-0939	ORANGE COUNTY ADVANCED POWER STATION	03/13/2023	TURBINE MSS	0		On-line turbine washing, turbine filter changeouts, catalyst handling, fuel venting, CEMS calibration, fugitive/small equipment maintenance Good air pollution control practices and safe operating practices.	0		
*TX-1005	FERMI AMERICA PROJECT MATADOR	02/25/2026	COMBINED CYCLE TURBINES	443	MMBTU/HR	GAS FUEL	0		
*TX-1005	FERMI AMERICA PROJECT MATADOR	02/25/2026	COMBINED CYCLE TURBINES	443	MMBTU/HR	GAS FUEL	0		
*TX-1005	FERMI AMERICA PROJECT MATADOR	02/25/2026	COMBINED CYCLE TURBINES	443	MMBTU/HR	GAS FUEL	0		
		01/15/2026							
*TX-1007	NRG JEWETT ENERGY CENTER		Combined Cycle & Cogeneration (>25 MW), Natural Gas (includes propane & liquified petroleum gas)	775	MMBTU/HR	Use of pipeline-quality natural gas and the application of good combustion practices. MSS: Minimize duration and frequency of MSS activities and engaging the pollution control equipment (i.e., the SCR and oxidation catalyst systems) as soon as practicable, based on vendor recommendations.	0		
		01/15/2026							
*TX-1007	NRG JEWETT ENERGY CENTER		Combined Cycle & Cogeneration (>25 MW), Natural Gas (includes propane & liquified petroleum gas)	775	MMBTU/HR	Use of pipeline-quality natural gas and the application of good combustion practices. MSS: Minimize duration and frequency of MSS activities and engaging the pollution control equipment (i.e., the SCR and oxidation catalyst systems) as soon as practicable, based on vendor recommendations.	0		
		01/15/2026							
*TX-1007	NRG JEWETT ENERGY CENTER		Combined Cycle & Cogeneration (>25 MW), Natural Gas (includes propane & liquified petroleum gas)	775	MMBTU/HR	Use of pipeline-quality natural gas and the application of good combustion practices. MSS: Minimize duration and frequency of MSS activities and engaging the pollution control equipment (i.e., the SCR and oxidation catalyst systems) as soon as practicable, based on vendor recommendations.	0		

RBLC Search Results - SO2

RBLCID	FACILITY NAME	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGHPUT	THROUGHPUT UNIT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	EMISSION LIMIT 1 AVG TIME CONDITION
AK-0085	GAS TREATMENT PLANT	08/13/2020	Six (6) Cogeneration Gas-Fired Turbines (Treated Gas Compressor Turbines)	576	MMBtu/hr	Good combustion practices and clean burning fuel low sulfur natural gas	96	PPMV SULFUR IN FUEL	PRIOR TO COMPLETING TREATMENT TRAINS
AK-0085	GAS TREATMENT PLANT	08/13/2020	Six (6) Cogeneration Gas-Fired Turbines (CO2 Compressor Turbines))	431	MMBtu/hr	Good combustion practices and clean burning fuel low sulfur natural gas	96	PPMV SULFUR IN FUEL	PRIOR TO COMPLETING TREATMENT TRAINS
TX-0751	EAGLE MOUNTAIN STEAM ELECTRIC STATION	06/18/2015	Combined Cycle Turbines (>25 MW) & natural gas	210	MW		40.66	LB/H	
MD-0045	MATTAWOMAN ENERGY CENTER	11/13/2015	2 COMBINED-CYCLE COMBUSTION TURBINES	286	MW		26	NG/J HEAT INPUT	AT ALL TIMES
AK-0088	LIQUEFACTION PLANT	07/07/2022	Four Combined Cycle Gas-Fired Turbines	384	MMBtu/hr	pipeline quality natural gas and good combustion practices	16	PPMV SULFUR IN FUEL	
MI-0423	INDECK NILES, LLC	01/04/2017	FGCTGHRSG (2 Combined Cycle CTGs with HRSGs)	8322	MMBTU/H	Good Combustion Practices and the use of pipeline quality natural gas.	11.7	LB/H	TEST PROTOCOL WILL SPECIFY AVG TIME
*MI-0445	INDECK NILES, LLC	11/26/2019	FGCTGHRSG	3421	MMBTU/H	Good combustion practices, inlet air conditioning and the use of pipeline quality natural gas.	11.7	LB/H	HOURLY; EACH CTGHRSG
NJ-0085	MIDDLESEX ENERGY CENTER, LLC	07/19/2016	Combined Cycle Combustion Turbine firing Natural Gas with Duct Burner	4000	h/yr	USE OF NATURAL GAS A LOW SULFUR FUEL CLEAN FUEL	6.64	LB/H	AV OF THREE ONE H STACK TESTS EVERY 5 YR
MI-0433	MEC NORTH, LLC AND MEC SOUTH LLC	06/29/2018	EUCTGHRSG (South Plant): A combined cycle natural gas-fired combustion turbine generator with heat recovery steam generator.	500	MW	Good combustion practices and the use of pipeline quality natural gas.	6.6	LB/H	HOURLY
MI-0433	MEC NORTH, LLC AND MEC SOUTH LLC	06/29/2018	EUCTGHRSG (North Plant): A combined-cycle natural gas-fired combustion turbine generator with heat recovery steam generator.	500	MW	Good combustion practices and the use of pipeline quality natural gas.	6.6	LB/H	HOURLY
MI-0451	MEC NORTH, LLC	06/23/2022	EUCTGHRSG (North Plant): A combined cycle natural gas fired combustion turbine generator with heat recovery steam generator	3064	MMBTU/H	Good combustion practices and the use of pipeline quality natural gas.	6.6	LB/H	HOURLY

RBLC Search Results - SO2

RBLCID	FACILITY NAME	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGHPUT	THROUGHPUT UNIT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	EMISSION LIMIT 1 AVG TIME CONDITION
MI-0452	MEC SOUTH, LLC	06/23/2022	EUCTGHRSG (South Plant): A combined-cycle natural gas-fired combustion turbine generator with heat recovery steam generator.	3064	MMBTU/H	Good Combustion Practices and the use of pipeline quality natural gas	6.6	LB/H	HOURLY
OH-0367	SOUTH FIELD ENERGY LLC	09/23/2016	Combined Cycle Combustion Turbines (two, identical) (P001 and P002)	3131	MMBTU/H	Low sulfur fuels	5.64	LB/H	NAT GAS, WITH DUCT BURNER. SEE NOTES.
NJ-0085	MIDDLESEX ENERGY CENTER, LLC	07/19/2016	Combined Cycle Combustion Turbine firing Natural Gas without Duct Burner	8040	H/YR	USE OF NATURAL GAS A CLEAN BURNING LOW SULFUR FUEL	5.62		
IL-0133	LINCOLN LAND ENERGY CENTER	07/29/2022	Combined-Cycle Combustion Turbines	3647	mmBtu/hour	Good combustion practices and use of natural gas with a sulfur content of no more than 0.5 grains (gr)/100 standard cubic feet (scf).	5.5	POUNDS/HOUR	ROLLING 3-OPERATING HOUR
OH-0370	TRUMBULL ENERGY CENTER	09/07/2017	Combined Cycle Combustion Turbines (two, identical) (P001 and P002)	3025	MMBTU/H	Low sulfur fuel	5.1	LB/H	WITH DUCT BURNER. SEE NOTES.
OH-0372	OREGON ENERGY CENTER	09/27/2017	Combined Cycle Combustion Turbines (two, identical) (P001 and P002)	3055	MMBTU/H	low sulfur fuel	5.1	LB/H	WITH DUCT BURNER. SEE NOTES.
TX-0789	DECORDOVA STEAM ELECTRIC STATION	03/08/2016	Combined Cycle & Cogeneration	231	MW	GOOD COMBUSTION PRACTICES AND LOW SULFUR FUEL	5	GR/100 SCF	HOURLY
TX-0790	PORT ARTHUR LNG EXPORT TERMINAL	02/17/2016	Refrigeration Compression Turbines	10	M TONNES/YR	Dry low NOx burners, good combustion practices, pipeline quality sweet natural gas fuel (low sulfur fuel)	5	GR/100 SCF	
CT-0157	CPV TOWANTIC, LLC	11/30/2015	Combined Cycle Power Plant	21200000	MMBTu/12 months		4.49	LB/H	
CT-0158	CPV TOWANTIC, LLC	11/30/2015	Combined Cycle Power Plant	21200000	MMBTu/yr	Use of inherently low sulfur fuel	4.49	LB/H	
LA-0331	CALCASIEU PASS LNG PROJECT	09/21/2018	Combined Cycle Combustion Turbines (CCCT1 to CCCT5)	921	MM BTU/h	Exclusive Combustion of Low Sulfur Fuel and Proper Engineering Practices	4	PPMV	ANNUAL AVERAGE
NJ-0088	COGEN TECH LINDEN VENTURE LP	07/30/2019	250 MW COMBINED CYCLE COMBUSTION TURBINE FIRING NATURAL GAS	21042	MMCubic ft/yr	USE OF NATURAL GAS AND ULSD; BOTH CLEAN BURNING FUELS	3.45	LB/H	AV OF THREE ONE H STACK TESTS EVERY 5 YR
TX-0790	PORT ARTHUR LNG EXPORT TERMINAL	02/17/2016	Simple Cycle Electrical Generation Gas Turbines 15.210	34	MW	Equipment specifications & work practices - Good combustion practices and use of low carbon, low sulfur fuel	2.96	LB/H	
FL-0356	OKEECHOBEE CLEAN ENERGY CENTER	03/09/2016	Combined-cycle electric generating unit	3096	MMBTu/hr per turbine	Use of low-sulfur fuels	2	GR. S/100 SCF GAS	FOR NATURAL GAS

RBLC Search Results - SO2

RBLCID	FACILITY NAME	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGHPUT	THROUGHPUT UNIT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	EMISSION LIMIT 1 AVG TIME CONDITION
TX-0730	COLORADO BEND ENERGY CENTER	04/01/2015	Combined-cycle gas turbine electric generating facility	1100	MW	efficient combustion, natural gas fuel	2	GR/100 SCF	1-HOUR
TX-0819	GAINES COUNTY POWER PLANT	04/28/2017	Combined Cycle Turbine with Heat Recovery Steam Generator, fired Duct Burners, and Steam Turbine Generator	426	MW	Pipeline quality natural gas	1.54	GR/100 DSCF	
FL-0371	SHADY HILLS COMBINED CYCLE FACILITY	06/07/2021	GE 7HA.02 Combustion Turbine and HRSG with Duct Firing	3622.1	MMBtu/hour	Low sulfur fuel	1.4	GR. S/100 SCF NG	
LA-0364	FG LA COMPLEX	01/06/2020	Cogeneration Units	2222	mm btu/h	Use of pipeline quality natural gas or fuel gas.	1.24	LB/H	
TX-0788	NECHES STATION	03/24/2016	Combined Cycle & Cogeneration	231	MW	GOOD COMBUSTION PRACTICES, LOW SULFUR FUEL	1	GR/100 SCF	HOURLY
TX-0834	MONTGOMERY COUNTY POWER STATION	03/30/2018	Combined Cycle Turbine	2635	MMBTU/HR/UNIT	PIPELINE QUALITY NATURAL GAS	1	GR/100 DSCF	
*LA-0412	ENTERGY LOUISIANA, LLC - FRANKLIN FARMS POWER STATION	12/23/2025	Gas Turbines	4985.3	mm BTU/h	Use of natural gas fuel and energy efficiency and waste heat recovery.	1	GR/100 SCF	
*TX-1007	NRG JEWETT ENERGY CENTER	01/15/2026	Combined Cycle & Cogeneration (>25 MW), Natural Gas (includes propane & liquified petroleum gas)	775	MMBTU/HR	Good combustion practices, units fire only pipeline quality sweet natural gas with no more than 1.0 grains sulfur/100 dscf fuel on a short-term maximum hourly basis and 0.5 grains sulfur/100 dscf on an annual average basis, assumption of 100% molar conversion of natural gas sulfur to SO2 (conservative since SO2 and H2SO4 emissions are double counted). MSS: Minimize duration and frequency of MSS activities and engaging the pollution control equipment (i.e., the SCR and oxidation catalyst systems) as soon as practicable, based on vendor recommendations.	1	GR/100 DSCF	HOURLY
MI-0432	NEW COVERT GENERATING FACILITY	07/30/2018	FG-TURB/DB1-3 (3 combined cycle combustion turbine and heat recovery steam generator trains)	1230	MW	Use of clean fuel (natural gas) with a fuel sulfur limit of 0.8 grains per 100 standard cubic feet of natural gas.	0.8	GR/100 SCF	NAT.GAS BURNED IN FG-TURB/DB1-3
AL-0328	PLANT BARRY	11/09/2020	Two 744 MW Combined Cycle Units	744	MW		0.6	GR S/100 SCF FUEL	
*WV-0033	MAIDSVILLE	01/05/2022	Combustion Turbine & Duct Burner (CT-01/HRSG1 & CT-02/HRSG2)	1275	mw	Low Sulfur Fuel	0.4	GR-S/100 SCF	SEE APPENDIX D OF 40CFR75

RBLC Search Results - SO2

RBLCID	FACILITY NAME	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGHPUT	THROUGHPUT UNIT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	EMISSION LIMIT 1 AVG TIME CONDITION
*WV-0033	MAIDSVILLE	01/05/2022	Combustion Turbine & Duct Burner (CT-01/HRSG1 & CT-02/HRSG2)	1275	mw	Low Sulfur Fuel	0.4	GR-S/100 SCF	SEE APPENDIX D OF 40CFR75
KS-0041	HOLLYFRONTIER EL DORADO REFINERY	10/30/2019	L3804	456.5	MMBTU/H	Low Sulfur Fuel Gas	0.0034	LB/MMBTU	3-HOUR ROLLING AVERAGE
MI-0442	THOMAS TOWNSHIP ENERGY, LLC	08/21/2019	FGCTGHRSG	625	MW	The use of clean fuel (natural gas), with a fuel sulfur limit of 1 grain per 100 standard cubic feet of natural gas.	0.003	LB/MMBTU	HOURLY; EACH UNIT
OH-0377	HARRISON POWER	04/19/2018	Mitsubishi Hitachi Power Systems (MHPS) Combustion Turbines (P007 & P008)	3231	MMBTU/H	Good combustion practices and pipeline quality natural gas	0.0021	LB/MMBTU	
*IN-0365	MAPLE CREEK ENERGY LLC	06/19/2023	Combined Cycle Turbine CTGB	4200	MMBTu per hour		0.0019	LB PER MMBTU	BASED ON 3-HR AVERAGE
PA-0334	RENOVO ENERGY CENTER LLC/RENOVO PLT	04/29/2021	COMBUSTION TURBINE #2 (ULSD)	3940	MMBTu/Hr	selective catalytic reduction (SCR) system, oxidation catalyst.	0.0018	LB/MMBTU	
PA-0334	RENOVO ENERGY CENTER LLC/RENOVO PLT	04/29/2021	COMBUSTION TURBINE #1 (ULSD)	3940	MMBTu/Hr	SCR, Catalytic Oxidizer	0.0018	LB/MMBTU	
*IN-0365	MAPLE CREEK ENERGY LLC	06/19/2023	Combined Cycle Turbine CTGA	3800	MMBTu per hour		0.0017	POUND PER MMBTU	3-HR AVERAGE
OH-0377	HARRISON POWER	04/19/2018	General Electric (GE) Combustion Turbines (P005 & P006)	3459.6	MMBTU/H	Good combustion practices and pipeline quality natural gas	0.0017	LB/MMBTU	SEE NOTES.
CT-0161	KILLINGLY ENERGY CENTER	06/30/2017	Natural Gas w/o Duct Firing	2969	MMBTu/hr	Low Sulfur fuel	0.0015	LB/MMBTU	
CT-0161	KILLINGLY ENERGY CENTER	06/30/2017	Natural Gas w/Duct Firing	2639	MMBTu/hr	Low Sulfur Fuel	0.0015	LB/MMBTU	
OH-0374	GUERNSEY POWER STATION LLC	10/23/2017	Combined Cycle Combustion Turbines (3, identical) (P001 to P003)	3516	MMBTU/H	pipeline quality natural gas with a maximum sulfur content not exceed 0.50 grain/100 scf	0.0015	LB/MMBTU	SEE NOTES.
PA-0334	RENOVO ENERGY CENTER LLC/RENOVO PLT	04/29/2021	COMBUSTION TURBINE w DUCT BURNER #2 (Natural Gas)	4546	MMBTu/Hr	SCR, CATALYTIC OXIDIZER	0.0012	LB/MMBTU	
PA-0334	RENOVO ENERGY CENTER LLC/RENOVO PLT	04/29/2021	COMBUSTION TURBINE w DUCT BURNER #1 (Natural Gas)	4546	MMBTu/Hr	SCR, Catalytic Oxidizer	0.0012	LB/MMBTU	
VA-0325	GREENSVILLE POWER STATION	06/17/2016	COMBUSTION TURBINE GENERATOR WITH DUCT-FIRED HEAT RECOVERY STEAM GENERATORS (3)	3227	MMBTU/HR	Low Sulfur fuel	0.0011	LB/MMBTU	DURING NORMAL OPERATION INCLUDING SU/SD
VA-0328	C4GT, LLC	04/26/2018	GE Combustion Turbine - Option 1 - Normal Operation	34000	MMCF/YR	use of pipeline quality natural gas with a maximum sulfur content of 0.4 gr/100 scf on a 12-month rolling average.	0.0011	LB/MMBTU	3 HR AVG

RBLC Search Results - SO2

RBLCID	FACILITY NAME	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGHPUT	THROUGHPUT UNIT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	EMISSION LIMIT 1 AVG TIME CONDITION
VA-0328	C4GT, LLC	04/26/2018	Siemens Combusion Turbine - Option 2 - Normal Operation	35000	MMCF/YR	use of pipeline quality natural gas with a maximum sulfur content of 0.4 gr/100 scf on a 12 mo rolling av.	0.0011	LB/MMBTU	3 H AV
VA-0332	CHICKAHOMINY POWER LLC	06/24/2019	Three (3) Mitsubishi Hitachi Power Systems combustion turbine generators	35000	MMCF/YR	Controlled by the use of pipeline-quality natural gas with a maximum sulfur content of 0.4 grains per 100 standard cubic feet (scf), on a 12-month rolling average.	0.0011	LB/MMBTU	3 HR AVG
FL-0363	DANIA BEACH ENERGY CENTER	12/04/2017	2-on-1 combined cycle unit (GE 7HA)	4000	MMBtu/hr	Clean fuels	0		
FL-0367	SHADY HILLS COMBINED CYCLE FACILITY	07/27/2018	1-on-1 combined cycle unit (GE 7HA)	3266.9	MMBtu/hour	Clean Fuels	0		
TX-0878	LNG EXPORT TERMINAL	09/15/2022	Refrigeration Compression Turbines	26.92	MMTON/Y	Good combustion practices and use of pipeline quality natural gas	0		
TX-0908	NEWMAN POWER STATION	08/27/2021	Simple Cycle Turbine	230	MW	use of natural gas	0		
WI-0300	NEMADJI TRAIL ENERGY CENTER	09/01/2020	Natural-Gas-Fired Combined-Cycle Turbine (P01)	4671	MMBTU/H	Only use pipeline quality natural gas and diesel fuel, and use good combustion control	0		
*TX-0994	SL ENERGY POWER PLANT I	10/29/2025	COMBINED CYCLE GAS TURBINES	348	MMBTU	Each turbine, including the duct burners, is limited to firing pipeline quality natural gas with a sulfur content of up to 0.5 grains per 100 dry standard cubic feet (gr S/100 dscf). To estimate emissions of SO2, it is assumed that there is 100% conversion of the sulfur in the fuel to SO2	0		
*TX-1005	FERMI AMERICA PROJECT MATADOR	02/25/2026	COMBINED CYCLE TURBINES	443	MMBTU/HR	H2S LIMITED IN FUEL TO 0.5 GR/100 DSCF	0		

RBLC Search Results - H2SO4

RBLCID	FACILITY NAME	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGHPUT	THROUGHPUT UNIT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	EMISSION LIMIT 1 AVG TIME CONDITION
WI-0300	NEMADJI TRAIL ENERGY CENTER	09/01/2020	Natural Gas-Fired Combined-Cycle Turbine (P01) Start-up and Shutdown (Natural Gas)	0			15.6	LB/START-UP	
TX-0751	EAGLE MOUNTAIN STEAM ELECTRIC STATION	06/18/2015	Combined Cycle Turbines (>25 MW) & natural gas	210	MW		15.56	LB/H	
WI-0300	NEMADJI TRAIL ENERGY CENTER	09/01/2020	Natural-Gas-Fired Combined-Cycle Turbine (P01) Start-Up and Shutdown (diesel)	0			14	LB/START-UP	
TX-0773	FGE EAGLE PINES PROJECT	11/04/2015	Combined Cycle Turbines (>25 MW)	321	MW	low sulfur fuel	10.4	T/YR	
WI-0300	NEMADJI TRAIL ENERGY CENTER	09/01/2020	Natural-Gas-Fired Combined-Cycle Turbine (P01)	4671	MMBTU/H	Only use pipeline quality natural gas and diesel fuel and use good combustion control.	9.9	LB/H	NATURAL GAS, DUCT FIRING
OH-0367	SOUTH FIELD ENERGY LLC	09/23/2016	Combined Cycle Combustion Turbines (two, identical) (P001 and P002)	3131	MMBTU/H	Low sulfur fuels	6.96	LB/H	WITH DUCT BURNER. SEE NOTES.
*PA-0319	RENAISSANCE ENERGY CENTER	08/27/2018	COMBUSTION TURBINE UNIT w/o DUCT BURNERS UNIT	2665.9	MMBTU/hr		5.98	TPY	
OH-0375	LONG RIDGE ENERGY GENERATION LLC - HANNIBAL POWER	11/07/2017	Siemens Combustion Turbine (P006)	3602	MMBTU/H	natural gas or a natural gas and ethane mixture only	5.2	X10-4 LB/MMBTU	WITH DUCT BURNER. SEE NOTES.
IL-0130	JACKSON ENERGY CENTER	12/31/2018	Combined-Cycle Combustion Turbine	3864	mmBtu/hr		5	POUNDS/HOUR	3-HR BLOCK AVG
TX-0789	DECORDOVA STEAM ELECTRIC STATION	03/08/2016	Combined Cycle & Cogeneration	231	MW	GOOD COMBUSTION PRACTICES AND LOW SULFUR FUEL	5	GR/100 SCF	HOURLY
MD-0045	MATTAWOMAN ENERGY CENTER	11/13/2015	2 COMBINED-CYCLE COMBUSTION TURBINES	286	MW	INITIAL AND ANNUAL PERFORMANCE TEST USING EPA METHOD 8 OR EQUIVALENT METHOD APPROVED BY MDE-ARMA	4.6	LB/H	3-HR BLOCK AVERAGE, W/OUT DUCT FIRING
MI-0423	INDECK NILES, LLC	01/04/2017	FGCTGHRSG (2 Combined Cycle CTGs with HRSGs)	8322	MMBTU/H	Good Combustion Practices and the use of pipeline quality natural gas.	4.6	LB/H	TEST PROTOCOL WILL SPECIFY AVG TIME
*MI-0445	INDECK NILES, LLC	11/26/2019	FGCTGHRSG	3421	MMBTU/H	Good combustion practices and the use of pipeline quality natural gas.	4.6	LB/H	HOURLY; EACH CTGHRSG
NJ-0085	MIDDLESEX ENERGY CENTER, LLC	07/19/2016	Combined Cycle Combustion Turbine firing Natural Gas with Duct Burner	4000	h/yr	USE OF NATURAL GAS A LOW SULFUR FUEL	4.26	LB/H	AV OF THREE ONE H STACK TESTS EVERY 5 YR
*WV-0029	HARRISON COUNTY POWER PLANT	03/27/2018	GE 7HA.02 Turbine	3496.2	mmBtu/hr	Use of Natural Gas	3.8	LB/HR	
OH-0370	TRUMBULL ENERGY CENTER	09/07/2017	Combined Cycle Combustion Turbines (two, identical) (P001 and P002)	3025	MMBTU/H	Low sulfur fuel	3.7	LB/H	WITH DUCT BURNER. SEE NOTES.
OH-0372	OREGON ENERGY CENTER	09/27/2017	Combined Cycle Combustion Turbines (two, identical) (P001 and P002)	3055	MMBTU/H	Low sulfur fuel	3.7	LB/H	WITH DUCT BURNER. SEE NOTES.
NJ-0085	MIDDLESEX ENERGY CENTER, LLC	07/19/2016	Combined Cycle Combustion Turbine firing Natural Gas without Duct Burner	8040	H/YR	USE OF NATURAL GAS A CLEAN BURNING FUEL	3.61	LB/H	AV OF THREE ONE H STACK TESTS EVERY 5 YR
NJ-0088	COGEN TECH LINDEN VENTURE LP	07/30/2019	250 MW COMBINED CYCLE COMBUSTION TURBINE FIRING NATURAL GAS	21042	MMcubic ft/yr	Use of clean burning fuels Natural gas	3.45	LB/H	
OH-0366	CLEAN ENERGY FUTURE - LORDSTOWN, LLC	08/25/2015	Combined Cycle Combustion Turbines (two, identical) (P001 and P002)	2725	MMBTU/H	Low sulfur fuel	3.4	LB/H	WITH DUCT BURNER. SEE NOTES.
MI-0433	MEC NORTH, LLC AND MEC SOUTH LLC	06/29/2018	EUCTGHRSG (South Plant): A combined cycle natural gas-fired combustion turbine generator with heat recovery steam generator.	500	MW	Good combustion practices and the use of pipeline quality natural gas.	2.7	LB/H	HOURLY
MI-0433	MEC NORTH, LLC AND MEC SOUTH LLC	06/29/2018	EUCTGHRSG (North Plant): A combined-cycle natural gas-fired combustion turbine generator with heat recovery steam generator.	500	MW	Good combustion practices and the use of pipeline quality natural gas.	2.7	LB/H	HOURLY
MI-0451	MEC NORTH, LLC	06/23/2022	EUCTGHRSG (North Plant): A combined cycle natural gas fired combustion turbine generator with heat recovery steam generator	3064	MMBTU/H	Good combustion practices and the use of pipeline quality natural gas.	2.6	LB/H	HOURLY
MI-0452	MEC SOUTH, LLC	06/23/2022	EUCTGHRSG (South Plant): A combined-cycle natural gas-fired combustion turbine generator with heat recovery steam generator.	3064	MMBTU/H	Good Combustion Practices and the use of pipeline quality natural gas	2.6	LB/H	HOURLY

RBLC Search Results - H2SO4

RBLCID	FACILITY NAME	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGHPUT	THROUGHPUT UNIT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	EMISSION LIMIT 1 AVG TIME CONDITION
*WV-0032	BROOKE COUNTY POWER PLANT	09/18/2018	GE 7HA.01 Turbine	2737.7	mmBtu/hr	Use of Natural Gas	2.6	LB/HR	
VA-0328	C4GT, LLC	04/26/2018	GE Combustion Turbine - Option 1 - Normal Operation	34000	MMCF/YR	use of natural gas with a sulfur content of no more than 0.4 gr/100scf, 12-mo rolling av	2.5	LB/H	3 H AV/WITHOUT DUCT BURNING
LA-0391	MAGNOLIA POWER GENERATING STATION UNIT 1	06/03/2022	Combined Cycle Gas Turbine Startup and Shutdown	5081	mm BTU/h	Good combustion practices.	2.28	LB/HR	
VA-0328	C4GT, LLC	04/26/2018	Siemens Combustion Turbine - Option 2 - Normal Operation	35000	MMCF/YR	use of natural gas with a sulfur content of no more than 0.4 gr/100scf, 12 mo rolling av.	2.2	LB/H	3 H AV/WITHOUT DB
CT-0157	CPV TOWANTIC, LLC	11/30/2015	Combined Cycle Power Plant	21200000	MMBtu/12 months		2.11	LB/H	
CT-0158	CPV TOWANTIC, LLC	11/30/2015	Combined Cycle Power Plant	21200000	MMBtu/yr	Use of inherently low sulfur fuel	2.11	LB/H	
OH-0365	ROLLING HILLS GENERATING, LLC	05/20/2015	Combustion Turbines, Scenario 2 (4, identical) (P001, P002, P004, P005)	2144	MMBTU/H	good combustion practices along with clean fuels. Firing only natural gas with a sulfur content of 0.25 grains per 100 standard cubic feet (gr/100 scf)	2.1	T/YR	PER ROLLING 12 MONTH PERIOD. SEE NOTES.
OH-0365	ROLLING HILLS GENERATING, LLC	05/20/2015	Combustion Turbines, Scenario 1 (4, identical) (P001, P002, P004, P005)	2022	MMBTU/H	good combustion practices along with clean fuels. Firing only natural gas with a sulfur content of 0.25 grains per 100 standard cubic feet (gr/100 scf)	2	T/YR	PER ROLLING 12 MONTH PERIOD. SEE NOTES.
IL-0133	LINCOLN LAND ENERGY CENTER	07/29/2022	Combined-Cycle Combustion Turbines	3647	mmBtu/hour	Good combustion practices and use of only natural gas with a sulfur content no greater than 0.5 grains (gr)/100 standard cubic feet (scf).	2	POUNDS/M MBTU	ROLLING 3-OPERATING HOUR
FL-0356	OKEECHOBEE CLEAN ENERGY CENTER	03/09/2016	Combined-cycle electric generating unit	3096	MMBtu/hr per turbine	Use of low-sulfur fuels	2	GR. S/100 SCF GAS	FOR GAS
TX-0730	COLORADO BEND ENERGY CENTER	04/01/2015	Combined-cycle gas turbine electric generating facility	1100	MW	efficient combustion, natural gas fuel	2	GR/100 SCF	1-HOUR
FL-0371	SHADY HILLS COMBINED CYCLE FACILITY	06/07/2021	GE 7HA.02 Combustion Turbine and HRSG with Duct Firing	3622.1	MMBTU/hour	Low sulfur fuel	1.4	GR. S/100 SCF NG	
LA-0313	ST. CHARLES POWER STATION	08/31/2016	SCPS Combined Cycle Unit 1A	3625	MMBTU/hr	Use of low sulfur fuel	1.21	LB/H	HOURLY MAXIMUM
LA-0313	ST. CHARLES POWER STATION	08/31/2016	SCPS Combined Cycle Unit 1B	3625	MMBTU/hr	Use of low sulfur fuels	1.21	LB/H	HOURLY MAXIMUM
MI-0432	NEW COVERT GENERATING FACILITY	07/30/2018	FG-TURB/DB1-3 (3 combined cycle combustion turbine and heat recovery steam generator trains)	1230	MW	Use of clean fuel (natural gas) with a fuel sulfur limit of 0.8 grains per 100 standard cubic feet of natural gas.	1	LB/H	HOURLY; EACH CT/HRSG TRAIN
TX-0788	NECHES STATION	03/24/2016	Combined Cycle & Cogeneration	231	MW	GOOD COMBUSTION PRACTICES AND LOW SULFUR FUEL	1	GR/100 SCF	HOURLY
TX-0834	MONTGOMERY COUNTY POWER STATION	03/30/2018	Combined Cycle Turbine	2635	MMBTU/HR/UNIT	PIPELINE QUALITY NATURAL GAS	1	GR/100 DSCF	
*WV-0033	MAIDSVILLE	01/05/2022	Combustion Turbine & Duct Burner (CT-01/HRSG1 & CT-02/HRSG2)	1275	mw	Low Sulfur Fuel	0.4	GR-S/100 SCF	SEE APPENDIX D OF 40CFR75
*WV-0033	MAIDSVILLE	01/05/2022	Combustion Turbine & Duct Burner (CT-01/HRSG1 & CT-02/HRSG2)	1275	mw	Low Sulfur Fuel	0.4	GR-S/100 SCF	SEE APPENDIX D OF 40CFR75
TX-0939	ORANGE COUNTY ADVANCED POWER STATION	03/13/2023	Combined Cycle Turbines	1215	MW	good combustion practices and low sulfur fuel	0.33	GR/100 DSCF	
LA-0391	MAGNOLIA POWER GENERATING STATION UNIT 1	06/03/2022	Combined Cycle Gas Turbine w/ Duct Burners and HRSG	5081	mm BTU/h	Use of gaseous fuel (pipeline-quality natural gas) and good combustion practices.	0.0062	GR/DSCF	
*LA-0412	ENTERGY LOUISIANA, LLC - FRANKLIN FARMS POWER STATION	12/23/2025	Gas Turbines	4985.3	mm BTU/h	Use of natural gas fuel and energy efficiency and waste heat recovery.	0.0043	LB/MM BTU	
OH-0377	HARRISON POWER	04/19/2018	Mitsubishi Hitachi Power Systems (MHPS) Combustion Turbines (P007 & P008)	3231	MMBTU/H	Good combustion practices and pipeline quality natural gas	0.0022	LB/MMBTU	
PA-0310	CPV FAIRVIEW ENERGY CENTER	09/02/2016	Combustion turbine and HRSG with duct burner NG only	3338	MMBTU/hr	ULSD fuel (CCCT only - duct burner is not fired with ULSD), good combustion practices	0.0014	LB/MMBTU	
PA-0310	CPV FAIRVIEW ENERGY CENTER	09/02/2016	Combustion turbine and HRSG without duct burner NG only	0		Low sulfur fuels and good combustion practices	0.0014	LB/MMBTU	
*IN-0365	MAPLE CREEK ENERGY LLC	06/19/2023	Combined Cycle Turbine CTGB	4200	MMBTU per hour		0.0013	LB PER MMBTU	
MI-0435	BELLE RIVER COMBINED CYCLE POWER PLANT	07/16/2018	FGCTGHRSG (EUCTGHRSG1 & EUCTGHRSG2)	0		Good combustion practices and the use of pipeline quality natural gas.	0.0013	LB/MMBTU	HOURLY; EACH UNIT
MI-0442	THOMAS TOWNSHIP ENERGY, LLC	08/21/2019	FGCTGHRSG	625	MW	The use of clean fuel (natural gas), with a fuel sulfur limit of 1 grain per 100 standard cubic feet of natural gas.	0.0013	LB/MMBTU	HOURLY; EACH UNIT
PA-0334	RENOVO ENERGY CENTER LLC/RENOVO PLT	04/29/2021	COMBUSTION TURBINE #2 (ULSD)	3940	MMBTU/Hr		0.0012	LB/MMBTU	
PA-0334	RENOVO ENERGY CENTER LLC/RENOVO PLT	04/29/2021	COMBUSTION TURBINE #1 (ULSD)	3940	MMBTU/Hr	SCR, Catalytic Oxidizer	0.0012	LB/MMBTU	

RBLC Search Results - H2SO4

RBLCID	FACILITY NAME	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGHPUT	THROUGHPUT UNIT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	EMISSION LIMIT 1 AVG TIME CONDITION
VA-0332	CHICKAHOMINY POWER LLC	06/24/2019	Three (3) Mitsubishi Hitachi Power Systems combustion turbine generators	35000	MMCF/YR	Controlled by the use of pipeline-quality natural gas with a maximum sulfur content of 0.4 grains per 100 standard cubic feet (scf), on a 12-month rolling average.	0.0012	LB/MMBTU	3 HR AVG
OH-0374	GUERNSEY POWER STATION LLC	10/23/2017	Combined Cycle Combustion Turbines (3, identical) (P001 to P003)	3516	MMBTU/H	pipeline quality natural gas with a maximum sulfur content not exceed 0.50 grain/100 scf	0.0011	LB/MMBTU	SEE NOTES.
OH-0375	LONG RIDGE ENERGY GENERATION LLC - HANNIBAL POWER	11/07/2017	General Electric Combustion Turbine (P004)	3544	MMBTU/H	natural gas or a natural gas and ethane mixture only	0.0011	LB/MMBTU	
PA-0307	YORK ENERGY CENTER BLOCK 2 ELECTRICITY GENERATION PROJECT	06/15/2015	Two Combine Cycle Combustion Turbine with Duct Burner	3001.57	MCF/hr		0.0011	LB/MMBTU	
OH-0377	HARRISON POWER	04/19/2018	General Electric (GE) Combustion Turbines (P005 & P006)	3459.6	MMBTU/H	Good combustion practices and pipeline quality natural gas	0.001	LB/MMBTU	WITH DUCT BURNER. SEE NOTES.
OH-0375	LONG RIDGE ENERGY GENERATION LLC - HANNIBAL POWER	11/07/2017	Mitsubishi Combustion Turbine (P005)	3320	MMBTU/H	natural gas or a natural gas and ethane mixture only	0.0009	LB/MMBTU	
PA-0309	LACKAWANNA ENERGY CTR/JESSUP	12/23/2015	Combustion turbine with duct burner	3304.3	MMBTU/hr	Exclusive natural gas	0.0009	LB/MMBTU	
PA-0311	MOXIE FREEDOM GENERATION PLANT	09/01/2015	Combustion Turbine With Duct Burner	3727	MMBTU/hr		0.0009	LB/MMBTU	
PA-0311	MOXIE FREEDOM GENERATION PLANT	09/01/2015	Combustion Turbine without Duct Burner	0			0.0009	LB/MMBTU	
PA-0334	RENOVO ENERGY CENTER LLC/RENOVO PLT	04/29/2021	COMBUSTION TURBINE w DUCT BURNER #2 (Natural Gas)	4546	MMBTU/Hr	SCR, CATALYTIC OXIDIZER	0.0009	LB/MMBTU	
PA-0334	RENOVO ENERGY CENTER LLC/RENOVO PLT	04/29/2021	COMBUSTION TURBINE w DUCT BURNER #1 (Natural Gas)	4546	MMBTU/Hr	SCR, Catalytic Oxidizer	0.0009	LB/MMBTU	
PA-0306	TENASKA PA PARTNERS/WESTMORELAND GEN FAC	02/12/2016	Large combustion turbine	0		Low sulfur fuel and good combustion practices	0.0006	LB/MMBTU	HHV
VA-0325	GREENSVILLE POWER STATION	06/17/2016	COMBUSTION TURBINE GENERATOR WITH DUCT-FIRED HEAT RECOVERY STEAM GENERATORS (3)	3227	MMBTU/HR	Low Sulfur fuel	0.0006	LB/MMBTU	
CT-0161	KILLINGLY ENERGY CENTER	06/30/2017	Natural Gas w/o Duct Firing	2969	MMBTU/hr	Low Sulfur content fuel	0.0005	LB/MMBTU	
*IN-0365	MAPLE CREEK ENERGY LLC	06/19/2023	Combined Cycle Turbine CTGA	3800	MMBTU per hour		0.0004	POUND PER MMBTU	
CT-0161	KILLINGLY ENERGY CENTER	06/30/2017	Natural Gas w/Duct Firing	2639	MMBTU/hr	Low Sulfur Fuels	0	LB/MMBTU	
FL-0363	DANIA BEACH ENERGY CENTER	12/04/2017	2-on-1 combined cycle unit (GE 7HA)	4000	MMBTU/hr	Clean fuels	0		
FL-0367	SHADY HILLS COMBINED CYCLE FACILITY	07/27/2018	1-on-1 combined cycle unit (GE 7HA)	3266.9	MMBTU/hour	Clean fuels	0		
IL-0129	CPV THREE RIVERS ENERGY CENTER	07/30/2018	Combined Cycle Combustion Turbines	3474	mmBTU/hr	No controls feasible for use of natural gas. For ULSD, use ultra-low sulfur diesel as a backup fuel	0		
TX-0908	NEWMAN POWER STATION	08/27/2021	Simple Cycle Turbine	230	MW	Use of natural gas and good combustion practices	0		
*TX-1007	NRG JEWETT ENERGY CENTER	01/15/2026	Combined Cycle & Cogeneration (>25 MW), Natural Gas (includes propane & liquified petroleum gas)	775	MMBTU/HR	Good combustion practices, units fire only pipeline quality sweet natural gas with no more than 1.0 grains sulfur/100 dscf fuel on a short-term maximum hourly basis and 0.5 grains sulfur/100 dscf on an annual average basis, assumption that 5% molar conversion of SO2 emissions oxidize to SO3 in the combustion turbine, 10% molar conversion of SO2 oxidizes to SO3 in the duct burner, 40% molar conversion of SO2 oxidizes to SO3 across the catalyst beds, and 100 percent of SO3 converts to H2SO4. MSS: Minimize duration and frequency of MSS activities and engaging the pollution control equipment (i.e., the SCR and oxidation catalyst systems) as soon as practicable, based on vendor recommendations.	0		

RBLC Search Results - CO2

RBLCID	FACILITY NAME	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGHPUT	THROUGHPUT UNIT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	EMISSION LIMIT 1 AVG TIME CONDITION
IL-0130	JACKSON ENERGY CENTER	12/31/2018	Combined-Cycle Combustion Turbine	3864	mmBtu/hr	Equipment design and proper operation	4733910	TONS/YEAR	12-MONTH ROLLING AVERAGE
PA-0310	CPV FAIRVIEW ENERGY CENTER	09/02/2016	Combustion turbine and HRSG with duct burner NG only	3338	MMBtu/hr	low sulfur fuel and good combustion practices	3352086	TONS	12-MONTH ROLLING BASIS
MI-0442	THOMAS TOWNSHIP ENERGY, LLC	08/21/2019	FGCTGHRSG	625	MW	Energy efficiency measures	2739722	T/YR	12-MONTH ROLLING TIME PERIOD; EACH UNIT
LA-0331	CALCASIEU PASS LNG PROJECT	09/21/2018	Combined Cycle Combustion Turbines (CCCT1 to CCCT5)	921	MM BTU/h	Combust low carbon fuel gas and good combustion practices	2602275	T/YR	ANNUAL TOTAL
*LA-0412	ENTERGY LOUISIANA, LLC - FRANKLIN FARMS POWER STATION	12/23/2025	Gas Turbines	4985.3	mm BTU/h	Good combustion practices, proper O&M practices, use of natural gas, energy efficiency and waste heat recovery.	2596711	T/YR	
LA-0391	MAGNOLIA POWER GENERATING STATION UNIT 1	06/03/2022	Combined Cycle Gas Turbine Startup and Shutdown	5081	mm BTU/h	Good combustion practices.	2528349	T/YR	
MI-0455	MIDLAND COGENERATION VENTURE LIMITED PARTNERSHIP	02/01/2023	EUCTGHRSG1	4197.6	MMBTU/H	Low carbon fuel, good combustion practices, energy efficiency measures.	2375313	T/YR	12-MO ROLLING TIME PERIOD
MI-0423	INDECK NILES, LLC	01/04/2017	FGCTGHRSG (2 Combined Cycle CTGs with HRSGs)	8322	MMBTU/H	Energy efficiency measures and the use of a low carbon fuel (pipeline quality natural gas).	2097001	T/YR	12-MONTH ROLLING TIME PERIOD
MI-0435	BELLE RIVER COMBINED CYCLE POWER PLANT	07/16/2018	FGCTGHRSG (EUCTGHRSG1 & EUCTGHRSG2)	0		Energy efficiency measures	2042773	T/YR	12-MO ROLLING TIME PERIOD; EACH UNIT
MI-0451	MEC NORTH, LLC	06/23/2022	EUCTGHRSG (North Plant): A combined cycle natural gas fired combustion turbine generator with heat recovery steam generator	3064	MMBTU/H	Energy efficiency measures and the use of a low carbon fuel (pipeline quality natural gas)	2001019	T/YR	12-MO ROLLING TIME PERIOD
MI-0452	MEC SOUTH, LLC	06/23/2022	EUCTGHRSG (South Plant): A combined-cycle natural gas-fired combustion turbine generator with heat recovery steam generator.	3064	MMBTU/H	Energy Efficiency Measures and the use of a low carbon fuel (pipeline quality natural gas)	2001019	T/YR	12-MO ROLLING TIME PERIOD
MI-0433	MEC NORTH, LLC AND MEC SOUTH LLC	06/29/2018	EUCTGHRSG (South Plant): A combined cycle natural gas-fired combustion turbine generator with heat recovery steam generator.	500	MW	Energy efficiency measures and the use of a low carbon fuel (pipeline quality natural gas).	1978297	T/YR	12-MO ROLLING TIME PERIOD
MI-0433	MEC NORTH, LLC AND MEC SOUTH LLC	06/29/2018	EUCTGHRSG (North Plant): A combined-cycle natural gas-fired combustion turbine generator with heat recovery steam generator.	500	MW	Energy efficiency measures and the use of a low carbon fuel (pipeline quality natural gas).	1978297	T/YR	12-MO ROLL TIME PERIOD
*MI-0445	INDECK NILES, LLC	11/26/2019	FGCTGHRSG	3421	MMBTU/H	Good combustion practices, inlet air conditioning, and the use of pipeline quality natural gas.	1911481	T/YR	12-MO ROLLING TIME PERIOD; EACH CTGHRSG
PA-0306	TENASKA PA PARTNERS/WESTMORELAND GEN FAC	02/12/2016	Large combustion turbine	0		Good combustion practices	1881905	TPY	
WI-0300	NEMADJI TRAIL ENERGY CENTER	09/01/2020	Natural-Gas-Fired Combined-Cycle Turbine (P01) Start-Up and Shutdown (diesel)	0			1639929	LB/START-UP	
PA-0309	LACKAWANNA ENERGY CTR/JESSUP	12/23/2015	Combustion turbine with duct burner	3304.3	MMBtu/hr		1629115	TONS	YEAR
MI-0432	NEW COVERT GENERATING FACILITY	07/30/2018	FG-TURB/DB1-3 (3 combined cycle combustion turbine and heat recovery steam generator trains)	1230	MW	Several energy efficiency measures and the use of natural gas.	1425081	T/YR	EACH CT/HRSG TRAIN; 12-MO. ROLL TIME PER
LA-0364	FG LA COMPLEX	01/06/2020	Cogeneration Units	2222	mm btu/h	Use of natural gas as fuel, energy-efficient design options, and operational/maintenance practices.	1096666	TONS/YR	
KS-0029	THE EMPIRE DISTRICT ELECTRIC COMPANY	07/14/2015	Combined cycle combustion turbine	250	MW		1022755.9	TONS PER YEAR	12-MONTH ROLLING AVERAGE
MI-0439	JACKSON GENERATING STATION	04/02/2019	FGLMDB1-6 (6 combined cycle natural gas fired CTG each equipped with a HRSG)	420	MW	Use of low carbon fuel (natural gas), good combustion practices, and energy efficiency measures.	1000257	T/YR	12-MONTH ROLLING TIME PERIOD

RBLC Search Results - CO2

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MI-0427	FILER CITY STATION	11/17/2017	EUCCT (Combined cycle CTG with unfired HRSG)	1934.7	MMBTU/H	Energy efficiency measures and the use of a low carbon fuel (pipeline quality natural gas).	992286	T/YR	12-MO.ROLL.TIME PERIOD
WI-0300	NEMADJI TRAIL ENERGY CENTER	09/01/2020	Natural Gas-Fired Combined-Cycle Turbine (P01) Start-up and Shutdown (Natural Gas)	0			939573	LB/START-UP	
TX-0766	GOLDEN PASS LNG EXPORT TERMINAL	09/11/2015	Refrigeration Compression Turbines	15.6	MMtpy	Equipment specifications & work practices - Good combustion practices and use of low carbon fuel	614533	TPY	
*WV-0029	HARRISON COUNTY POWER PLANT	03/27/2018	GE 7HA.02 Turbine	3496.2	mmBtu/hr	Use of Natural Gas, Model GE7HA	528543	LB/HR	
TX-0790	PORT ARTHUR LNG EXPORT TERMINAL	02/17/2016	Refrigeration Compression Turbines	10	M TONNES/YR	Equipment specifications & work practices - Good combustion practices and use of low carbon fuel	504517	T/YR	
TX-0878	LNG EXPORT TERMINAL	09/15/2022	Refrigeration Compression Turbines	26.92	MMTON/Y	Equipment specifications & work practices - Good combustion practices and use of low carbon fuel	504000	TON/Y	
OH-0367	SOUTH FIELD ENERGY LLC	09/23/2016	Combined Cycle Combustion Turbines (two, identical) (P001 and P002)	3131	MMBTU/H	High efficient combustion technology	481301	LB/H	NAT GAS, WITH DUCT BURNER. SEE NOTES.
MI-0441	LBWL--ERICKSON STATION	12/21/2018	EUCTGHRSG2--A 667 MMBTU/H natural gas fired CTG with a HRSG.	667	MMBTU/H	low carbon fuel (pipeline quality natural gas), good combustion practices and energy efficiency measures.	430349	T/YR	12-MO ROLLING TIME PERIOD
MI-0441	LBWL--ERICKSON STATION	12/21/2018	EUCTGHRSG1--A 667 MMBTU/H NG fired combustion turbine generator coupled with a heat recovery steam generator (HRSG)	667	MMBTU/H	Low carbon fuel (pipeline quality natural gas), good combustion practices and energy efficiency measures.	430349	T/YR	12-MO ROLLING TIME PERIOD
MI-0447	LBWL--ERICKSON STATION	01/07/2021	EUCTGHRSG1	667	MMBTU/H	Low carbon fuel (pipeline quality natural gas), good combustion practices, and energy efficiency measures.	430349	T/YR	12-MO ROLLING TIME PERIOD
MI-0447	LBWL--ERICKSON STATION	01/07/2021	EUCTGHRSG2	667	MMBTU/H	Low carbon fuel (pipeline quality natural gas), good combustion practices, and energy efficiency measures.	430349	T/YR	12-MO ROLLING TIME PERIOD
MI-0454	LBWL-ERICKSON STATION	12/20/2022	EUCTGHRSG1	667	MMBTU/H	low carbon fuel (pipeline quality natural gas), good combustion practices, and energy efficiency measures.	430349	T/YR	12-MO ROLLING TIME PERIOD; DUR. ALL MODE
MI-0454	LBWL-ERICKSON STATION	12/20/2022	EUCTGHRSG2	667	MMBTU/H	Low carbon fuel (pipeline quality natural gas), good combustion practices, and energy efficiency measures.	430349	T/YR	12-MO ROLLING TIME PERIOD
*WV-0032	BROOKE COUNTY POWER PLANT	09/18/2018	GE 7HA.01 Turbine	2737.7	mmBtu/hr	Use of Natural Gas, Model GE7HA	417382	LB/HR	
OH-0372	OREGON ENERGY CENTER	09/27/2017	Combined Cycle Combustion Turbines (two, identical) (P001 and P002)	3055	MMBTU/H	high efficiency combustion design	401921	LB/H	SEE NOTES.
MI-0424	HOLLAND BOARD OF PUBLIC WORKS - EAST 5TH STREET	12/05/2016	FGCTGHRSG (2 Combined cycle CTGs with HRSGs; EUCTGHRSG10 & EUCTGHRSG11)	554	MMBTU/H, each	Energy efficiency measures and the use of a low carbon fuel (pipeline quality natural gas).	312321	T/YR	12-MO. ROLLING TIME PERIOD; EACH EU.
TX-0790	PORT ARTHUR LNG EXPORT TERMINAL	02/17/2016	Simple Cycle Electrical Generation Gas Turbines 15.210	34	MW	Equipment specifications & work practices - Good combustion practices and use of low carbon, low sulfur fuel	156912	T/YR	
TX-0679	CORPUS CHRISTI LIQUEFACTION PLANT	02/27/2015	Refrigeration Compressor Turbine	40000	hp	install efficient turbines, follow the turbine manufacturer's emission-related written instructions for maintenance activities including prescribed maintenance intervals to assure good combustion and efficient operation. Compressors shall be inspected and maintained according to a written maintenance plan to maintain efficiency.	146754	TPY	12-MONTH ROLLING BASIS
OH-0365	ROLLING HILLS GENERATING, LLC	05/20/2015	Combustion Turbines, Scenario 1 (4, identical) (P001, P002, P004, P005)	2022	MMBTU/H	high efficiency	7471	BTU/KW-H	HHV NET PER EACH CCT BLOCK. SEE NOTES.
OH-0365	ROLLING HILLS GENERATING, LLC	05/20/2015	Combustion Turbines, Scenario 2 (4, identical) (P001, P002, P004, P005)	2144	MMBTU/H	high efficiency	7471	BTU/KW-H	HHV NET PER EACH CCT BLOCK. SEE NOTES.

RBLC Search Results - CO2

RBLCID	FACILITY NAME	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGHPUT	THROUGHPUT UNIT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	EMISSION LIMIT 1 AVG TIME CONDITION
CT-0161	KILLINGLY ENERGY CENTER	06/30/2017	Natural Gas w/o Duct Firing	2969	MMBtu/hr	Use of low carbon fuel	7273	BTU/KW-HR	12-MONTH ROLLING (NET PLANT, GAS ONLY)
*TN-0164	TVA - JOHNSONVILLE COGENERATION	#N/A	Dual-fuel CT and HRSG with duct burner	1020	MMBtu/hr	Good combustion design & practices	1800	LB/MWH	12-MONTH MOVING AVERAGE
TN-0162	JOHNSONVILLE COGENERATION	#N/A	Natural Gas-Fired Combustion Turbine with HRSG	1339	MMBtu/hr	Good combustion design and practices	1800	LB/MWH	12-MONTH MOVING AVERAGE
OH-0377	HARRISON POWER	#N/A	General Electric (GE) Combustion Turbines (P005 & P006)	3459.6	MMBTU/H	High efficient combustion technology	1000	LB/MW-H	WITH DUCT BURNER. SEE NOTES.
MI-0454	LBWL-ERICKSON STATION	#N/A	EUCTGHRSG2	667	MMBTU/H	Low carbon fuel (pipeline quality natural gas), good combustion practices, and energy efficiency measures.	1000	LB/MWH	12-OPERATING MO. ROLL.AVG DUR. ALL MODES
AL-0328	PLANT BARRY	#N/A	Two 744 MW Combined Cycle Units	744	MW	Efficient Design	1000	LB/MWH	
MI-0441	LBWL--ERICKSON STATION	#N/A	EUCTGHRSG2--A 667 MMBTU/H natural gas fired CTG with a HRSG.	667	MMBTU/H	low carbon fuel (pipeline quality natural gas), good combustion practices and energy efficiency measures.	1000	LB/MW-H	GROSS ENERGY OUTPUT; 12-OPERATING MO AVG
MI-0441	LBWL--ERICKSON STATION	#N/A	EUCTGHRSG1--A 667 MMBTU/H NG fired combustion turbine generator coupled with a heat recovery steam generator (HRSG)	667	MMBTU/H	Low carbon fuel (pipeline quality natural gas), good combustion practices and energy efficiency measures.	1000	LB/MW-H	12-OPERATING MO. AVG; SEE NOTES
OH-0377	HARRISON POWER	#N/A	Mitsubishi Hitachi Power Systems (MHPS) Combustion Turbines (P007 & P008)	3231	MMBTU/H	High efficient combustion technology	1000	LB/MW-H	WITH DUCT BURNER. SEE NOTES.
OH-0375	LONG RIDGE ENERGY GENERATION LLC - HANNIBAL POWER	#N/A	Mitsubishi Combustion Turbine (P005)	3320	MMBTU/H	high efficiency combustion practices as recommended by the manufacturer	1000	LB/MW-H	WITH DUCT BURNER. SEE NOTES.
OH-0375	LONG RIDGE ENERGY GENERATION LLC - HANNIBAL POWER	#N/A	Siemens Combustion Turbine (P006)	3602	MMBTU/H	high efficiency combustion practices as recommended by the manufacturer	1000	LB/MW-H	WITH DUCT BURNER. SEE NOTES.
TX-0817	CHOCOLATE BAYOU STEAM GENERATING (CBSG) STATION	#N/A	Combined Cycle Cogeneration	50	MW		1000	LB/MW H	
PA-0311	MOXIE FREEDOM GENERATION PLANT	#N/A	Combustion Turbine With Duct Burner	3727	MMBtu/hr		1000	LB CO2/MWH	GROSS ON A 12-MONTH ROLLING BASIS
TX-0810	DECORDOVA STEAM ELECTRIC STATION (DECORDOVA STATION)	#N/A	Combined Cycle and Cogeneration (>25 MW)	213	MW	good combustion practices and firing low carbon fuel.	966	LB/MW H	
TX-0791	ROCKWOOD ENERGY CENTER	#N/A	Combined Cycle & Cogeneration (> 25 MW)	915	MW	good combustion practices	965	LB/MWH	
TX-0819	GAINES COUNTY POWER PLANT	#N/A	Combined Cycle Turbine with Heat Recovery Steam Generator, fired Duct Burners, and Steam Turbine Generator	426	MW	Pipeline quality natural gas	960	LB / MW H	
TX-0791	ROCKWOOD ENERGY CENTER	#N/A	Combined Cycle & Cogeneration (> 25 MW)	748	MW	Good combustion practices	944	LB/MWH	
TX-0787	TRINIDAD GENERATING FACILITY	#N/A	Combined Cycle & Cogeneration	497	MW	Good Combustion Practices	937	LB/MW HR	
TX-0791	ROCKWOOD ENERGY CENTER	#N/A	Combined Cycle & Cogeneration (> 25 MW)	889	MW	good combustion practices	929	LB/MWH	
TX-0791	ROCKWOOD ENERGY CENTER	#N/A	Combined Cycle & Cogeneration (> 25 MW)	889	MW	good combustion practices	929	LB/MWH	
TX-0788	NECHES STATION	#N/A	Combined Cycle & Cogeneration	231	MW	GOOD COMBUSTION PRACTICES	924	LB/MWH	
TX-0805	EAGLE MOUNTAIN STEAM ELECTRIC STATION	#N/A	Combined Cycle & Cogeneration	462	MW	Good Combustion Practices	917	LB/MW H	
TX-0791	ROCKWOOD ENERGY CENTER	#N/A	Combined Cycle & Cogeneration (> 25 megawatts (MW))	889	MW	Good combustion practices	901	LB/MWH	
VA-0325	GREENSVILLE POWER STATION	#N/A	COMBUSTION TURBINE GENERATOR WITH DUCT-FIRED HEAT RECOVERY STEAM GENERATORS (3)	3227	MMBTU/HR		890	LB/MWH	NET OUTPUT AFTER 30 YEARS OF OPERATION

RBLC Search Results - CO2

RBLCID	FACILITY NAME	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGHPUT	THROUGHPUT UNIT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	EMISSION LIMIT 1 AVG TIME CONDITION
NJ-0085	MIDDLESEX ENERGY CENTER, LLC	#N/A	Combined Cycle Combustion Turbine firing Natural Gas with Duct Burner	4000	h/yr	USE OS NATURAL GAS A CLEAN BURNING FUEL	888	LB/MW-H	BASED ON CONSECUTIVE 12 MONTH ROLLING
NJ-0085	MIDDLESEX ENERGY CENTER, LLC	#N/A	Combined Cycle Combustion Turbine firing Natural Gas without Duct Burner	8040	H/YR	USE OF NATURAL GAS A CLEAN BURNING FUEL	888	LB/MW-H	BASED ON CONSECUTIVE 12 MONTH ROLLING
TX-0773	FGE EAGLE PINES PROJECT	#N/A	Combined Cycle Turbines (>25 MW)	321	MW	Low carbon fuel, good combustion, efficient combined cycle design	886	LB/MW H	WITHOUT DUCT FIRING
TX-0834	MONTGOMERY COUNTY POWER STATION	#N/A	Combined Cycle Turbine	2635	MMBTU/HR/UNIT	PIPELINE QUALITY NATURAL GAS, GOOD COMBUSTION PRACTICES	884	LB/MWH	
VA-0328	C4GT, LLC	#N/A	GE Combustion Turbine - Option 1 - Normal Operation	34000	MMCF/YR	Energy efficient combustion practices and low GHG fuels	883	LB CO2E/MW-H	12 MO ROLLING TOTAL
VA-0328	C4GT, LLC	#N/A	Siemens Combustion Turbine - Option 2 - Normal Operation	35000	MMCF/YR	Energy efficient combustion practices and low GHG fuels	883	LB CO2E/MW H	12 MO ROLLING TOTAL
PA-0307	YORK ENERGY CENTER BLOCK 2 ELECTRICITY GENERATION PROJECT	#N/A	Two Combine Cycle Combustion Turbine with Duct Burner	3001.57	MCF/hr	Good combustion practices and oxidation catalyst	883	LB/MW-HR	EXPRESSED AS CO2E (NET)
*PA-0315	HILLTOP ENERGY CENTER, LLC	04/12/2017	Combustion Turbine without Duct Burner	3509	MMBTu/hr		879	LB	MWH (GROSS)
TX-0730	COLORADO BEND ENERGY CENTER	#N/A	Combined-cycle gas turbine electric generating facility	1100	MW	efficient processes, practices, and designs	879	LB/MWH	
FL-0371	SHADY HILLS COMBINED CYCLE FACILITY	#N/A	GE 7HA.02 Combustion Turbine and HRSG with Duct Firing	3622.1	MMBTu/hour	Low-emitting fuel	875	LB/MWH	12-MO ROLLING (PRIMARY BACT)
FL-0367	SHADY HILLS COMBINED CYCLE FACILITY	#N/A	1-on-1 combined cycle unit (GE 7HA)	3266.9	MMBTu/hour	Low-emitting fuel	875	LB/MWH	12-MO ROLLING (PRIMARY BACT)
LA-0391	MAGNOLIA POWER GENERATING STATION UNIT 1	#N/A	Combined Cycle Gas Turbine w/ Duct Burners and HRSG	5081	mm BTU/h	Use of gaseous fuel (pipeline-quality natural gas), thermally efficient turbines, and good combustion practices.	875	LB/MW-H	ANNUAL AVERAGE
TX-0791	ROCKWOOD ENERGY CENTER	#N/A	Combined Cycle & Cogeneration (> 25 MW)	1127	MW	Good combustion practices	865	LB/MWH	
MD-0045	MATTAWOMAN ENERGY CENTER	#N/A	2 COMBINED-CYCLE COMBUSTION TURBINES	286	MW		865	LB/MW-H	12-MONTH ROLLING AVERAGE
*WV-0033	MAIDSVILLE	#N/A	Combustion Turbine & Duct Burner (CT-01/HRSG1 & CT-02/HRSG2)	1275	mw	Thermal efficiency/combustion air cooling and use of lower carbon fuels.	852	LB/MWH GROSS	12 MONTH ROLLING AVG
*WV-0033	MAIDSVILLE	#N/A	Combustion Turbine & Duct Burner (CT-01/HRSG1 & CT-02/HRSG2)	1275	mw	Thermal efficiency/combustion air cooling and use of lower carbon fuels	852	LB/MWH GROSS	12 MONTH ROLLING AVG
FL-0363	DANIA BEACH ENERGY CENTER	#N/A	2-on-1 combined cycle unit (GE 7HA)	4000	MMBTu/hr	Low-emitting fuels	850	LB/MWH	FOR GAS OPERATION, 12-MO ROLLING
IL-0133	LINCOLN LAND ENERGY CENTER	#N/A	Combined-Cycle Combustion Turbines	3647	mmBtu/hour	Inherently lower-polluting design, good combustion practices and operational energy efficiency	850	LB/MW-HR (GROSS)	12 CONSECUTIVE OPERATING MONTHS
IN-0382	DUKE ENERGY INDIANA, INC.- CAYUGA GENERATING STATION	#N/A	Combustion Turbines (6A and 6B)	4254	MMBTu/hr	good combustion practices and efficient turbine design	850	LB/MW-HR	PER TWELVE (12) CONSECUTIVE MONTH PERIOD
*WI-0326	NEMADJI TRAIL ENERGY CENTER	#N/A	Combustion Turbine; S01/P01/C01a (SCR)/C01b (oxidation catalyst)	4671	MMBTu/hr	(a) Efficient turbine design. (b) Only pipeline quality natural gas and diesel fuel oil may be combusted in P01. (c) An oxidation catalyst shall be used to control emissions from P01 while P01 is in operation. (d) The combustion turbine is to be equipped with oxygen monitors as part of a continuous emissions monitoring (CEM) system.	850	LB CO2/MW-HR	12-MONTH ROLLING, FIRING NATURAL GAS
WI-0300	NEMADJI TRAIL ENERGY CENTER	#N/A	Natural-Gas-Fired Combined-Cycle Turbine (P01)	4671	MMBTU/H	Efficient turbine design, only combust pipeline quality natural gas and diesel fuel oil, Oxidation Catalyst	850	LB CO2/MW-H	12-MO ROLLING AVG., NATURAL GAS
FL-0356	OKEECHOBEE CLEAN ENERGY CENTER	#N/A	Combined-cycle electric generating unit	3096	MMBTu/hr per turbine	Use of low-emitting fuels and technologies	850	LB/MWH	FOR GAS OPERATION, 12-MO ROLLING
OH-0374	GUERNSEY POWER STATION LLC	#N/A	Combined Cycle Combustion Turbines (3, identical) (P001 to P003)	3516	MMBTU/H	high efficiency combustion practices as recommended by the manufacturer	846	LB/MW-H	WITHOUT DUCT BURNER. SEE NOTES.
OH-0370	TRUMBULL ENERGY CENTER	#N/A	Combined Cycle Combustion Turbines (two, identical) (P001 and P002)	3025	MMBTU/H	High efficient combustion technology	833	LB/MW-H	SEE NOTES.

RBLC Search Results - CO2

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OH-0366	CLEAN ENERGY FUTURE - LORDSTOWN, LLC	#N/A	Combined Cycle Combustion Turbines (two, identical) (P001 and P002)	2725	MMBTU/H	High efficient combustion technology	833	LB/MW-H	WITHOUT DUCT BURNERS. SEE NOTES.
*IN-0365	MAPLE CREEK ENERGY LLC	#N/A	Combined Cycle Turbine CTGB	4200	MMBTu per hour		826	LB/MW-HR (GROSS)	CORRECTED TO ISO CONDITIONS
TX-0761	SR BERTRON ELECTRIC GENERATING STATION	#N/A	Combined cycle and cogeneration turbines greater than 25 MW firing natural gas	301	MMBTU/H		825	LB /MW H	
TX-0762	CEDAR BAYOU ELECTRIC GENERATING STATION	#N/A	Combined cycle and cogeneration turbines greater than 25 MW	301	MMBTU/H		825	LB CO2/MWH	
VA-0332	CHICKAHOMINY POWER LLC	#N/A	Three (3) Mitsubishi Hitachi Power Systems combustion turbine generators	35000	MMCF/YR	Energy efficient combustion practices and low GHG fuels	812	LB/CO2E/MW-H	12 MO ROLLING TOTAL
CT-0158	CPV TOWANTIC, LLC	#N/A	Combined Cycle Power Plant	21200000	MMBTu/yr		809	LB/MWH	
*TX-0994	SL ENERGY POWER PLANT I	10/29/2025	COMBINED CYCLE GAS TURBINES	348	MMBTU	Each turbine will comply with 40 CFR NSPS TTTTa requirements and operate as base load units (annual capacity factor greater than 40%). Therefore, the gross power-output based GHG emissions for each unit are limited to 800 lb CO2/MWh on a 12-month operating month average during all operation, as specified at 40 CFR 60.5580(a) and Table 1 of NSPS Subpart TTTTa. Effective January 1, 2032 however, the gas turbine will be subject to a 100 lb CO2/MWh gross power-output based GHG emission limit instead, according to NSPS TTTTa.	800	LB/MWH	
OH-0375	LONG RIDGE ENERGY GENERATION LLC - HANNIBAL POWER	#N/A	General Electric Combustion Turbine (P004)	3544	MMBTU/H	high efficiency combustion practices as recommended by the manufacturer	775	LB/MW-H	SEE NOTES.
*IN-0365	MAPLE CREEK ENERGY LLC	#N/A	Combined Cycle Turbine CTGA	3800	MMBTu per hour		726	LB/MW-HR (GROSS)	CORRECTED TO ISO CONDITIONS
WI-0299	WPL- RIVERSIDE ENERGY CENTER	08/20/2020	Natural gas fired combustion turbine with heat recovery steam generator (P20, P21)	250	MMBTU/H		350	T	DURING ANY DOCUMENTED STARTUP EVENT
TX-0834	MONTGOMERY COUNTY POWER STATION	03/30/2018	COMBINED CYCLE TURBINE MSS REDUCED LOAD	0		minimizing duration of startup / shutdown events, engaging the pollution control equipment as soon as practicable (based on vendor recommendations and guarantees), and meeting the emissions limits on the MAERT	223	TON/H	
WI-0306	WPL- RIVERSIDE ENERGY CENTER	02/28/2020	Natural Gas Fired Combustion Turbine (P20, P21) Phase I Commissioning	2208	MMBTU/H		118	LB CO2/MMBTU	HEAT INPUT
AK-0085	GAS TREATMENT PLANT	08/13/2020	Six (6) Cogeneration Gas-Fired Turbines (Treated Gas Compressor Turbines)	576	MMBTu/hr	Good combustion practices and clean burning fuel (NG)	117.1	LB/MMBTU	3-HOUR AVERAGE
AK-0085	GAS TREATMENT PLANT	08/13/2020	Six (6) Cogeneration Gas-Fired Turbines (CO2 Compressor Turbines)	431	MMBTu/hr	Good combustion practices and clean burning fuel (NG)	117.1	LB/MMBTU	3-HOUR AVERAGE
AK-0088	LIQUEFACTION PLANT	07/07/2022	Four Combined Cycle Gas-Fired Turbines	384	MMBTu/hr	Good combustion practices and burning clean fuels (natural gas)	117.1	LB/MMBTU	3-HOURS
IN-0371	WABASH VALLEY RESOURCES, LLC	01/11/2024	Integrated Gasification Combined Cycle Combustion Turbine	2292	MMBTu/hr	Good Combustion Practices	110	LB/MMBTU	
IL-0129	CPV THREE RIVERS ENERGY CENTER	07/30/2018	Combined Cycle Combustion Turbines	3474	mmBtu/hr	Equipment design and proper operation	0		
LA-0313	ST. CHARLES POWER STATION	08/31/2016	SCPS Combined Cycle Unit 1A	3625	MMBTU/hr	Thermally efficient combustion turbines and good combustion practices	0		
LA-0313	ST. CHARLES POWER STATION	08/31/2016	SCPS Combined Cycle Unit 1B	3625	MMBTU/hr	Thermally efficient combustion turbines and good combustion practices	0		
TX-0908	NEWMAN POWER STATION	08/27/2021	Simple Cycle Turbine	230	MW	Use of natural gas and good combustion practices	0		
TX-0915	UNIT 5	03/17/2021	COMBINED CYCLE TURBINE	0		Low sulfur natural gas fuel	0		

RBLC Search Results - CO2

RBLCID	FACILITY NAME	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGHPUT	THROUGHPUT UNIT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	EMISSION LIMIT 1 AVG TIME CONDITION
TX-0939	ORANGE COUNTY ADVANCED POWER STATION	03/13/2023	Combined Cycle Turbines	1215	MW	good combustion practices and clean fuel	0		
TX-0939	ORANGE COUNTY ADVANCED POWER STATION	03/13/2023	TURBINE MSS	0		On-line turbine washing, turbine filter changeouts, catalyst handling, fuel venting, CEMS calibration, fugitive/small equipment maintenance Good air pollution control practices and safe operating practices.	0		
TX-0939	ORANGE COUNTY ADVANCED POWER STATION	03/13/2023	CIRCUIT BREAKER FUGITIVES	0		State-of-the-art circuit breakers that are gas-tight and require minimal SF6 are used. An AVO monitoring program is used to detect circuit breaker leaks.	0		
*TX-1005	FERMI AMERICA PROJECT MATADOR	02/25/2026	COMBINED CYCLE TURBINES	443	MMBTU/HR	CLEAN FUEL, GOOD COMBUSTION	0		
*TX-1007	NRG JEWETT ENERGY CENTER	01/15/2026	Combined Cycle & Cogeneration (>25 MW), Natural Gas (includes propane & liquified petroleum gas)	775	MMBTU/HR	Combined cycle operation and firing only pipeline quality natural gas and comply with 40 CFR 60 Subpart TTTTa limits as applicable.	0		

RBLC Search Results - Ammonia

RBLCID	FACILITY_NAME	PERMIT_ISSUANCE_DATE	PROCESS_NAME	THROUGHPUT	THROUGHPUT_UNIT	CONTROL_METHOD_DESCRIPTION	EMISSION_LIMIT_1	EMISSION_LIMIT_1_UNIT	EMISSION_LIMIT_1_AVG_TIME_CONDITION
NJ-0085	MIDDLESEX ENERGY CENTER LLC	07/19/2016	Combined Cycle Combustion Turbine	4000	h/yr	USE OF NATURAL GAS A CLEAN BURNING FUEL	27.4	LB/H	AV OF THREE ONE H
TX-0908	NEWMAN POWER STATION	08/27/2021	Simple Cycle Turbine	230	MW	Controlling ammonia injection	10	PPMVD	STACK TEST METHOD
*IN-0365	MAPLE CREEK ENERGY LLC	06/19/2023	Combined Cycle Turbine CTGB	4200	MMBtu per hour		5	PPMVD	
*IN-0365	MAPLE CREEK ENERGY LLC	06/19/2023	Combined Cycle Turbine CTGA	3800	MMBtu per hour		5	PPMVD	
MD-0045	MATTAWOMAN ENERGY CENTER	11/13/2015	2 COMBINED-CYCLE COMBUSTION TURBINES	286	MW	INITIAL STACK TEST USING EPA METHOD CTM-027 OR EQUIVALENT METHOD APPROVED BY MDE-ARMA	5	PPMVD @ 15% O2	AVERAGE OF 3 TEST RUNS (FOR STACK TEST)
NJ-0085	MIDDLESEX ENERGY CENTER LLC	07/19/2016	Combined Cycle Combustion Turbine	8040	H/YR	USE OF NATURAL GAS A CLEAN BURNING FUEL	5	PPMVD@15%O2	3 H ROLLING AV BASED
*PA-0319	RENAISSANCE ENERGY CENTER	08/27/2018	COMBUSTION TURBINE UNIT w/o DUCT BURNERS UNIT	2665.9	MMBtu/hr		5	PPMVD	ON ONE HOUR BLOCK AV
PA-0334	RENOVO ENERGY CENTER LLC/RENOVO PLT	04/29/2021	COMBUSTION TURBINE #2 (ULSD)	3940	MMBtu/Hr	selective catalytic reduction (SCR) system, oxidation catalyst.	5	PPMVD	@ 15% O2 / 1 HR
PA-0334	RENOVO ENERGY CENTER LLC/RENOVO PLT	04/29/2021	COMBUSTION TURBINE #1 (ULSD)	3940	MMBtu/Hr	SCR, Catalytic Oxidizer	5	PPMVD	@ 15% O2 / 1 HR
PA-0334	RENOVO ENERGY CENTER LLC/RENOVO PLT	04/29/2021	COMBUSTION TURBINE w DUCT BURNER #2 (Natural Gas)	4546	MMBtu/Hr	SCR, oxidation catalyst	5	PPMVD	@ 15% O2 / 1 HR
PA-0334	RENOVO ENERGY CENTER LLC/RENOVO PLT	04/29/2021	COMBUSTION TURBINE w DUCT BURNER #1 (Natural Gas)	4546	MMBtu/Hr	SCR, Catalytic Oxidizer	5	PPMVD	@ 15% O2 / 1 HR
CT-0157	CPV TOWANTIC, LLC	11/30/2015	Combined Cycle Power Plant	21200000	MMBtu/12 months		2	PPMVD @15% O2	
CT-0158	CPV TOWANTIC, LLC	11/30/2015	Combined Cycle Power Plant	21200000	MMBtu/yr		2	PPMVD @15% O2	1 HR BLOCK
CT-0161	KILLINGLY ENERGY CENTER	06/30/2017	Natural Gas w/o Duct Firing	2969	MMBtu/hr	Good Combustion, Optimization of SCR	2	PPMVD @15% O2	1 HR BLOCK
CT-0161	KILLINGLY ENERGY CENTER	06/30/2017	Natural Gas w/Duct Firing	2639	MMBtu/hr	Optimization of SCR	2	PPMVD @15% O2	1 HR BLOCK

APPENDIX E. AMBIENT AIR QUALITY ANALYSIS

Due to file size limitations, the Ambient Air Quality Analysis is submitted under separate cover.

Air Dispersion Modeling Report Montour CT Project LLC

Submitted to the Pennsylvania Department of Environmental Protection

Project number: 60756454

June 10, 2026

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1. Introduction

1.1 Project Overview

Montour CT Project LLC (“Montour CT”) is proposing to construct and operate a new electric generating station located in Derry Township, Montour County, Pennsylvania. Montour CT Project LLC is a separate entity from Montour LLC which operates the existing Montour Steam Electric Station (“Montour SES”). Montour SES currently operates under Pennsylvania Department of Environmental Protection (PADEP) Bureau of Air Quality Title V Operating Permit No. 47-00001, issued to Montour, LLC on April 23, 2025. Montour SES recently converted from coal-firing to natural gas firing. The Montour CT and Montour SES facilities will be aggregated for purposes of major source applicability determinations as the facilities are located on contiguous properties, will operate under the same SIC code (4911 – Electric Services), and are under common control through common ownership and shared staffing. Even though Montour CT and Montour SES are aggregated, a separate Title V air permit is requested for Montour CT. This application includes emissions from both Montour CT and Montour SES in applicability evaluations.

Montour CT is proposing to install and operate two new identical (~655 MW) combined cycle combustion turbine trains (herein labeled as the CCCT Project), each of which consists of a natural gas fired combined cycle combustion turbine (CCCT) with a generator and a heat recovery steam generator (HRSG) with a dedicated steam turbine generator. Each HRSG has natural gas duct burners, oxidation catalyst, and Selective Catalytic Reduction (SCR). Cooling for condensing the steam in the HRSGs will be done using air-cooled condensers to reduce water demand. Natural gas for the CCCT Project will be provided by the existing natural gas pipeline brought to the Montour SES property. The proposed turbines will be located within the existing facility property, which will allow for considerable utilization of existing site infrastructure including transmission connectivity. Montour CT is evaluating various models of CTs¹, but to be conservative and to submit the plan approval application, Montour has based all air emissions on the largest and most conservative emissions model, the GE 7HA.02 CT. If a different CT is selected, emissions and impacts will be less.

Montour SES is an existing major source under Title V and New Source Review (NSR). Thus, any new sources affecting air emissions at the site must be evaluated as aggregated sources in order to determine if Prevention of Significant Deterioration (PSD) or non-attainment New Source Review (NNSR) requirements are triggered. This project is defined as a major modification to an existing major stationary source and is subject to the NSR permitting program. A dispersion modeling protocol was submitted to PADEP on May 26, 2026 and was approved on May 28, 2026.

1.2 Purpose of Modeling Report

The purpose of this document is to present the methods and assumptions used to conduct air dispersion modeling and present the modeling results in support of the air permit application for the CCCT Project.

1.3 Document Organization

The modeling report consists of the following additional sections:

- **Section 2** contains the CCCT Project description, including information regarding project equipment, location, and the expected air emissions,
- **Section 3** is a discussion of applicable air regulations,

¹ Should the turbine model change after the application is submitted, a revised application and modeling analysis will be provided.

- **Section 4** presents a detailed description of the modeling approach used in evaluating air quality impacts of the proposed project, including model selection criteria, the good engineering practice stack height determination, refined modeling analyses, and ambient air quality compliance approaches,
- **Section 5** presents the results from the operating load and Class II area project-only modeling impacts,
- **Section 6** presents the results on the Class II area cumulative impacts,
- **Section 7** presents the results of Class I Area Quality Relative Values, Class I PSD Increments, Class II Visibility, Air Quality Review/Pre-Construction Monitoring, Soils and Vegetation, and Growth-related impacts, and
- **Section 8** contains References.

2. Proposed CCCT Project

2.1 CCCT Project Location

The CCCT Project is located in Montour County, approximately 2 kilometers (1.2 miles) northeast of the town of Washingtonville, Pennsylvania. **Figure 2-1** is an aerial map showing the location of the CCCT Project and **Figure 2-2** provides a closer view of the CCCT Project. **Figure 2-3** shows an overlay of a preliminary site layout of the proposed CCCT Project. The approximate size of the proposed CCCT Project footprint is shown in **Figure 2-3**.

2.2 CCCT Project Emission Sources

As stated in **Section 1**, Montour CT plans to install two (2) identical CCCTs. The CCCTs are proposed to be GE 7HA.02 units and are the primary sources of air emissions associated with the proposed CCCT Project. Air cooled condensers will be used in place of cooling towers. Montour CT anticipates using existing diesel generators and fire water pumps with no new ancillary sources of air emissions as part of the CCCT Project.

2.3 Source Data

2.3.1 Criteria Pollutant Emissions

The CCCT Project is located at an existing major stationary source. As such, the CCCT Project must be evaluated to determine whether it constitutes a major modification at a major stationary source. A major modification is defined as a physical change or change in the method of operation at a major source that results in a significant emissions increase and a significant net emissions increase of a regulated NSR pollutant that is greater than the PSD significant emission rate (SER).

As stated in **Section 1**, Montour SES has recently converted from coal to natural gas; therefore, Montour CT will use emission offsets associated with that project to net out of PSD review for sulfur dioxide (SO₂). As such, the CCCT Project will be subject to PSD requirements under the NSR program for emissions of carbon monoxide (CO), nitrogen oxides (NO_x), particulate matter (PM), PM with a diameter of 10 micrometers or less (PM₁₀), PM with a diameter of 2.5 micrometers or less (PM_{2.5}), volatile organic compounds (VOC), sulfuric acid mist (SAM, or H₂SO₄), and greenhouse gas (GHG). Since Pennsylvania is in the Ozone Transport Region (OTR), emissions of ozone precursors (i.e., NO_x and VOC), would be subject to Non-Attainment NSR (NAA-NSR) requirements and not PSD requirements. **Table 2-1** shows a comparison of the CCCT Project emission increases relative to the PSD SERs. **Table 2-2** shows a comparison of the applicable CCCT Project emission increases to the NAA-NSR thresholds. As indicated in **Table 2-1**, the CCCT Project is expected to be a major modification and subject to PSD review for CO, NO_x, PM₁₀, PM_{2.5}, H₂SO₄, and GHG. **Table 2-2** indicates the CCCT Project triggers NAA-NSR for VOC.

Table 2-1. Net Emission Increases Compared to PSD Significant Emission Rates

	PM ₁₀	PM _{2.5}	NO _x	CO	SO ₂	H ₂ SO ₄	Lead	CO _{2e}
Preliminary Net Emissions Increase (tons/yr)	212	212	293	271	-1,980	40	0.1	4,735,365
PSD Significance Emission Rate (tons/yr)	15	10	40	100	40	7	0.6	75,000
PSD Review Triggered?	Yes	Yes	Yes	Yes	No	Yes	No	Yes

Table 2-2. Net Emission Increases Compared to NAA-NSR Significance Emission Rate

	NO _x	VOC
Preliminary Net Emissions Increase (tons/yr)	293	80
NAA-NSR Significance Emission Rate (tons/yr)	100	50
NAA-NSR LAER Review Triggered?	Yes	Yes

2.3.2 Short Term Emission Rates

Table 2-3 lists the expected maximum hourly emission rates of criteria pollutants for type of turbine operation. The data shown below reflects the maximum hourly emissions for each individual turbine over a range of operating loads and ambient operating conditions.

Table 2-3. Maximum Hourly Emission Rates of Criteria Pollutants from Each CCCT for Modeling

Pollutant	Normal Operations Maximum Hourly Emission Rates (lb/hr) ^(1,2)	Start-up/Shutdown Maximum Hourly Emission Rates (lb/hr) ^(1,2,3)
PM ₁₀	24.1	12.2
PM _{2.5}	24.1	12.2
NO _x	33.2	171.4
CO	20.2	711.4

- (1) Hourly emission rates are based on vendor information. Pollutant emission rates shown represent maximum operation of a single unit over the proposed operating ranges and for all ambient temperatures.
- (2) Emission rates presented in this table are preliminary and are subject to change.
- (3) Cold Start-Up duration is 70 minutes, scaled lb/event emission rate by 60/70 for maximum hourly rate.

Figure 2-1. CCCT Project Location

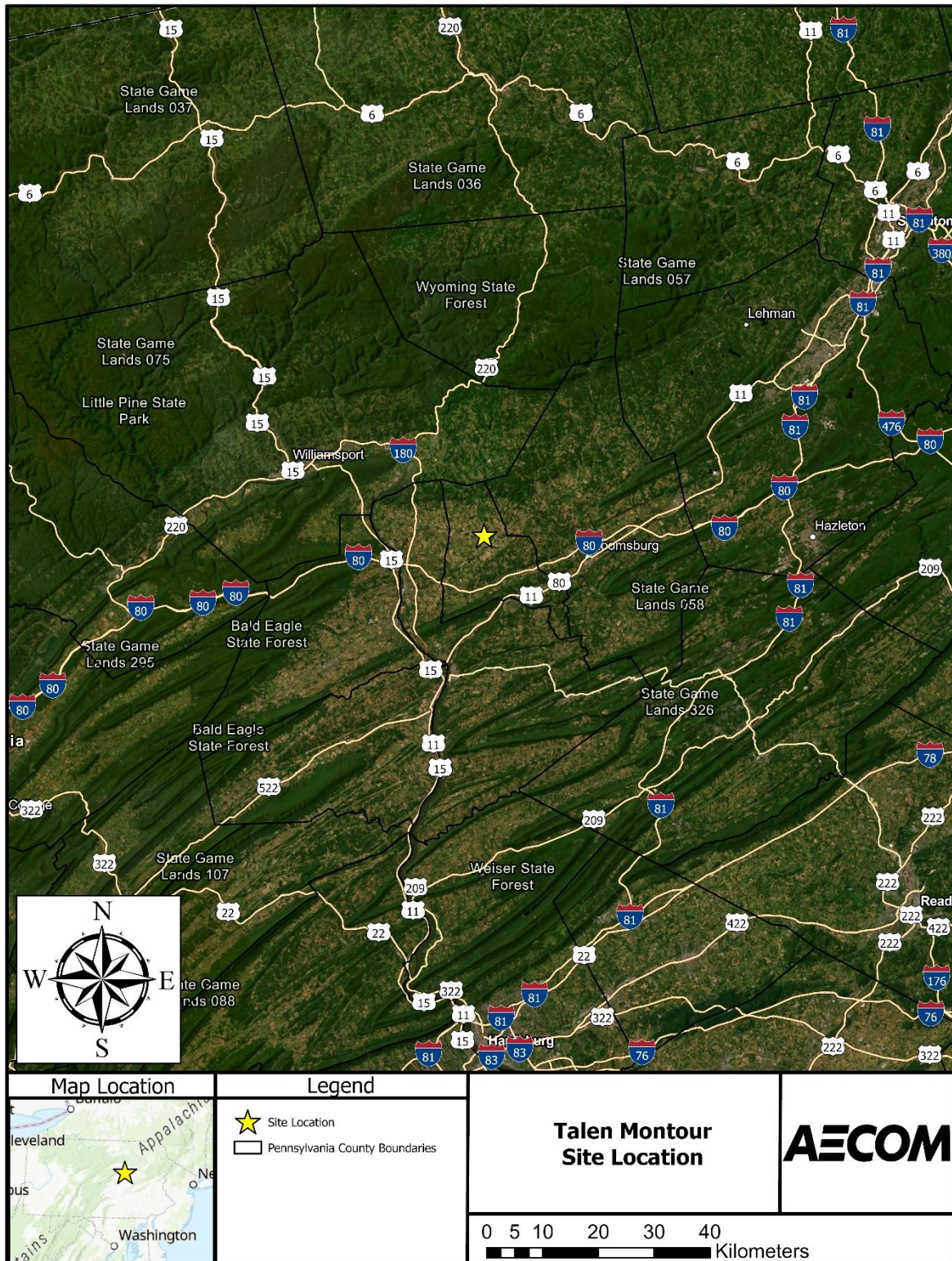
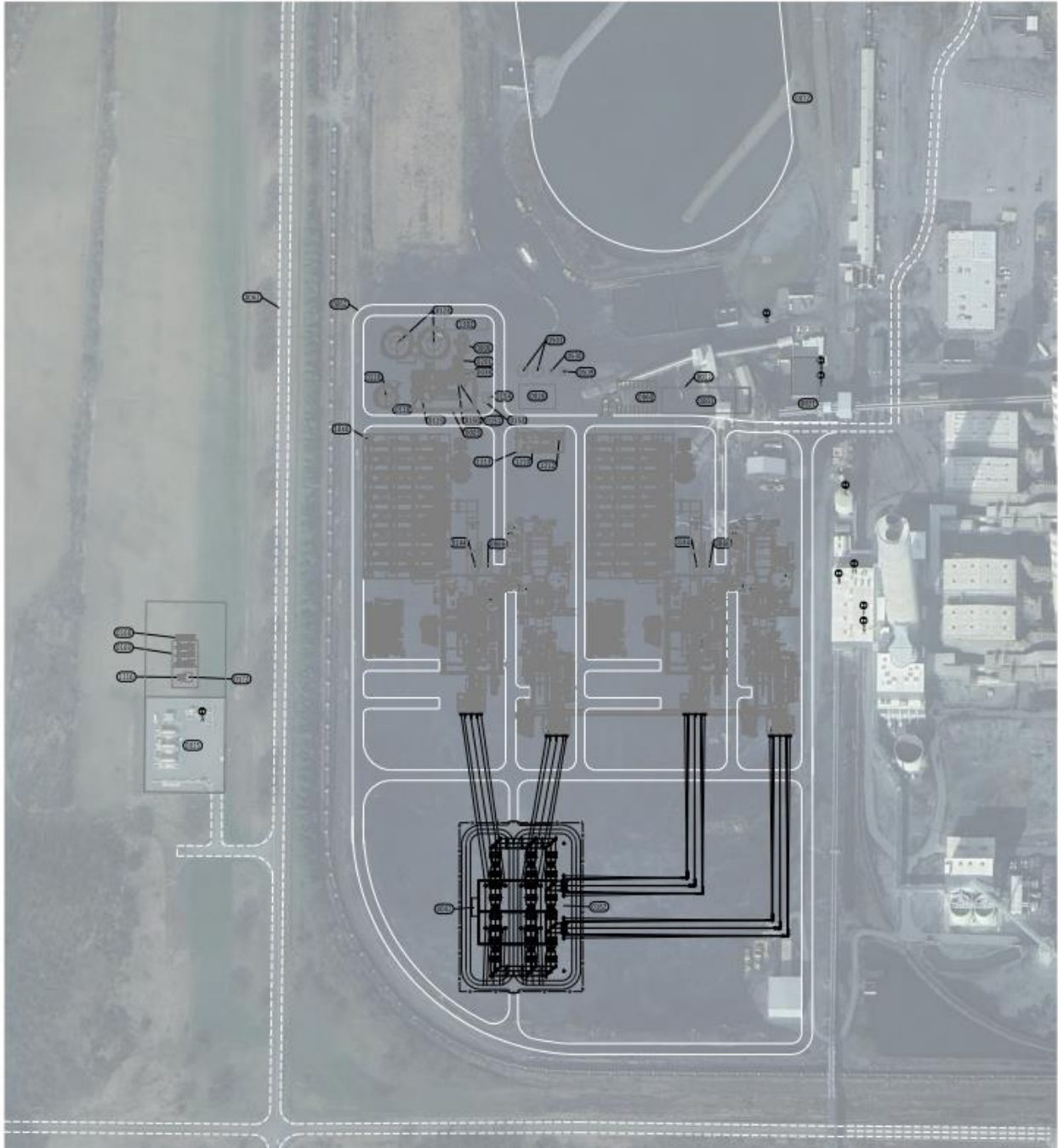


Figure 2-2. Aerial View of CCCT Project Site



Figure 2-3. CCCT Project Layout



3. Applicable Requirements

3.1 Federal Air Quality Standards

The Clean Air Act (CAA) of 1970 required the U.S. EPA to establish ambient concentration thresholds for certain compounds based upon the identifiable effects that the compounds may have on public health and welfare. Subsequently, the U.S. EPA promulgated regulations that set NAAQS for several criteria compounds applicable to this CCCT Project: particulate matter (PM₁₀ and PM_{2.5}), Nitrogen Dioxide (NO₂), and CO. Two classes of ambient air quality standards have been established: (1) primary standards defining levels of air quality that the U.S. EPA has judged as necessary to protect public health; and (2) secondary standards defining levels for protecting soils, vegetation, wildlife, and other aspects of public welfare. **Table 3-1** lists the currently applicable NAAQS for which the proposed CCCT Project is subject to PSD review. Pennsylvania has adopted all of the NAAQS.

Table 3-1. National Ambient Air Quality Standards (NAAQS)

Pollutant	Averaging Period	Primary Standard (µg/m ³)	Secondary Standard (µg/m ³)
PM ₁₀	24-hour ⁽¹⁾	150 µg/m ³	150 µg/m ³
PM _{2.5}	24-hour ⁽²⁾	35 µg/m ³	35 µg/m ³
	Annual ⁽³⁾	9 µg/m ³	15 µg/m ³
NO ₂	1-hour ⁽⁴⁾	100 ppb	--
	Annual ⁽⁵⁾	53 ppb	53ppb
CO	1-hour ⁽⁶⁾	35 ppm	--
	8-hour ⁽⁶⁾	9 ppm	--

1. Not to be exceeded more than once per year on average over 3 years.
2. Compliance with the 24-hour standard is demonstrated when the 3-year average (5-year average in a modeling demonstration) of the 98th-percentile (8th High) 24-hour concentration is below the standard.
3. Not to be exceeded by the arithmetic average of the annual arithmetic averages from 3 successive years.
4. Annual 98th percentile (8th High) of 1-hour daily maximum concentrations, averaged over 3 years.
5. Annual Mean.
6. Not to be exceeded more than once per year.

Source: U.S. EPA 40 CFR 50

Pursuant to the 1970 CAA, states were required to delineate air quality control regions (AQCRs) and to adopt State Implementation Plans (SIPs) to provide for attainment of the NAAQS as expeditiously as practical, within certain time limits. The 1977 Clean Air Act Amendments, in Section 107, required U.S. EPA and states to identify, by category, those AQCRs (or portions thereof) meeting and not meeting the NAAQS. Areas meeting the NAAQS are termed attainment areas, and areas not meeting the NAAQS are termed non-attainment areas. Areas that have insufficient data to make a determination of attainment/non-attainment status are unclassified or are not designated but are treated as being attainment areas for permitting purposes. The designation of an area is made on a pollutant-by-pollutant basis. **Table 3-2** lists the attainment status for Montour County for each NAAQS for which the CCCT Project is subject to PSD permitting.

Table 3-2. Attainment Status of Montour County, Pennsylvania

Compound	Attainment Status ⁽¹⁾
PM ₁₀	Unclassifiable/Attainment
PM _{2.5}	Unclassifiable/Attainment
NO ₂	Unclassifiable/Attainment
CO	Unclassifiable/Attainment

40 CFR §81.301 and U.S. EPA information available at <https://www.epa.gov/green-book>

(1) Pennsylvania is part of the Ozone Transport Region and thus will be subject to NAA-NSR for VOC.

3.2 Prevention of Significant Deterioration

The PSD regulations require that an owner or operator undertaking a major modification perform the following analyses for those pollutants triggering PSD:

- Analysis of existing air quality in the vicinity of the source;
- Application of best available control technology (BACT) to the modified or proposed source (not covered by this protocol);
- Assessment of air quality impacts resulting from pollutant emissions from the source relative to PSD Increments and NAAQS;
- PSD increment consumption, visibility, and air quality related values (AQRVs) impact analyses at PSD Class I areas (generally within 300 kilometers of the facility where the project is slated to take place);
- A Class II visibility analysis;
- Assessment of the effects of emitted pollutants on soils and vegetation in the source's impact areas; and
- Assessment of impacts associated with indirect economic growth.

The PSD regulations limit the amount that ambient air quality concentrations can be increased above existing ambient levels in attainment areas. These allowable increases in concentrations, called PSD increments, have only been established for PM₁₀, PM_{2.5}, SO₂ and annual NO₂.

U.S. EPA has defined concentrations, called significant impact levels (SILs), that are used to determine whether a major new source or modification causes or contributes to a violation of a NAAQS or exceedance of a PSD increment. U.S. EPA has also proposed SILs for PSD Class I areas (July 23, 1996, Federal Register, Section IV.C.4), but these have not yet been finalized. U.S. EPA recently updated the Class I and II SILs for PM_{2.5} (U.S. EPA, 2024b). As detailed in **Section 5**, if modeled concentrations exceed the SILs described in **Table 3-3** below, additional cumulative modeling is required using an inventory of major background sources to demonstrate compliance with the NAAQS and PSD increments. If modeled concentrations are less than or equal to the SILs, then no additional modeling is performed, as the project would be deemed not to cause or contribute to a violation of a NAAQS or exceedance of a PSD increment. **Table 3-3** lists the applicable PSD increments and SILs which the CCCT Project is subject to PSD permitting.

Table 3-3. PSD Increments and Significant Impact Levels

Pollutant	Averaging Period	PSD Increments ($\mu\text{g}/\text{m}^3$)		Significant Impact Levels ($\mu\text{g}/\text{m}^3$)	
		Class I	Class II	Class I	Class II
PM ₁₀	24-hour ⁽²⁾	8	30	0.3	5
	Annual ⁽¹⁾	4	17	0.2	1
PM _{2.5}	24-hour ⁽²⁾	2	9	0.27	1.2
	Annual ⁽¹⁾	1	4	0.03	0.13
NO ₂	1-hour	--	--	--	7.5
	Annual ⁽¹⁾	2.5	25	0.1	1
CO	1-hour ⁽²⁾	--	--	--	2000
	8-hour ⁽²⁾	--	--	--	500

1. Not to be exceeded (PSD Increment).

2. Not to be exceeded more than once per year (PSD Increment).

Source: U.S. EPA 40 CFR 50

4. Dispersion Modeling Methodology

4.1 Overview

This section presents the dispersion modeling methods and assumptions used to assess compliance with the applicable state and federal ambient air quality regulations and guidelines. The analysis was conducted in accordance with the U.S. EPA's Guideline on Air Quality Models (GAQM), which is contained in 40 CFR Part 51, Appendix W (U.S. EPA, 2024a).

The proposed CCCT Project is subject to PSD review for NO_x, CO, PM₁₀, PM_{2.5}, H₂SO₄, and GHG. The CCCT Project is also subject to NAA-NSR for NO_x and VOC as ozone precursors. Therefore, associated dispersion modeling analyses were conducted for CO, NO_x, PM₁₀ and PM_{2.5}. There are no modeling requirements for H₂SO₄, VOC (as NAA-NSR applies), and GHGs. The modeling analysis addresses impacts associated with secondary PM_{2.5} as described further in **Section 4.8**.

4.2 Modeling Source Approach and Configuration

The air dispersion modeling analysis was conducted with emission rates and flue gas exhaust characteristics (flow rate and temperature) expected to represent the worst-case parameters among the range of possible values considered for the proposed CCCT Project. Since emission rates and flue gas characteristics for a given operating load vary as a function of ambient temperature, data was derived for the following ambient temperatures and operating scenarios for each turbine:

GE 7HA.02

- 5 operating scenarios
 1. base load (~100 load) with duct burners (DB),
 2. base load (~100 load) no DB,
 3. intermediate load (~75% load),
 4. minimum emission compliance load (MECL, ~35-45% load)
 5. Startup and shutdown
- 7 ambient temperatures (105°F, 90°F, 70°F, 59°F, 52°F, 20°F, and -20°F)

A summary of the exhaust data and emission rates for each ambient temperature and operating scenario for each GE 7HA.02 is provided in **Table 4-1**. In order to conservatively calculate ground-level concentrations, a composite "worst-case" set of emission rates and exhaust parameters were used in the modeling for each turbine. For each turbine operating load, the highest pollutant-specific emission rate coupled with the lowest exhaust temperature and exhaust flow rate were selected. **Table 4-2** summarizes the worst-case emission parameters for the CCCTs. This data was used to perform a load analysis for the turbines to determine which load results in the highest ground-level concentrations. The results of the load analysis are summarized in **Section 5.1**. The worst-case load scenario for each pollutant and averaging period was used in subsequent SIL, NAAQS, and PSD increment modeling, as applicable. If base load operations are not the worst-case load, both the base load and worst-case load were included in the SIL and any subsequent cumulative modeling. The turbine load analysis also includes the assessment of startup and shutdown operations to the extent that those emissions and stack parameters are worst-case relative normal operations.

Table 4-1. GE 7HA.02 Stack Exhaust Parameters and Emission Rates

Load/Scenario ⁽¹⁾	Ambient Temp. (°F)	Stack Height (ft)	Stack Dia. (ft)	Exit Temp. (°F)	Exit Velocity (fps)	Maximum Hourly Emissions (lb/hr) ⁽²⁾			
						PM ₁₀	PM _{2.5}	NO _x	CO
Base Load 100% + DB	-20°F,	225	22	169.9	75.29	24.1	24.1	33.0	20.1
Base Load 100% + DB	20°F,	225	22	170.5	76.08	23.7	23.7	33.2	20.2
Base Load 100% + DB	52°F,	225	22	172.0	74.54	23.2	23.2	32.6	19.8
Base Load 100% + DB	59°F,	225	22	171.6	73.76	23.0	23.0	32.2	19.6
Base Load 100% + DB	70°F,	225	22	172.2	73.64	22.9	22.9	31.9	19.4
Base Load 100% + DB	70°F,	225	22	172.4	73.80	22.9	22.9	32.1	19.6
Base Load 100% + DB	90°F,	225	22	170.1	70.90	22.2	22.2	30.4	18.5
Base Load 100% + DB	90°F,	225	22	172.2	73.47	22.8	22.8	31.8	19.4
Base Load 100% + DB	105°F,	225	22	166.5	65.78	21.1	21.1	28.2	17.2
Base Load 100% + DB	105°F,	225	22	172.3	73.55	22.8	22.8	31.8	19.3
Base Load 100%	-20°F,	225	22	172.9	58.05	12.1	12.1	25.5	15.5
Base Load 100%	20°F,	225	22	171.8	75.29	12.2	12.2	25.9	15.8
Base Load 100%	52°F,	225	22	174.8	73.96	12.2	12.2	25.6	15.6
Base Load 100%	59°F,	225	22	174.6	73.21	12.1	12.1	25.3	15.4
Base Load 100%	70°F,	225	22	177.1	73.32	12.1	12.1	25.1	15.3
Base Load 100%	70°F,	225	22	177.2	73.45	12.1	12.1	25.3	15.4
Base Load 100%	90°F,	225	22	177.6	70.89	11.9	11.9	23.9	14.6
Base Load 100%	90°F,	225	22	179.6	73.42	12.1	12.1	25.0	15.2
Base Load 100%	105°F,	225	22	175.3	65.91	11.4	11.4	22.2	13.5
Base Load 100%	105°F,	225	22	180.4	73.59	12.1	12.1	25.0	15.2
Intermediate Load 75%	-20°F,	225	22	169.2	59.63	11.3	11.3	20.3	12.3
Intermediate Load 75%	20°F,	225	22	168.2	59.35	11.3	11.3	20.3	12.4
Intermediate Load 75%	52°F,	225	22	168.7	58.05	11.3	11.3	20.0	12.2
Intermediate Load 75%	59°F,	225	22	168.5	57.50	11.3	11.3	19.9	12.1
Intermediate Load 75%	70°F,	225	22	170.9	57.39	11.2	11.2	19.6	11.9
Intermediate Load 75%	90°F,	225	22	172.5	56.27	11.1	11.1	18.7	11.4
Intermediate Load 75%	105°F,	225	22	172.4	54.06	10.9	10.9	17.5	10.7
MECL 45%	-20°F,	225	22	163.8	44.91	10.4	10.4	14.7	8.9
MECL 30%	20°F,	225	22	162.8	38.37	9.9	9.9	11.6	7.0
MECL 30%	52°F,	225	22	162.3	37.74	9.9	9.9	11.3	6.9
MECL 30%	59°F,	225	22	162.6	37.50	9.9	9.9	11.2	6.8
MECL 30%	70°F,	225	22	164.9	37.44	9.9	9.9	11.0	6.7
MECL 30%	90°F,	225	22	166.7	37.34	9.8	9.8	10.7	6.5
MECL 30%	105°F,	225	22	167.3	38.22	9.8	9.8	11.0	6.7
Cold Start-Up ⁽³⁾	N/A	225	22	162.3	75.29	12.2	12.2	171.4	711.4

Note: Data are provided per CCCT unless otherwise noted and are preliminary and subject to change.

(1) Data presented are for multiple operating loads/conditions and several ambient temperatures.

(2) Hourly emissions reflect operation of a single GE 7HA.02 unit firing natural gas.

(3) Cold Start-Up duration is 70 minutes, scaled lb/event emission rate by 60/70 for maximum hourly rate

Table 4-2. GE 7HA.02 Composite Worst-Case Data⁽¹⁾ Modeling Inputs

Parameter					
Load (%)		Base Load (100%) + DB	Base Load (100%)	Intermediate Load (75%)	Cold-Start-Up ¹
Stack Height (ft)		225.0	225.0	225.0	225.0
Stack Diameter (ft)		22.0	22.0	22.0	22.0
Exit Temperature (°F)		166.5	171.8	168.2	162.3
Exit Velocity (ft/sec)		65.8	65.9	54.1	37.3
Pollutant Emissions Per Unit (lb/hr)	PM ₁₀	24.10	19.00	14.90	12.20
	PM _{2.5}	24.10	19.00	14.90	12.20
	NO _x	33.20	25.90	20.30	171.4
	CO	20.20	15.80	12.40	711.4

¹ The controlling scenario (i.e., lowest temperature and velocity) for MECL and cold-start-up are identical. Therefore, it is conservative to only evaluate cold-start-up as the emission rate would be higher.

4.3 Model Selection

The suitability of an air quality dispersion model for a particular application is dependent upon several factors. The following selection criteria were evaluated:

- stack height relative to nearby structures;
- dispersion environment;
- representative meteorological data; and
- local terrain.

The U.S. EPA GAQM prescribes a set of approved models for regulatory applications for a wide range of source types and dispersion environments. AERMOD is U.S. EPA's recommended refined dispersion model for simple and complex terrain for receptors within 50 kilometers (km) of a modeled source and is capable of handling the source geometry, terrain, and dispersion environment associated with this proposed CCCT Project. Representative meteorological data with suitable data capture for various meteorological parameters is needed to run AERMOD.

The latest version of AERMOD (version 24142) (U.S. EPA, 2024c) was used to assess air quality impacts for the proposed CCCT Project. AERMOD was used to assess air quality impacts of NO₂, CO, PM₁₀, and PM_{2.5} at receptors located within 50-km of the CCCT Project site. AERMOD was run with default model options in the CONTROL pathway and without using any urban source options as discussed in **Section 4.5**.

4.4 Building Downwash and GEP Height Analysis

U.S. EPA modeling guidelines require the evaluation of the potential for physical structures to affect the dispersion of emissions from stack emission points. The exhaust from stacks that are located within specified distances of buildings, and whose physical heights are below specified levels, may be subject to “aerodynamic building downwash” under certain meteorological conditions. If this is the case, a model capable of simulating this effect must be employed.

The analysis used to evaluate the potential for building downwash is referred to as a physical “Good Engineering Practice” (“GEP”) stack height analysis. Stacks with heights below physical GEP are considered to be subject to building downwash. In the absence of influencing structures, a “default” GEP stack height is creditable up to 65 meters (213

feet) per the *Guideline for Determination of Good Engineering Practice Stack Height* (U.S. EPA, 1985). Any portion of a stack above the maximum of the physical or default GEP height cannot be used in the dispersion modeling analysis for purposes of comparison to U.S. EPA's ambient impact criteria.

A GEP stack height analysis was performed for all point sources included in the modeling in accordance with U.S. EPA's guidelines (U.S. EPA, 1985). Per the guidelines, the physical GEP height ("H_{GEP}") is determined from the dimensions of all buildings that are within the region of influence using the following equation:

$$H_{GEP} = H + 1.5L$$

where:

H = height of the structure within 5L of the stack which maximizes H_{GEP}, and

L = lesser dimension (height or projected width) of the structure.

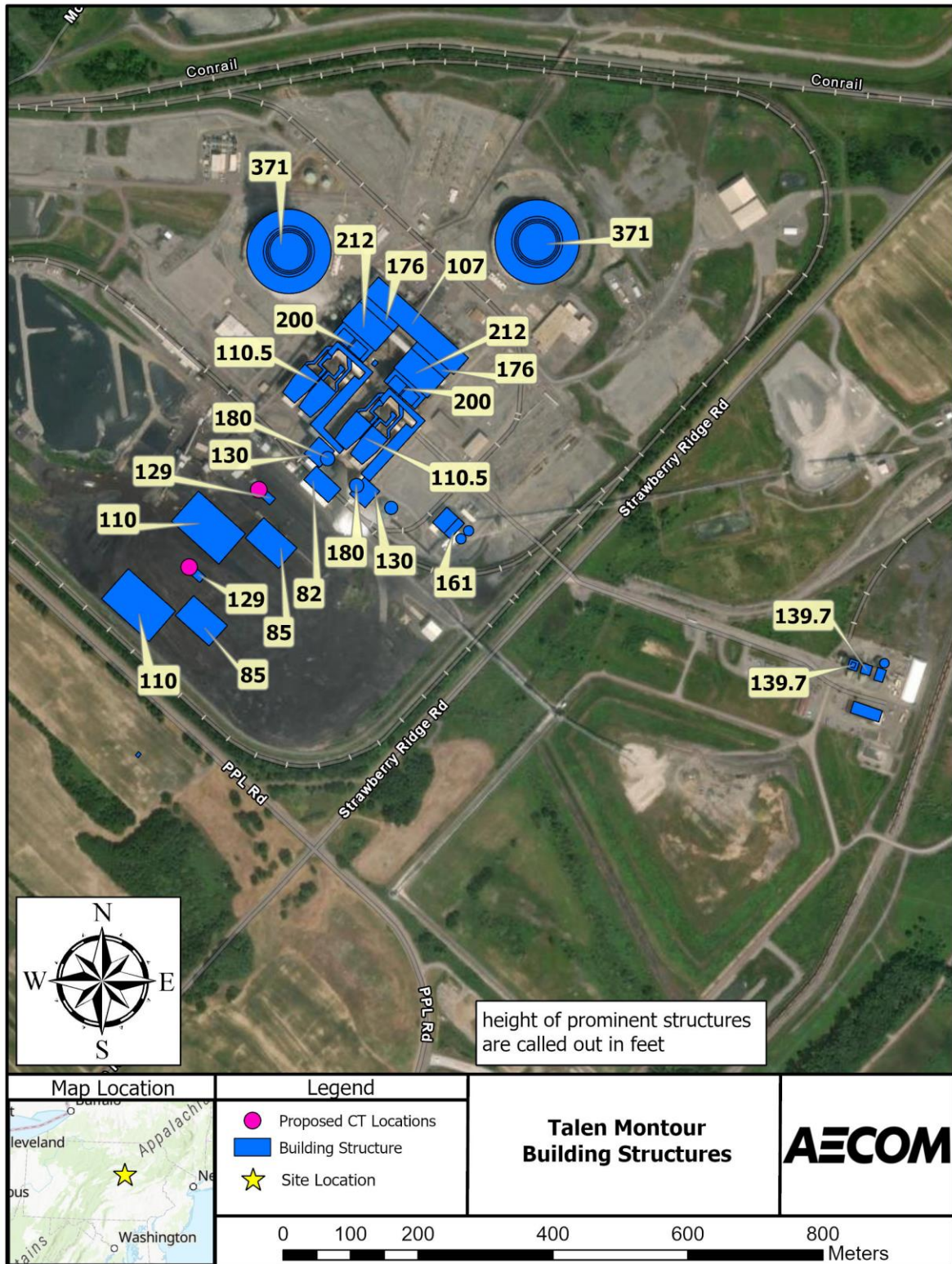
For a squat structure (*i.e.*, height less than projected width), the formula reduces to:

$$H_{GEP} = 2.5H$$

Both the height and width of the structure are determined from the frontal area of the structure projected onto a plane perpendicular to the direction of the wind. In all instances, the GEP stack height is based on the plane projections of any nearby building which result in the greatest justifiable height. For purposes of the GEP analysis, nearby refers to the "sphere of influence," defined as five times the height or width of the building, whichever is less, downwind from the trailing edge of the structure. Where a stack is not influenced by nearby structures, the maximum GEP stack height is limited to 65 meters (m).

The U.S. EPA's Building Profile Input Program (BPIP-Version 04274) version that is appropriate for use with PRIME algorithms in AERMOD was used to incorporate wind-direction-specific building dimensions for input to AERMOD. Building coordinates and stack locations were developed using site plan drawings, aerial photographs, and GIS software. All relevant building structures were included in the BPIP modeling for both new and existing stacks at the Plant, as applicable. All building structures included in the modeling are shown in **Figure 4-1**.

Figure 4-1. Building Structures Included in the Modeling



4.5 Dispersion Environment

4.5.1 Land Use Analysis

The application of AERMOD requires characterization of the local (within 3-km) dispersion environment as either urban or rural based on prevalent land use. According to U.S. EPA modeling guidelines (U.S. EPA, 2024a), if more than 50 percent of an area within a 3-km radius of the proposed CCCT Project is classified as rural, then a rural modeling application is required. Conversely, if more than 50% of the area is urban, an urban dispersion adjustment can be used.

Using the Auer method recommended by the U.S. EPA (U.S. EPA, 2024a), urban land use types are classified as categories I1, I2, C1, R2, and R3. **Table 4-3** describes these categories and maps them to reasonably equivalent United States Geological Survey (USGS) 2016 National Land Cover Database (NLCD) categories. While the Auer method and NLCD do not use the same terms to define their categories, the similarities between the five Auer categories and NLCD categories 23 and 24 are apparent. Thus, it is reasonable to classify NLCD categories 23 and 24 as urban land use. A visual comparison of the 2024 (the most recent version) NLCD land use types to recent aerial imagery from Google™ Earth indicates only insignificant changes to the land use within 3-km since 2024. **Figure 4-2** displays the 2024 NLCD data superimposed over aerial imagery within 3-km of the Plant.

The NLCD data were processed with U.S. EPA's AERSURFACE processor (version 24142) to determine the different land use types within 3-km of the CCCT Project sources. AERSURFACE is typically used to process NLCD data for input to AERMET, the AERMOD model's meteorological data processor. In this case, AERSURFACE output in the form of the pixel count for each of NLCD's land use types was used to determine the total pixel count of urban land use types within 3-km.

As noted above, urban land use types are assumed to be NLCD categories 23 and 24: "Developed, Medium Intensity" and "Developed, High Intensity", respectively. The pixel count for these categories was 7.21% of the total pixel count for all categories. Thus, the overwhelming majority (>90%) of the 3-km area around the CCCT Project can be classified as rural land use and AERMOD was not applied with any urban source options. **Table 4-4** provides the pixel counts as reported in the AERSURFACE output along with respective percentages.

Table 4-3. Comparison of Auer and NLCD Land Use Categories

Type	Auer Urban Land Use Categories ⁽¹⁾		USGS NLCD Categories ⁽²⁾	
	Use and Structure	Vegetation	Category	Description
R2	Dense single/multi-family	< 30%	23	<u>Developed, Medium Intensity</u> – Areas with a mixture of constructed materials and vegetation. Impervious surfaces account for 50% to 79% of the total cover. These areas most commonly include single-family housing units.
R3	Multi-family, two story	< 35%	24	<u>Developed, High Intensity</u> – Highly developed areas where people reside or work in high numbers. Examples include apartment complexes, row houses and commercial/industrial. Impervious surfaces account for 80% to 100% of the total cover.
I1	Heavy Industrial	< 5%		
I2	Light/moderate industrial	< 5%		
C1	Commercial	< 15%		

Notes:

⁽¹⁾ U.S. EPA, 2024a.

⁽²⁾ Multi-Resolution Land Characteristics Consortium (MRLC).

<https://www.mrlc.gov/data/legends/national-land-cover-database-class-legend-and-description>

Table 4-4. AERSURFACE Surface Roughness Output

USGS NLCD Category	Description	Pixel counts	Percent of Total Pixels
0	Missing, Out-of-Bounds, or Undetermined	0	0%
11	Open Water	167	0.53%
12	Perennial Ice/Snow	0	0%
21	Developed, Open Space	1492	4.75%
22	Developed, Low Intensity	2954	9.41%
23	Developed, Medium Intensity	1569	5.00%
24	Developed, High Intensity	701	2.23%
31	Barren Land (Rock/Sand/Clay)	7	0.02%
32	Unconsolidated Shore	0	0%
41	Deciduous Forest	3834	12.21%
42	Evergreen Forest	1	0%
43	Mixed Forest	63	0.20%
51	Dwarf Scrub	0	0%
52	Shrub/Scrub	126	0.40%
71	Grasslands/Herbaceous	11	0.04%
72	Sedge/Herbaceous	0	0%
73	Lichens	0	0%
74	Moss	0	0%
81	Pasture/Hay	3691	11.75%
82	Cultivated Crops	16279	51.84%
90	Woody Wetlands	484	1.54%
91	Palustrine Forested Wetland	0	0%
92	Palustrine Scrub/Shrub Wetland	0	0%
93	Estuarine Forested Wetland	0	0%
94	Estuarine Scrub/Shrub Wetland	0	0%
95	Emergent Herbaceous Wetland	23	0.07%
96	Palustrine Emergent Wetland	0	0%
97	Estuarine Emergent Wetland	0	0%
98	Palustrine Aquatic Bed	0	0%
99	Estuarine Aquatic Bed	0	0%
	Total	31402	100%
	Urban Total	2270	7.23%

Urban land use types are shown in red, bold text.

Source: AERSURFACE (U.S. EPA, 2024d)

4.5.2 Terrain

U.S. EPA's GAQM requires that the differences in terrain elevations between the stack base and model receptor locations be considered in the modeling analyses. There are three types of terrain:

- simple terrain – locations where the terrain elevation is at or below the exhaust height of the stacks to be modeled;
- intermediate terrain – locations where the terrain is between the top of the stack and the modeled exhaust “plume” centerline (this varies as a function of plume rise, which in turn, varies as a function of meteorological condition);
- complex terrain – locations where the terrain is above the plume centerline.

Figure 4-3 provides a topographic map of the area in the vicinity of the CCCT Project site. The area near Montour is characterized as consisting of all terrain types relative to the modeled stacks.

Figure 4-2. NLCD Land Use (2024)

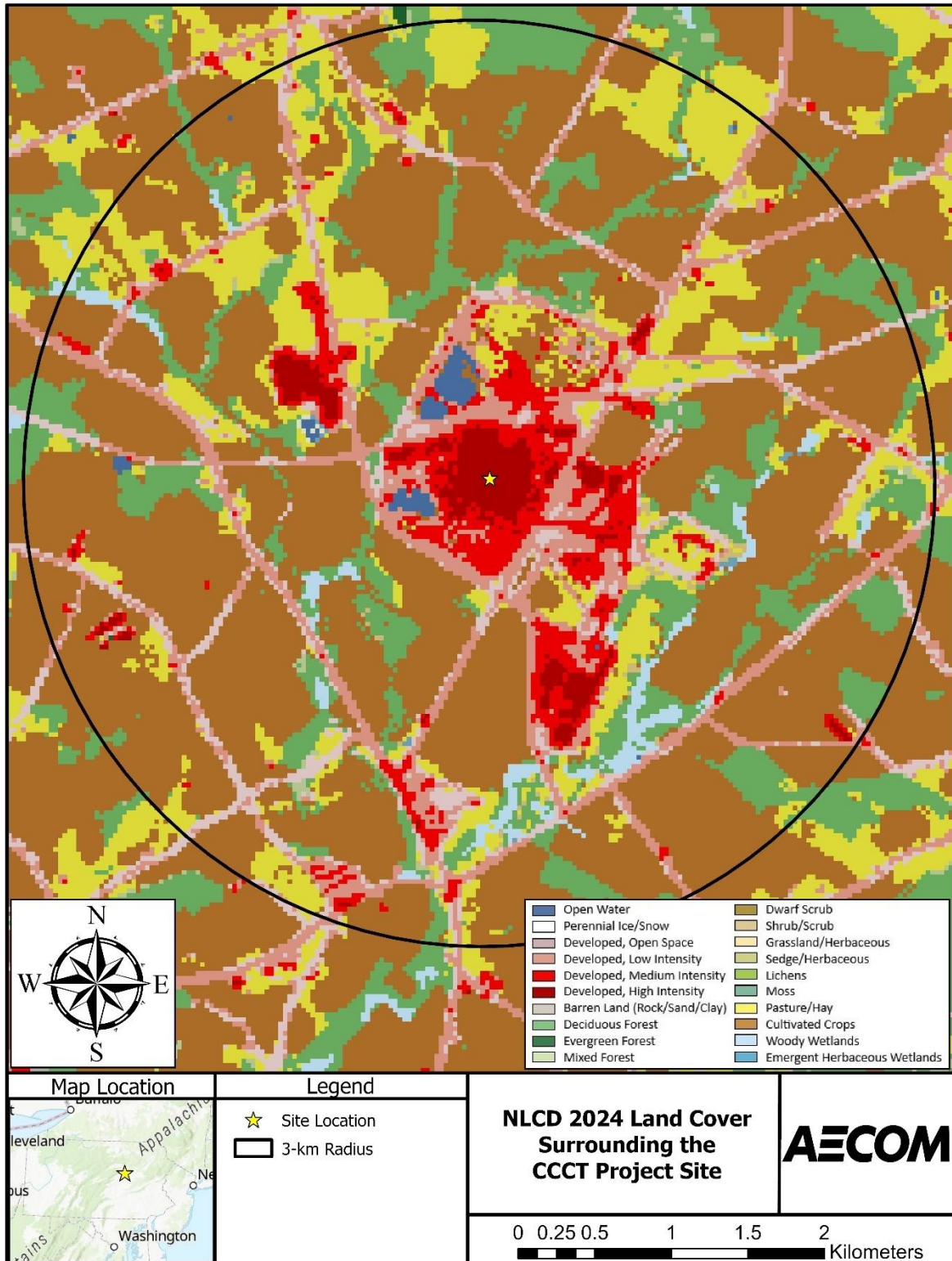
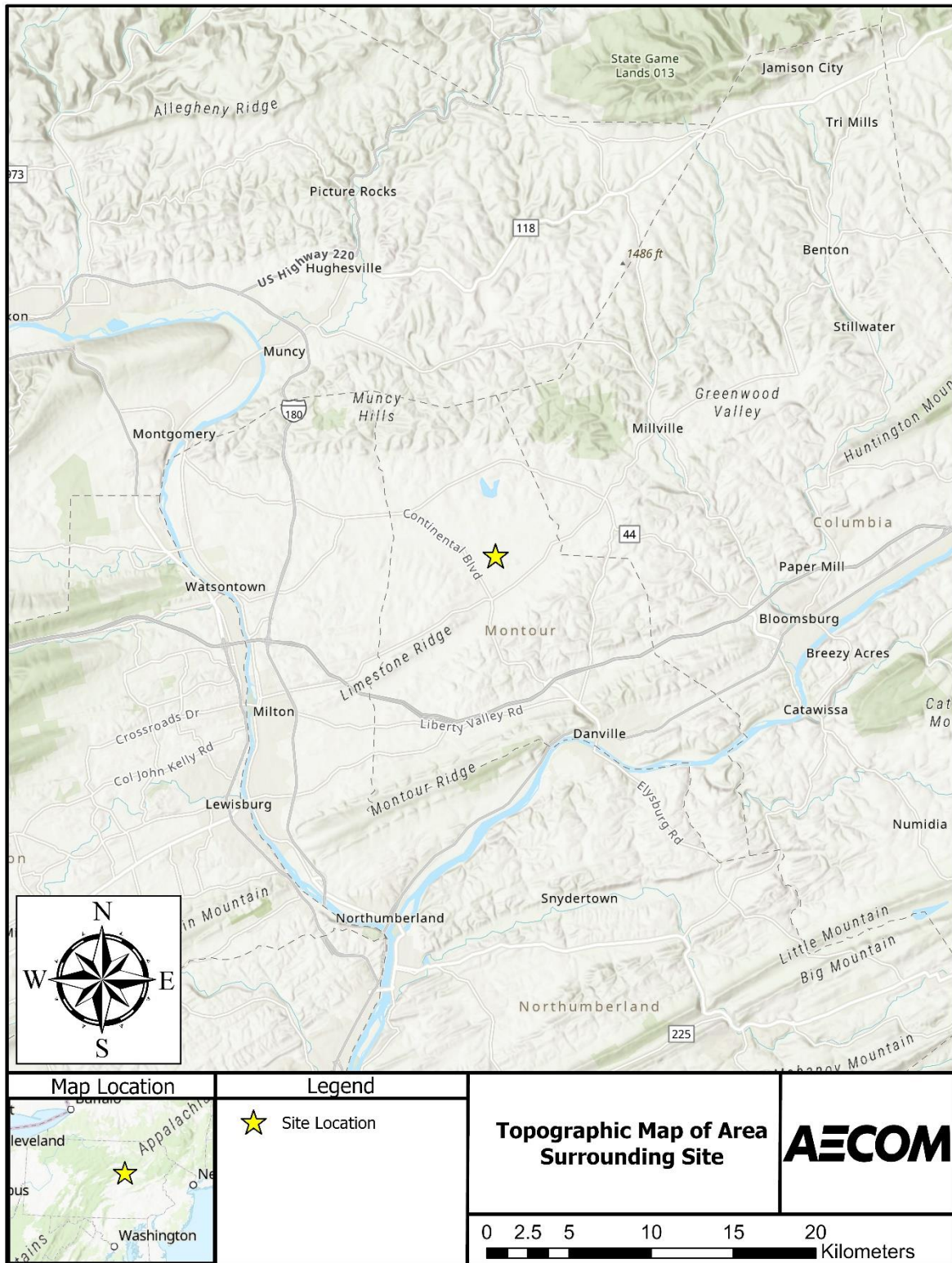


Figure 4-3. Topographic Map of CCCT Project Area



4.6 Meteorological Data

Montour CT used five years (2020–2024) of near-surface meteorological data from the Selinsgrove Penn Valley Airport (Selinsgrove Airport) along with upper-level data from Pittsburgh International Airport for this modeling demonstration. The meteorological data from Selinsgrove Airport was processed using AERMET version 24142 and regulatory default options. The PROFBASE keyword in AERMOD, representing the base elevation of the surface dataset was set to 135.3 meters (NCEI, 2025). This is consistent with historical modeling conducted by PADEP and U.S. EPA using the Selinsgrove Airport meteorological station.

4.6.1 Review of Available Meteorological Data

Previous U.S. EPA-accepted air dispersion modeling (U.S. EPA, 2017) used meteorological data from the National Weather Service’s Automated Surface Observing Station (ASOS) at the Penn Valley/Selinsgrove Airport (Selinsgrove). As part of this acceptance, U.S. EPA concluded that the most representative meteorological site is Selinsgrove (paired with upper-air data from Pittsburgh) for dispersion modeling at Montour. Selinsgrove is located approximately 32-km southwest of the CCCT Project and is the closest meteorological site. A search of other available meteorological stations, within 100-km of the Montour, was conducted to determine if Selinsgrove would still be the most representative for this dispersion modeling demonstration. This search found two additional ASOS sites; (1) the Williamsport Regional Airport (Williamsport) located approximately 28-km northwest of Montour and (2) the Wilkes-Barre Scranton International Airport (Wilkes-Barre) located approximately 85-km northeast of Montour. **Figure 4-4** shows the relative location of the meteorological stations relative to the CCCT Project.

Five-years of recent (2020 – 2024) meteorological data is available from all three (3) ASOS sites. **Figure 4-5(a-c)** show the wind roses during this 5-year period for Selinsgrove (a), Wilkes-Barre (b), and Williamsport (c). All three (3) sites yield rather different wind patterns. Both Wilkes-Barre and Williamsport are located in valleys relative to surrounding terrain. The Wilkes-Barre valley has a mostly southwest to northeast orientation. The predominant flow at Wilkes-Barre is from the southwest (**Figure 4-5(a)**), which aligns well with the orientation of the terrain. The Williamsport valley orientation is primarily west to east with a significant elevated terrain feature to its immediate south. This west-to-east orientation is very prominent in the wind rose (**Figure 4-5(c)**). The Selinsgrove wind rose (**Figure 4-5(a)**) has a predominant flow from the south and a secondary flow from the northwest. The terrain surrounding Selinsgrove is generally flat with rolling hills. These same terrain features near Selinsgrove are similar to the terrain features surrounding Montour.

In 1989, Montour SES installed and operated an onsite 10-m tower with a SOnic Detection and Ranging (SODAR) that was located along the northern edge of the property boundary. This meteorological dataset serves as another data-point by comparing the winds from the onsite tower to the nearby meteorological stations. Quarterly data capture from the onsite tower and SODAR dataset is summarized in **Figure 4-5** from January 1, 1990 through December 31, 1990. Quarter 3 was the only quarter below 94% data capture as there were two separate multi-day outages that occurred in that quarter.

Table 4-5. Data Capture by Quarter and Tower/SODAR for 1990

Quarter	Months	% Data Capture ¹
1	January – March	99.72%
2	April – June	94.64%
3	July – September ²	60.73%
4	October – December	99.05%

¹ Data capture from AERMOD output.

² Multi-day outages in August and September.

Winds at 10-m from the 1990 onsite data were oriented west-to-east, as shown in **Figure 4-6**. This suggests the onsite Montour tower would be more in agreement with Williamsport. In PADEP’s comments to the SO₂ Data Requirements Rule (DRR) Draft Modeling Protocol submitted by Talen Energy on April 15, 2016, PADEP noted that, while the

Williamsport Regional Airport matches closely with the 10-meter onsite tower data recorded in 1990, it does not match at the 210-meter SODAR level, a level corresponding to the Montour SES stack height. PADEP also noted that the Selinsgrove data “illustrated a high frequency of light winds” (average wind speed of 2.35 m/s and 1.61% calm winds); however, the 10-meter onsite tower also has a high frequency of light winds (average wind speed of 2.12 m/s and over 1.95% calm winds). Given these differences and the ability to analyze higher level wind patterns with the available onsite SODAR data, an analysis at plume height was warranted and is discussed on **Section 4.6.2**.

4.6.2 Wind Profiles at Plume Height

A key component of evaluating the representativeness of the meteorological data is the winds at plume height. The U.S. EPA's SCREEN3 screening model (version 13043) (U.S. EPA, 2013) was used to estimate the plume rise and ultimately final plume height of the CCCT Project sources. An initial run of SCREEN3 was conducted for the CCCT Project sources using the “full meteorological” option to initially identify the conditions that would produce the highest model concentrations. For this run, the final plume height was 1,203 meters above ground level. The meteorological conditions producing these results were wind speeds around one (1) m/s which would be typical of a low wind (< 2 m/s) condition and likely maximize the potential plume height. As a result, a second SCREEN3 run was performed to evaluate a more average wind speed of 3 m/s under neutral stability conditions. As anticipated, the 3 m/s SCREEN3 run produced a lower plume height compared to the low wind condition, with a max height of 393 meters. When comparing the base elevations of Selinsgrove (136 meters) and Montour (163 meters), there is a 27-m difference in elevation. The closest SODAR data level to the plume height obtained from the SCREEN3 run is at 390-m. To extract the plume height wind profile from the Selinsgrove meteorological data, AERMOD was run with the meteorological debug option (DEBUGOPT METEOR). This generated model-estimated vertical wind profiles based on the 10-m Selinsgrove station. Accounting for the slight difference in elevation between Montour and Selinsgrove of only 27-m, the closest upper-level wind height from AERMOD was 400-m. The data capture for wind speed and direction decreases as the height of the onsite SODAR measurement increases as noted in **Table 4-6**, below.

Table 4-6. Data Capture by Quarter and Tower/SODAR by Level for 1990

SODAR Height (m)	Q1	Q2	Q3	Q4	Annual
10	78.1%	79.3%	59.9%	70.1%	71.8%
90	97.8%	97.0%	97.3%	97.0%	97.3%
100	92.8%	95.8%	92.7%	93.9%	93.8%
120	97.6%	97.0%	97.4%	97.0%	97.2%
150	97.0%	96.5%	96.7%	96.5%	96.7%
180	96.5%	96.2%	96.1%	95.0%	95.9%
210	95.6%	95.7%	95.9%	94.0%	95.3%
240	94.1%	95.1%	95.6%	92.4%	94.3%
270	91.6%	94.0%	94.5%	89.7%	92.5%
300	85.5%	90.6%	88.9%	84.1%	87.3%
330	79.8%	86.7%	86.2%	77.5%	82.6%
360	73.0%	83.2%	82.3%	68.7%	76.8%
390	66.1%	78.8%	78.2%	59.1%	70.6%
420	58.2%	74.6%	73.8%	51.2%	64.5%
450	51.5%	68.6%	68.5%	42.8%	57.9%
480	44.2%	62.6%	62.4%	34.6%	51.0%
510	36.8%	57.3%	55.3%	28.0%	44.3%
540	30.3%	51.5%	48.2%	21.7%	37.9%
570	24.0%	45.0%	42.9%	17.2%	32.3%
600	22.0%	43.1%	40.8%	16.0%	30.5%

Table 4-7 further illustrates the drop in data capture, on an annual basis, from the onsite SODAR with the 360-meter level dropping below 80%. As a result, a wind rose comparison was conducted for select levels, including those below the 400-meter plume height from the SCREEN3 run (“intermediate plume heights”). Wind roses from the 1990 tower at intermediate plume heights of 270 and 330-meter levels (**Figure 4-8(a,c)**), and the Selinsgrove 300 and 350-meter effective wind rose based on AERMOD’s profiling calculations (**Figure 4-8(b,d)**) are shown below. The Selinsgrove 300-m and 350-m wind roses pick up on a similar southerly flow pattern as seen in the 270-m and 330-m onsite wind roses. The predominant flow from Selinsgrove at these levels is from the west-northwest rather than westerly in the onsite wind rose, but it is generally in good agreement with direction.

The wind rose from the SCREEN3 calculated plume heights for the onsite SODAR, Selinsgrove, and Williamsport, respectively, are shown in **Figure 4-9**. The Selinsgrove wind rose is reasonably representative of the SODAR wind rose, with winds favored from the west or west-northwest and south for both meteorological data sets. The Williamsport wind rose continues to favor winds from the east and west due to the prominent terrain feature to the south. The wind speeds from Selinsgrove are generally lower compared to the onsite data at the wind rose levels analyzed, which would in turn lead to less dispersion and a more conservative modeled concentration. Based on this supplemental analysis at plume height, Selinsgrove is the most representative for air dispersion modeling of the CCCT Project sources.

4.6.3 Comparison of Surface Characteristics

Key data inputs to the processing of meteorological data for dispersion models include surface roughness, albedo, and Bowen ratio. According to Section 3.1.1 of AERMOD’s Implementation Guide, the determination of representativeness should include a comparison of these key surface data inputs (U.S. EPA, 2024f). U.S. EPA has developed a tool, AERSURFACE, that can estimate these parameters for a given location based upon digitized land cover data and corresponding lookup tables. AERSURFACE User’s Guide recommends a default radial distance of 1-km from the meteorological station or source location to evaluate surface roughness. Albedo and Bowen ratio are assessed within a 10-km by 10-km distance. **Figure 4-10** and **Figure 4-11** illustrate the albedo and Bowen ratios for Selinsgrove and Montour, respectively, for calendar year 2023. For both parameters, the values are nearly identical between Selinsgrove and Montour.

It is well documented (Karvounis et al., 2007; Faulkner et al., 2008) that dispersion models are typically most sensitive to changes in surface roughness compared to albedo or Bowen ratios. Surface roughness was computed using the AERSURFACE tool and NLCD available from the USGS. NLCD files are released on an annual basis. At the time of this analysis, the calendar year 2023 is the most recent year with land cover, canopy, and impervious files. The comparison of the two sites for surface roughness was performed using these files.

Figure 4-12 through **Figure 4-15** illustrates the differences of surface roughness by season between Selinsgrove and Montour at intervals of 10-degree bins and for each season (winter, spring, summer, and fall). In general, surface roughness within 1-km of Montour is slightly higher than Selinsgrove Airport. This is attributed to a higher percentage of developed land cover pixels (56% for Montour compared to 36% at Selinsgrove Airport). Aerial images for both Selinsgrove Airport and Montour are shown in **Figure 4-16** and **Figure 4-17**, respectively. Based on visual inspection of aerial imagery of Montour (**Figure 4-16**), the amount of developed land is likely overstated, especially where the former coal piles resided and should instead be classified as barren land (a lower surface roughness category). Even so, the lower surface roughness at Selinsgrove compared to Montour would yield conservative dispersion parameters as less mixing would occur. Where surface roughness values deviate the most between the two sites are for winds between 80 degrees and 140 degrees. However, as illustrated by the wind rose (**Figure 4-5(a)**), the frequency of winds from that direction are relatively infrequent. Therefore, the surface conditions at Selinsgrove would be representative (and on the conservative side) for modeling of Montour.

Figure 4-4. Map of Candidate Meteorological Sites

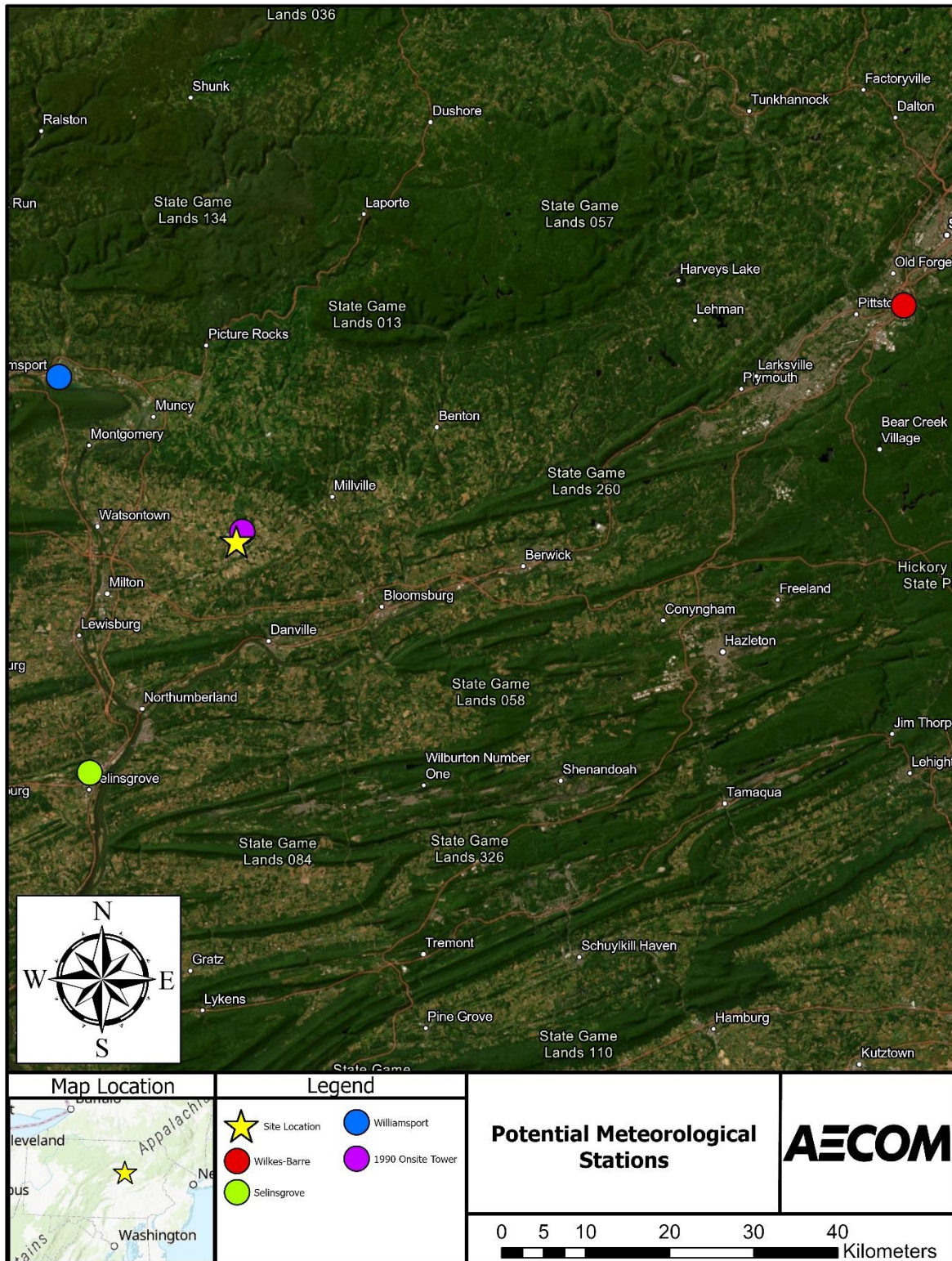
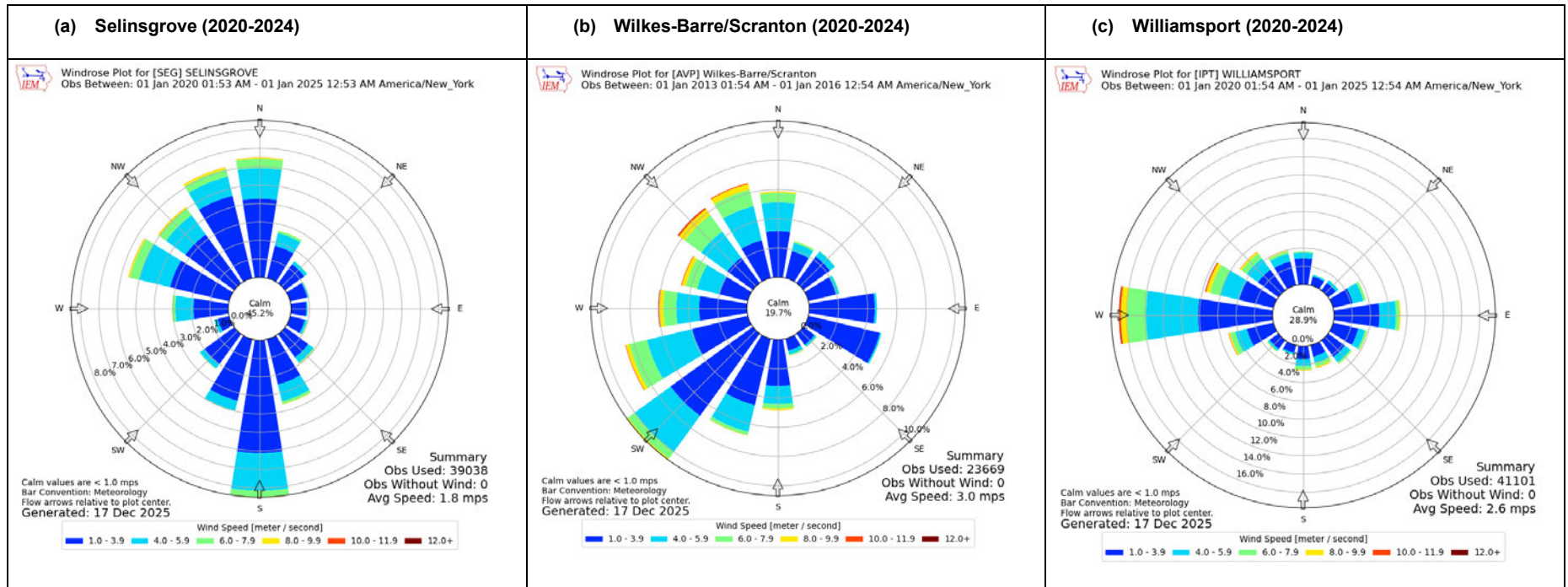


Figure 4-5. Nearby Meteorological Station 10-meter Wind Roses (2020-2024)



Source: <https://www.mesonet.agron.iastate.edu/sites/locate.php>

Figure 4-6. 10-meter Onsite Tower Wind Rose (1990)

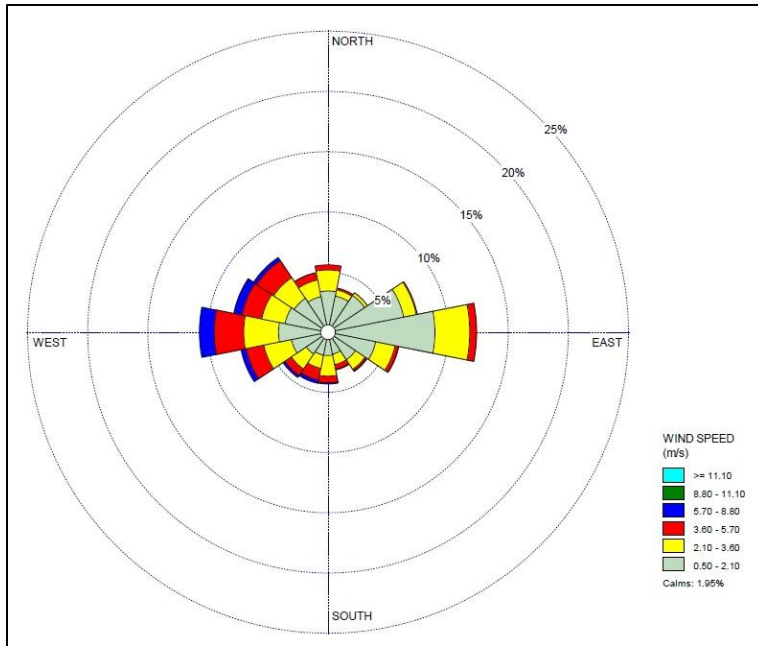


Figure 4-7. Bar Chart of Onsite SODAR Data Capture

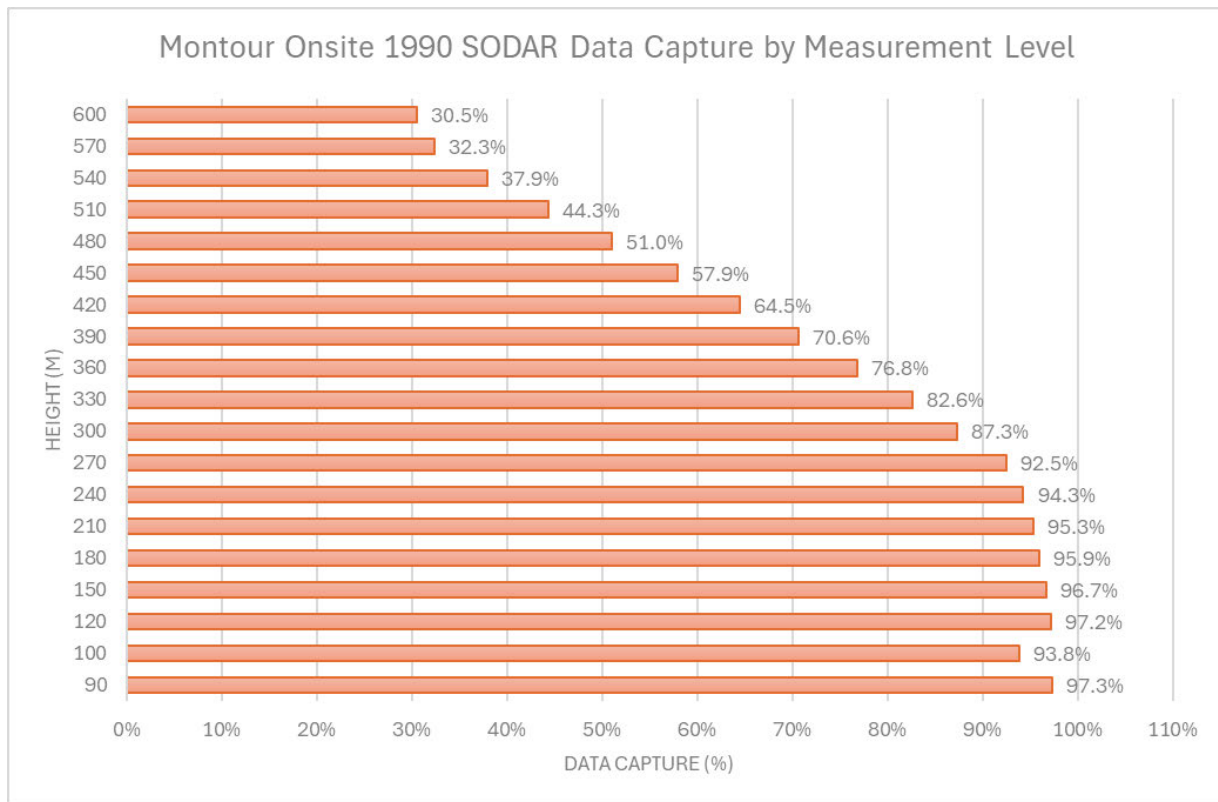


Figure 4-8. Wind Roses at Intermediate Plume Height of CCCT Project Sources

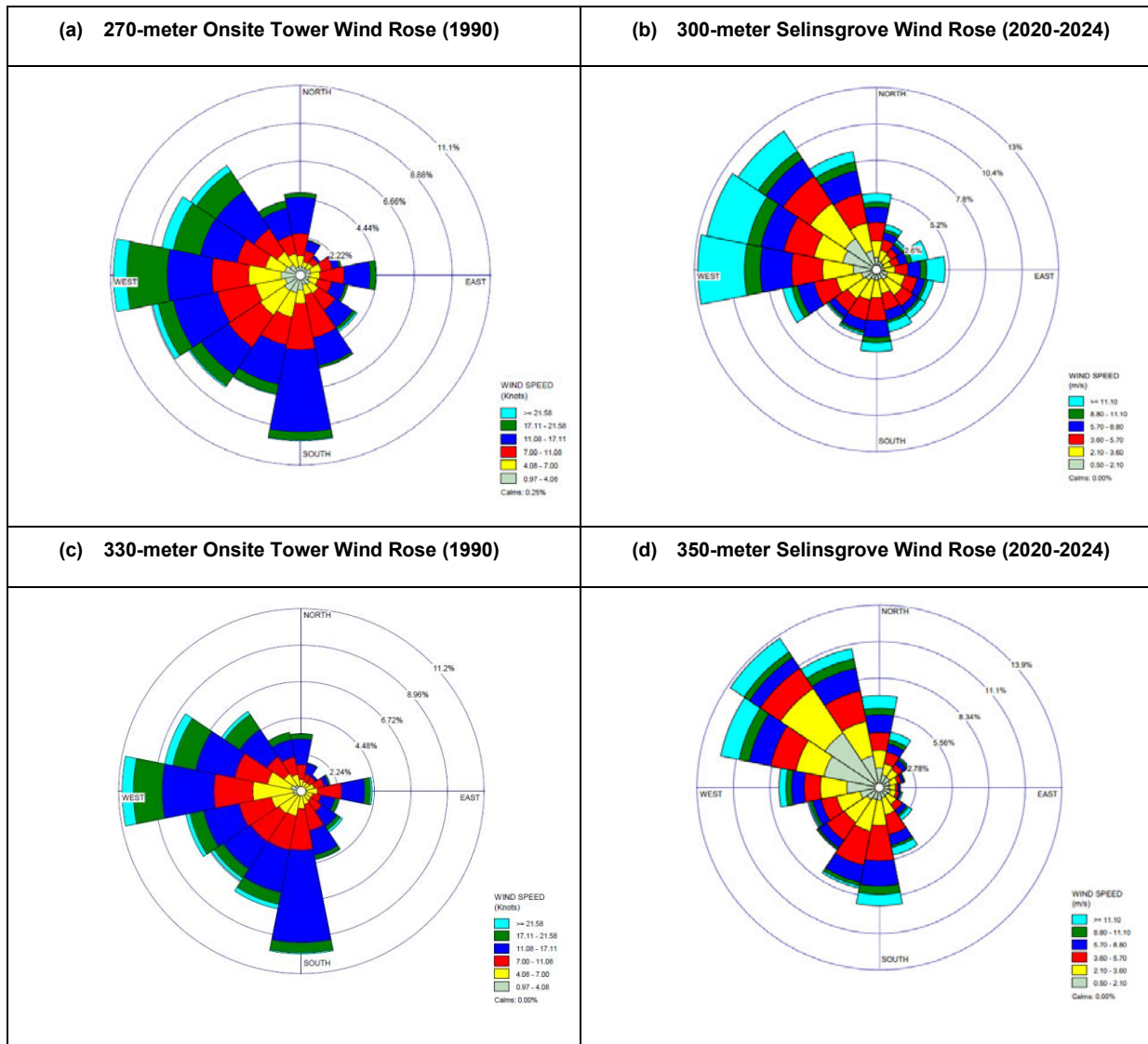


Figure 4-9. Wind Roses at Plume Height of CCCT Project Sources

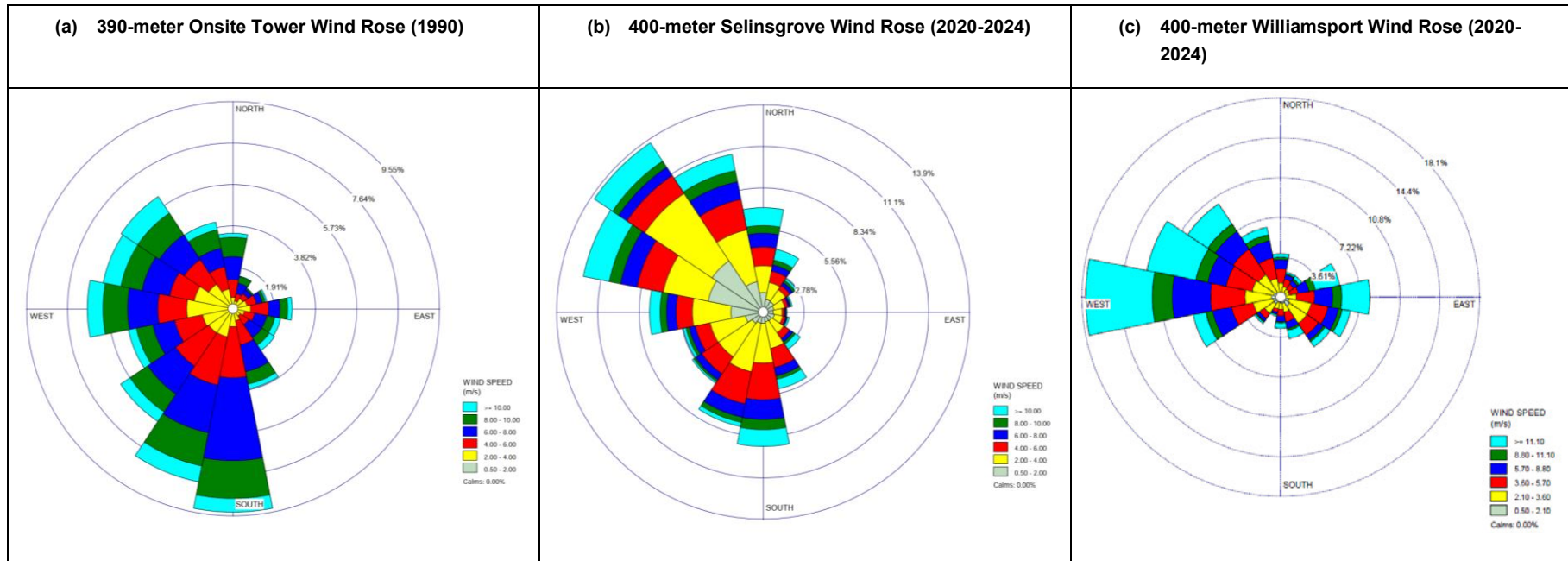


Figure 4-10. Albedo Comparison at Selinsgrove Airport (KSEG) and Montour 2023

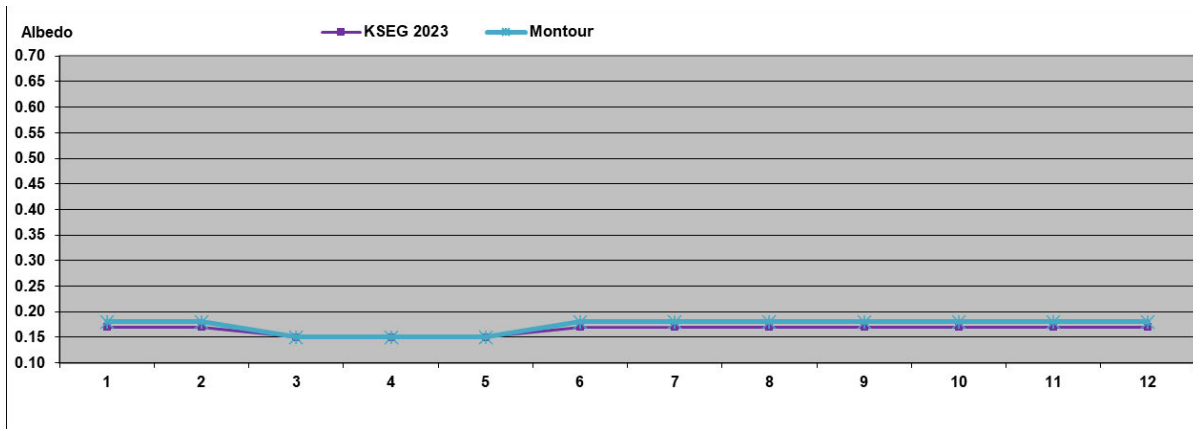


Figure 4-11. Bowen Ratio Comparison at Selinsgrove Airport (KSEG) and Montour 2023

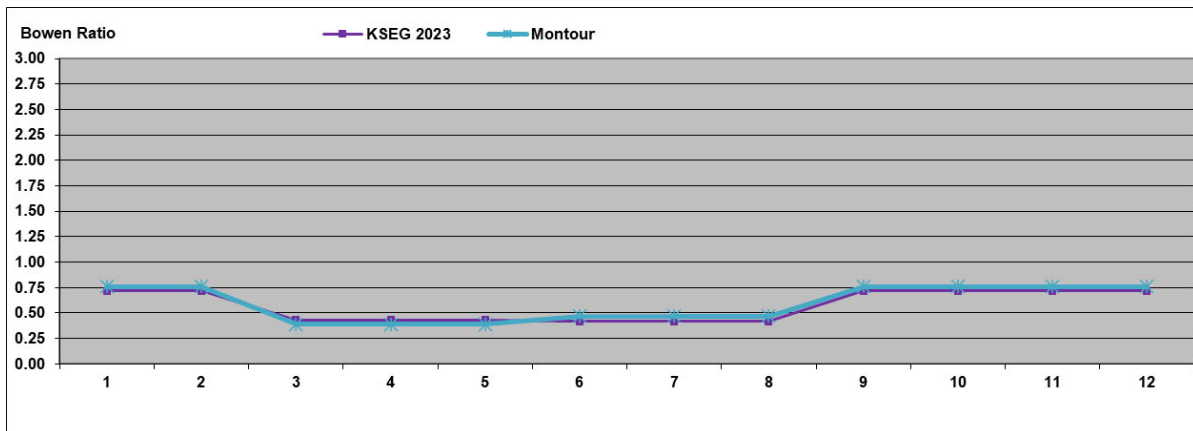


Figure 4-12. Surface Roughness Comparison at Selinsgrove Airport (KSEG) and Montour (Winter 2023)

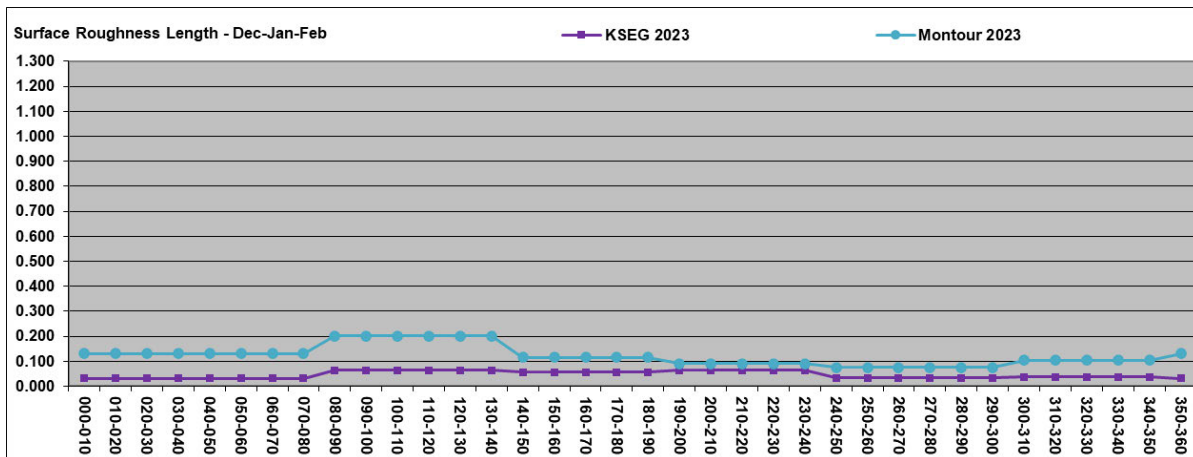


Figure 4-13. Surface Roughness Comparison at Selinsgrove Airport (KSEG) and Montour (Spring 2023)

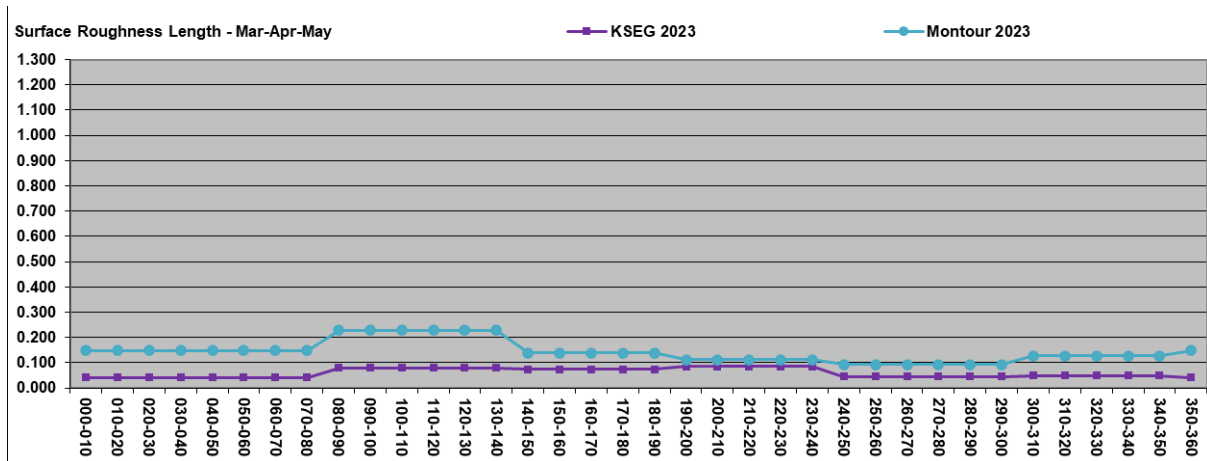


Figure 4-14. Surface Roughness Comparison at Selinsgrove Airport (KSEG) and Montour (Summer 2023)

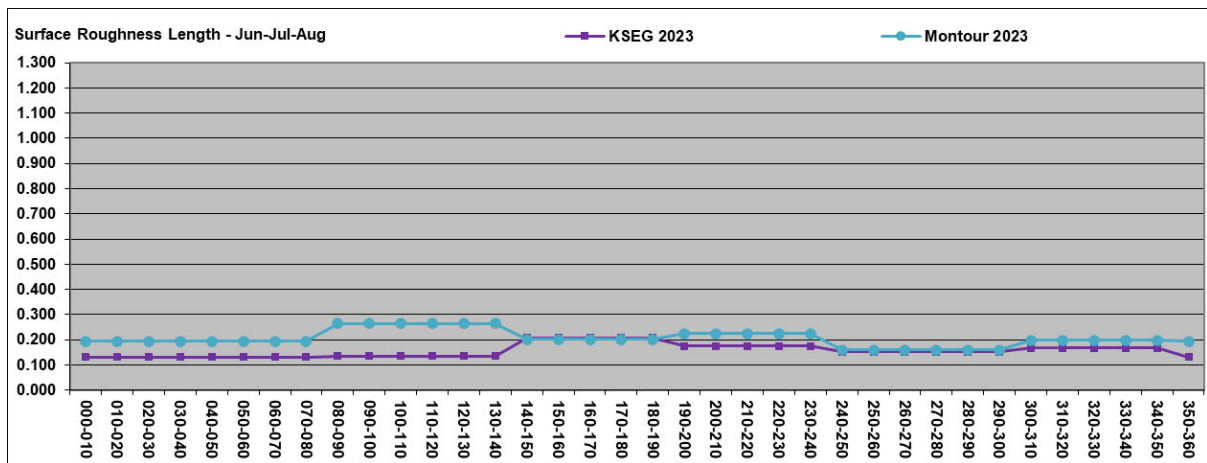


Figure 4-15. Surface Roughness Comparison at Selinsgrove Airport (KSEG) and Montour (Fall 2023)

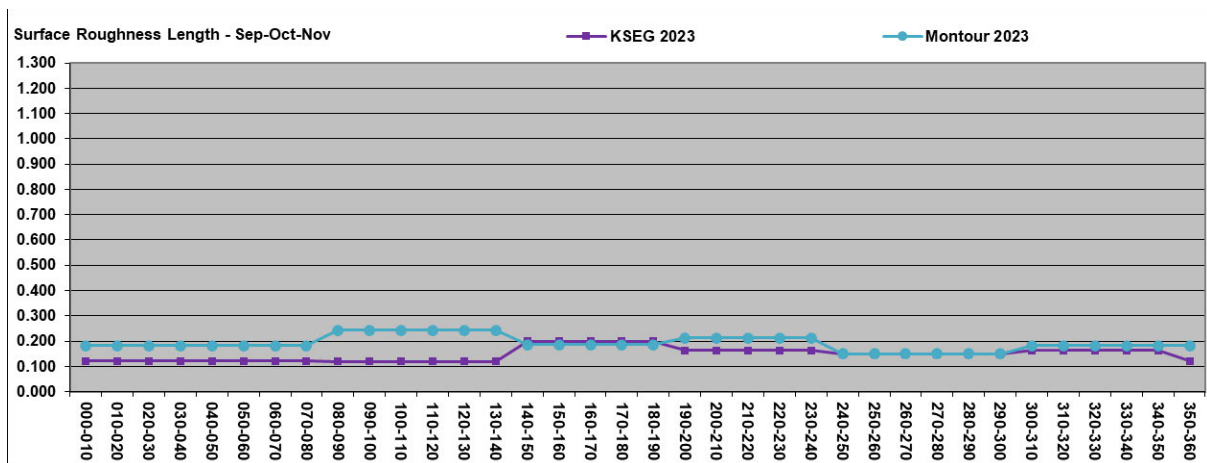


Figure 4-16. Aerial Image of Selingsgrove Airport



Figure 4-17. Aerial Image of Montour



4.7 Receptors and AERMAP

A Cartesian receptor grid extending approximately 50-km from the approximate centroid (Easting = 360079.00 m; Northing = 4547813.00 m) of the proposed CCCT Project was used in the modeling. The receptor grid consisted of the following spacing:

- 25-m spaced receptors along the ambient boundary;
- 100-m spaced receptors extending from ambient boundary to 5-km;
- 250-m spaced receptors between 5-km and 10 km from the proposed CCCT Project centroid;
- 500-m spaced receptors between 10-m and 20-km from the proposed CCCT Project centroid; and
- 1,000-m spaced receptors between 20-m and 50-km from the proposed CCCT Project centroid.

Far-field and near-field views of the receptor grid and ambient air boundary are shown in **Figure 4-18** and **Figure 4-19**, respectively. CCCT Project modeled concentrations for each pollutant and averaging period were resolved using a refined 100-m receptor spacing receptor grid at the area of modeled maximum.

Figure 4-19 also shows the ambient air boundary comprising effective barriers to general public access along Montour's property boundary. Consistent with U.S. EPA's Revised Policy on Exclusions from Ambient Air (U.S. EPA, 2019), effective barriers include physical obstacles (e.g., security fencing), active and passive deterrents (e.g., security patrols and surveillance), and natural barriers (e.g., dense vegetation, low lying water areas, ditches, creeks, and ponds) that collectively prevent reasonable access by unauthorized persons on Montour property. The property is fenced along PP and L Road, McMichael Road, and Strawberry Ridge Road. However, the railroad running through the Plant property is accessible by the public. Because of this, receptors have been added to estimate concentrations along this rail line. Overall, Montour is very secure and limits public access to all areas of the property.

AERMAP (version 24142) (U.S. EPA 2024h), the AERMOD terrain preprocessor program, was used to calculate terrain elevations and critical hill heights for the modeled receptors (NAD83 datum and Zone 18 using USGS National Elevation Data (NED). The dataset consisted of 1/3 arc second (~10 m) resolution. Consistent with the AERMAP User's Guide (U.S. EPA, 2024g), the AERMAP domain is sufficient to ensure that all significant nodes are included such that all terrain features that exceed a 10% elevation slope from any given receptor are considered. The NED files are referenced to Datum NAD83 (note all source locations and receptors will also be referenced to NAD83 UTM Zone 18). The NED files are included in the electronic modeling archive that accompanies this modeling report.

Figure 4-18. Far-field Receptor Grid

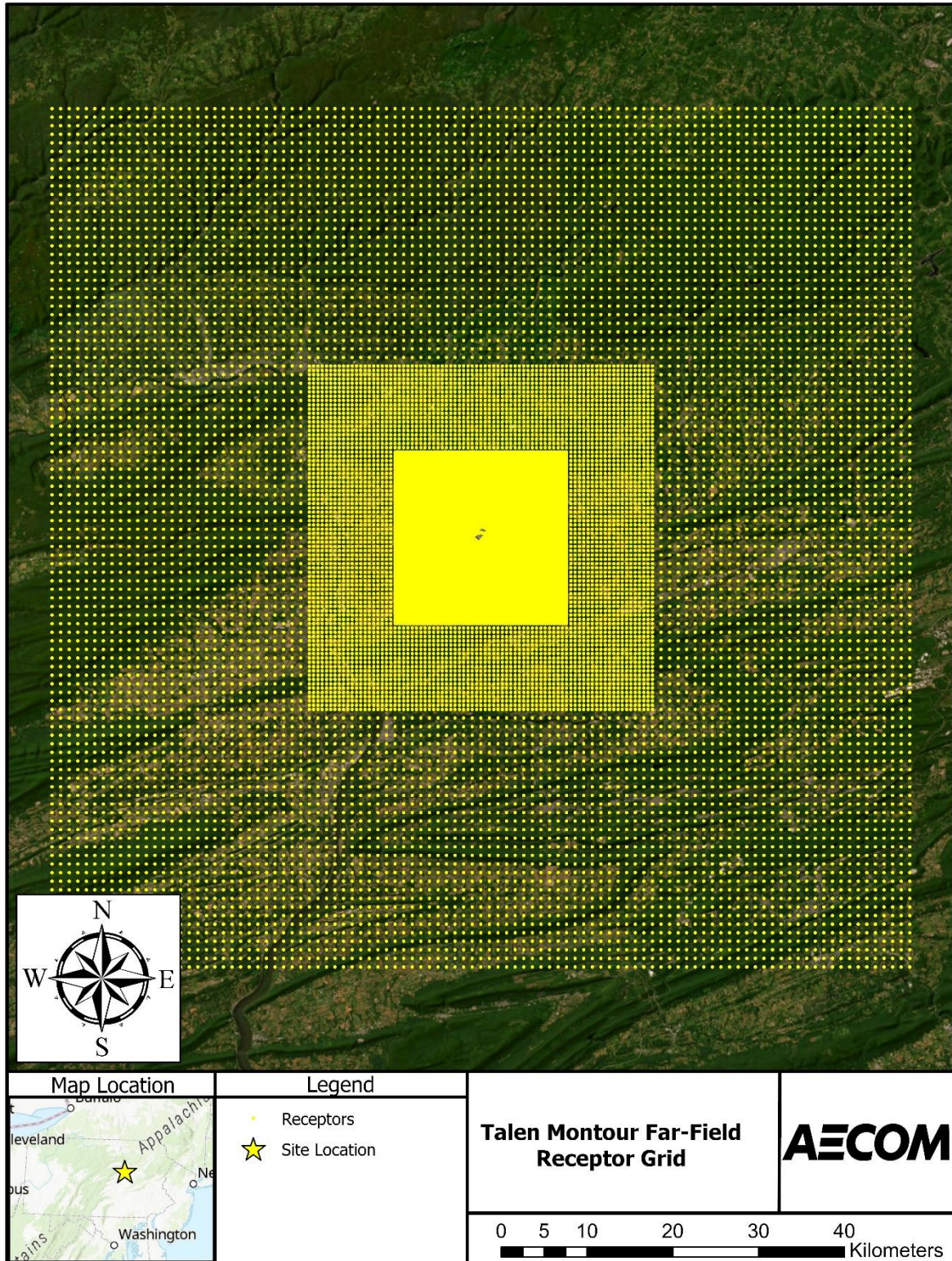
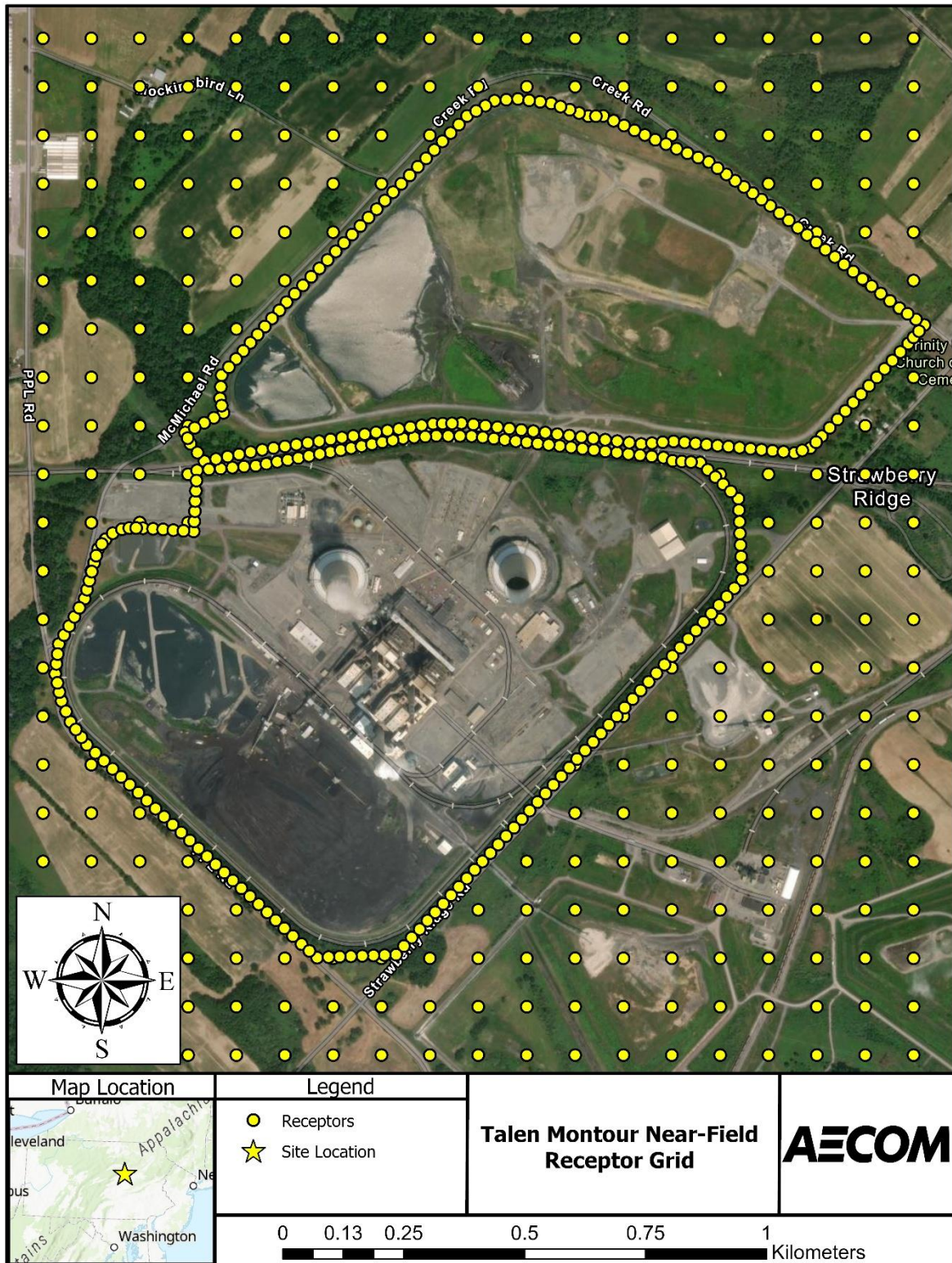


Figure 4-19. Near-field Receptors



4.8 Modeling of Secondary PM_{2.5}

In July 2022, U.S. EPA released their Final Guidance for Ozone and Fine Particulate Matter Permit Modeling and provided updates to the guidance in April 2024 to reflect changes to the PM_{2.5} SILs. The guidance from U.S. EPA recommends a tiered approach for determining which sources would be important to consider when assessing secondary PM_{2.5} concentrations.

The two cases presented by U.S. EPA include²:

- Case 1: If the PM_{2.5} emission increases < 10 tons per year (TPY) and NO_x and SO₂ emission increases < 40 TPY; then a PM_{2.5} compliance modeling demonstration IS NOT required.
- Case 2: If the PM_{2.5} emission increases > 10 TPY and/or NO_x or SO₂ emission increases > 40 TPY; then a PM_{2.5} compliance modeling demonstration IS required and secondary PM_{2.5} MUST BE accounted for from the CCCT Project sources.

Secondary PM_{2.5} modeling for the CCCT Project falls under Case 2 and a qualitative / quantitative analysis to address secondary PM_{2.5} is required.

The Final Guidance provides recommendations on air quality modeling and related technical analyses to satisfy compliance demonstration requirements for PM_{2.5} for permit-related assessments under the PSD program; Guidance on the Development of Modeled Emission Rates for Precursors (MERPs) as a Tier 1 Demonstration Tool for Ozone and PM_{2.5} under the PSD Permitting Program (U.S. EPA 2024h)³. The guidance and the accompanying online tool⁴ provide a Tier 1 demonstration tool for PM_{2.5}. The MERPs are screening thresholds for precursor emissions, where SO₂ and NO_x screening values are provided for PM_{2.5}, for projects that are expected to result in an insignificant increase in ambient PM_{2.5} relative to PSD Increment and the NAAQS; i.e., an impact less than the 24-hour PM_{2.5} SIL of 1.2 µg/m³ or annual PM_{2.5} SIL of 0.13 µg/m³. The MERP values were derived based on modeling conducted by U.S. EPA for locations across the U.S. For this project, since there is a large reduction in SO₂, zero (0) tons/year was conservatively used for the MERP calculation with the NO_x CCCT Project emission rate.

To estimate the CCCT Project impact of secondary PM_{2.5}, the list of hypothetical sources that were modeled by U.S. EPA were analyzed. The closest hypothetical site, modeled by U.S. EPA with modeled PM_{2.5} concentrations found in Appendix A of U.S. EPA's MERP Guidance, is 76 miles south-southwest of the CCCT Project site, located in Adams County. Three (3) additional sites were considered but they are located further away in Warren County, New Jersey (87 miles east of the CCCT Project site), Chester County, Pennsylvania (89 miles southeast of the CCCT Project site), and Livingston County, New York (133 miles north northwest of the CCCT Project site). The calculated secondary PM_{2.5} concentrations associated with CCCT Project emissions is shown in **Table 4-7** for each of the four nearby hypothetical MERP sites. **Table 4-8** provides a comparison of population density and NO_x emissions per square mile within the county where each of the four (4) candidate MERP sites are located relative to the CCCT Project. As the CCCT Project does not increase SO₂ emissions, a comparison of those emissions is not included.

The Livingston County, NY site is the furthest away from Montour County and the CCCT Project. This site has the lowest population density and lowest County-wide emissions per square mile, making it the least representative. The Adams County site is the closest site and most similar in terms of population density, but the Chester County site is comparable based on NO_x emissions per square mile. Climate summaries from the National Oceanic and Atmospheric Administration's (NOAA's) Online Weather products for Adams County indicate similar 30-year climate normals when compared to the location of the CCCT Project site. As previously discussed in Section 4.6, the meteorological site chosen to represent the CCCT Project site is located in Selinsgrove, PA since it was the closest in proximity to the CCCT Project. A comparison of 30-year (1994-2024) average maximum and average minimum, temperatures and total precipitation for the CCCT Project site and the Adams County hypothetical source is provided in **Figure 4-20**, **Figure 4-21**, and **Figure 4-22**. Data presented in these figures show similar annual average high temperatures in the low-60s°F, and low temperatures around 41°F. In addition, mid-summer average maximum temperatures were in the range of 72 – 80°F for both the CCCT Project and Adams County locations. Precipitation averages are also similar with approximately 44 inches of rain per year for Adams County and 43 inches of rain per year at Selinsgrove. In addition, the MERP data for the 90-meter stack was used for this assessment as opposed to the 10-meter stack MERP data.

² Available at https://www.epa.gov/system/files/documents/2022-07/Guidance_for_O3_PM25_Permit_Modeling.pdf

³ Available at https://www.epa.gov/sites/default/files/2020-09/documents/epa-454_r-19-003.pdf

⁴ Available at: <https://www.epa.gov/scram/merps-view-glik>

The 90-meter stack data is more representative of a tall stack with buoyancy and momentum rise like the emission sources for the CCCT Project. **Section 4.6.2** references a plume height of 393 to 1,203 meters for the GE 7HA.02 stacks, this supports the use of the 90-meter MERP data.

Table 4-7. CCCT Project Estimated Secondary PM_{2.5} Concentrations

Averaging Period	NO _x				SO ₂				Project Estimated Secondary PM _{2.5} Concentration (µg/m ³)
	U.S. EPA Precursor Emissions (TPY)	U.S. EPA Modeled Concentration (µg/m ³)	Project Precursor Emissions (TPY)	Project Estimated Concentration (µg/m ³)	U.S. EPA Precursor Emissions (TPY)	U.S. EPA Modeled Concentration (µg/m ³)	Project Precursor Emissions (TPY)	Project Estimated Concentration (µg/m ³)	
Adams County, PA									
24-hour	500	0.0429	282	0.0242	500	0.1026	0	0	0.0242
Annual	500	0.0029	282	0.0016	500	0.0030	0	0	0.0016
Warren County, NJ									
24-hour	500	0.0249	282	0.0141	500	0.0672	0	0	0.0141
Annual	500	0.0017	282	0.0009	500	0.0025	0	0	0.0009
Chester County, PA									
24-hour	500	0.0516	282	0.0291	500	0.1386	0	0	0.0291
Annual	500	0.0023	282	0.0013	500	0.0036	0	0	0.0013
Livingston County, NY									
24-hour	500	0.1205	282	0.0680	500	0.1315	0	0	0.0680
Annual	500	0.0032	282	0.0018	500	0.0033	0	0	0.0018

Bold values denote the secondary PM_{2.5} values to be used for cumulative and PSD increment analyses.

Table 4-8. Comparison of County-Wide Statistics for Hypothetical MERPs Locations

Criteria	County Level Statistics				
	Montour Co. PA + Project ¹	Adams Co., PA	Chester Co., PA	Livingston Co., NY	Warren Co., NJ
Population Density					
Population	18,136	103,852	560,745	61,561	112,031
County Area (mi ²)	132	522	759	640	363
Population Density (per mi ²)	137.4	199.0	738.8	96.2	308.6
County-Wide Emissions from All Sources					
NO _x (tons) ²	1254.34	2245.7	7005.2	1259.7	1601.2
County Area (mi ²)	132	522	759	640	363
NO _x (tons/mi ²)	9.50	4.30	9.23	1.97	4.41

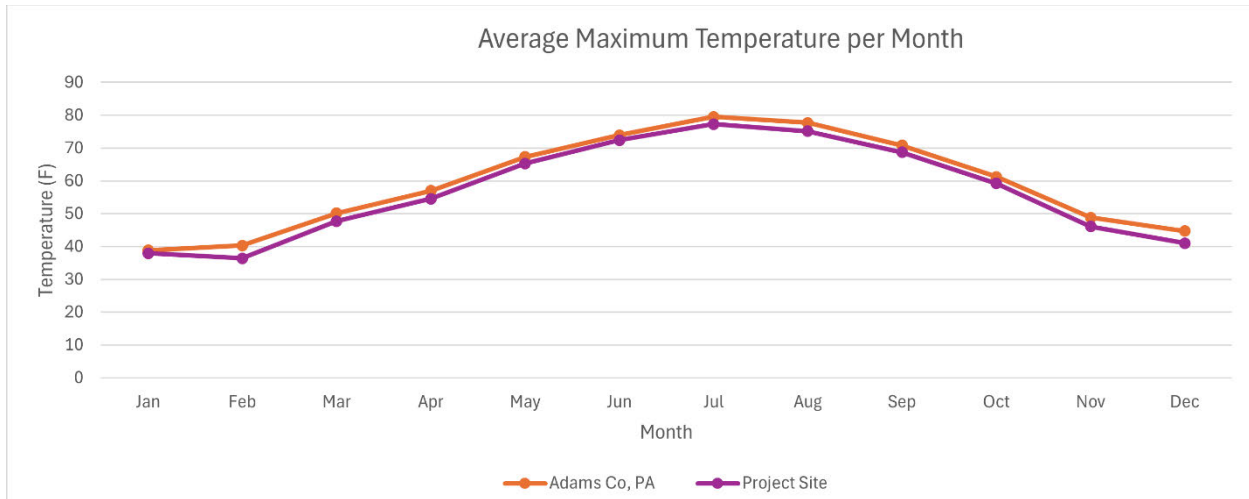
¹ Values from Table 2-1 and Montour County Level total emissions.

² Emissions from 2020 U.S. EPA's National Emissions Inventory (NEI) database. Available at: <https://www.epa.gov/air-emissions-inventories/2020-national-emissions-inventory-nei-data>

There are some mountains to the west and south of the CCCT Project whereas the Adams County hypothetical source has smaller mountains to the west and north. However, the difference in terrain features would not create a substantial difference in climate regimes between the CCCT Project site and hypothetical source in Adams County. Both have similar elevations: 610 ft for Adams County and 536 ft for the CCCT Project site. The Adams County hypothetical source also exhibits similar land use to the CCCT Project site. The CCCT Project area is primarily rural while the Adams County site is somewhat more suburban, primarily residential. Based on the similarities in land use, climate, and overall terrain, the Adams County site is the most representative but based on emissions the Chester County site should also be considered. Therefore, to be conservative, the data associated with both MERP sites were used for assessing the

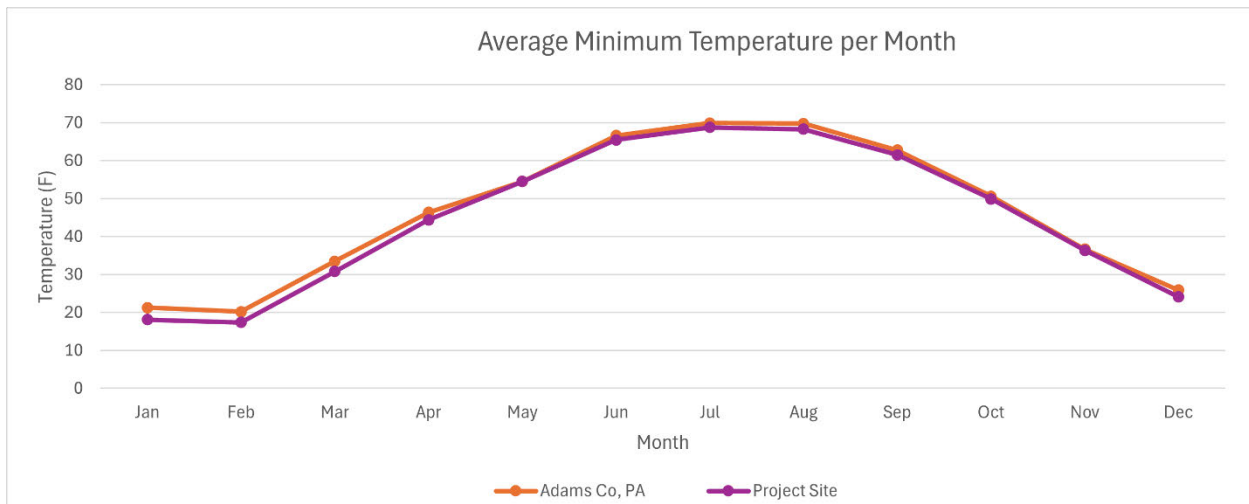
CCCT Project impact on secondary PM_{2.5} (Chester County site for 24-hour PM_{2.5} and Adams County site for annual PM_{2.5}).

Figure 4-20. 30-Year Average Maximum Temperature of Adams County and Plant per Month



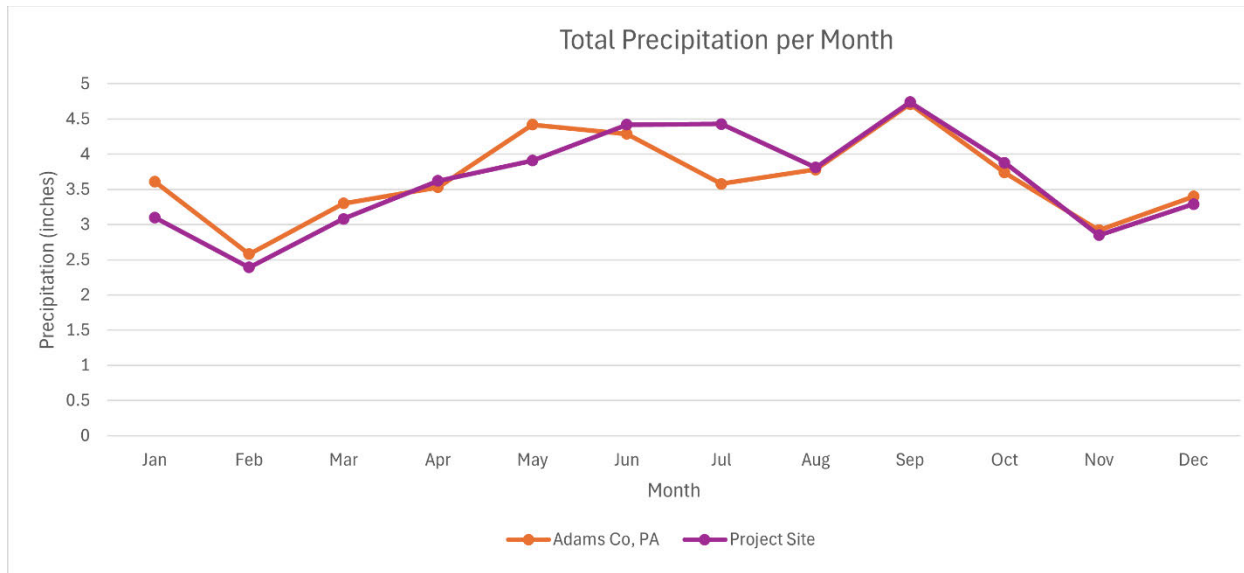
Source: Data from NOAA Online Weather Data, <https://weather.gov>

Figure 4-21. 30-Year Minimum Temperature of Adams County and Plant per Month



Source: Data from NOAA Online Weather Data, <https://weather.gov>

Figure 4-22. 30-Year Average Total Precipitation for Adams County and Plant per Month



Source: Data from NOAA Online Weather Data, <https://weather.gov>

4.9 Modeling of NO₂

Based on current guidance, NO₂ impacts can be determined by using a 3-tiered NO_x to NO₂ conversion rate system, where:

- Tier 1 assumes 100 percent NO_x to NO₂ conversion;
- Tier 2 utilizes the Ambient Ratio Method 2 (ARM2); and
- Tier 3 allows the use of refined techniques such as the Ozone Limiting Method (OLM), Plume Volume Molar Ratio Method Version 2 (PVMRM2), and the Generic Reaction Set Method (GRSM). All three options are in AERMOD.

For the CCCT Project, the modeling was conducted using the U.S. EPA default Tier 2 methodology (ARM2) to estimate NO₂ concentrations from total NO_x emissions. ARM2 was run using default, regulatory options. ARM2 uses a minimum NO₂/NO_x ratio of 0.5 and a maximum NO₂/NO_x ratio of 0.9.

4.10 Ambient Background Concentrations

Ambient air quality data are used to represent the contribution to total ambient air pollutant concentrations from non-modeled sources. In accordance with 40 CFR 52.21(m), an application for a PSD permit must contain an analysis of ambient air quality in the vicinity of the proposed CCCT Project for each pollutant subject to PSD review. The objective of reviewing these data is to develop representative background concentrations which, when added to modeled impacts, are used in the NAAQS compliance analysis. This section summarizes the ambient background concentrations used in the NAAQS analysis. The monitored concentrations presented in this section were obtained from values provided by PADEP. The data has been certified by the state, including the most recent calendar year of 2025.

Section 8.3 of U.S. EPA's Appendix W refers to *Guidance on Developing Background Concentrations for Use in Modeling Demonstrations* (Background Concentration Guidance), which provides a framework on developing background concentrations for use in cumulative modeling demonstrations (U.S. EPA, 2024i). The following subsections focus on the components related to nearby sources and monitored background concentrations for PM_{2.5} and NO₂, respectively. As discussed in U.S. EPA's guidance, efforts should be undertaken to avoid over conservatism through double-counting when selecting a regional background monitor(s) and the inventory of nearby sources that were explicitly modeled.

4.10.1 PM_{2.5} Background Monitor Selection

Using the U.S. EPA Air Quality Design Values interactive map (U.S. EPA, 2025)⁵, there are eight (8) PM_{2.5} monitors that were considered; State College (AQS Site ID: 42-027-0100), Salladasburg (AQS Site ID: 42-081-0419), Penn State (AQS Site ID: 42-117-4000), Towanda (AQS Site ID: 42-015-0011), Tunkhannock (AQS Site ID: 42-131-0010), Scranton (AQS Site ID: 42-069-2006), Allentown (AQS Site ID: 42-077-0004), and Freemansburg (AQS Site ID: 42-095-0025) (see **Figure 4-23**). Factors considered when determining the most representative monitor include proximity to the CCCT Project, prevailing winds, and population density near the monitor vs. the source.

The Salladasburg, Penn State, Towanda, Tunkhannock, and Allentown monitors were quickly ruled out due to not meeting the minimum data requirements. The Freemansburg monitor, located 75 miles southeast of the CCCT Project site, is in Northampton County which has a population density six (6) times larger than the population density of the CCCT Project site located in Montour County. The State College monitor is the closest monitor to the CCCT Project site (65 miles west southwest) that meets the minimum data requirements and has a comparable population density to the CCCT Project site (see county population densities in **Figure 4-23**). The wind rose shown in **Figure 4-24** also indicates that the State College monitor is in an upwind direction of the CCCT Project. Based on these factors the State College monitor provides a good representation of background PM_{2.5} concentration in the vicinity of the CCCT Project. The monitor values are summarized in **Table 4-9**.

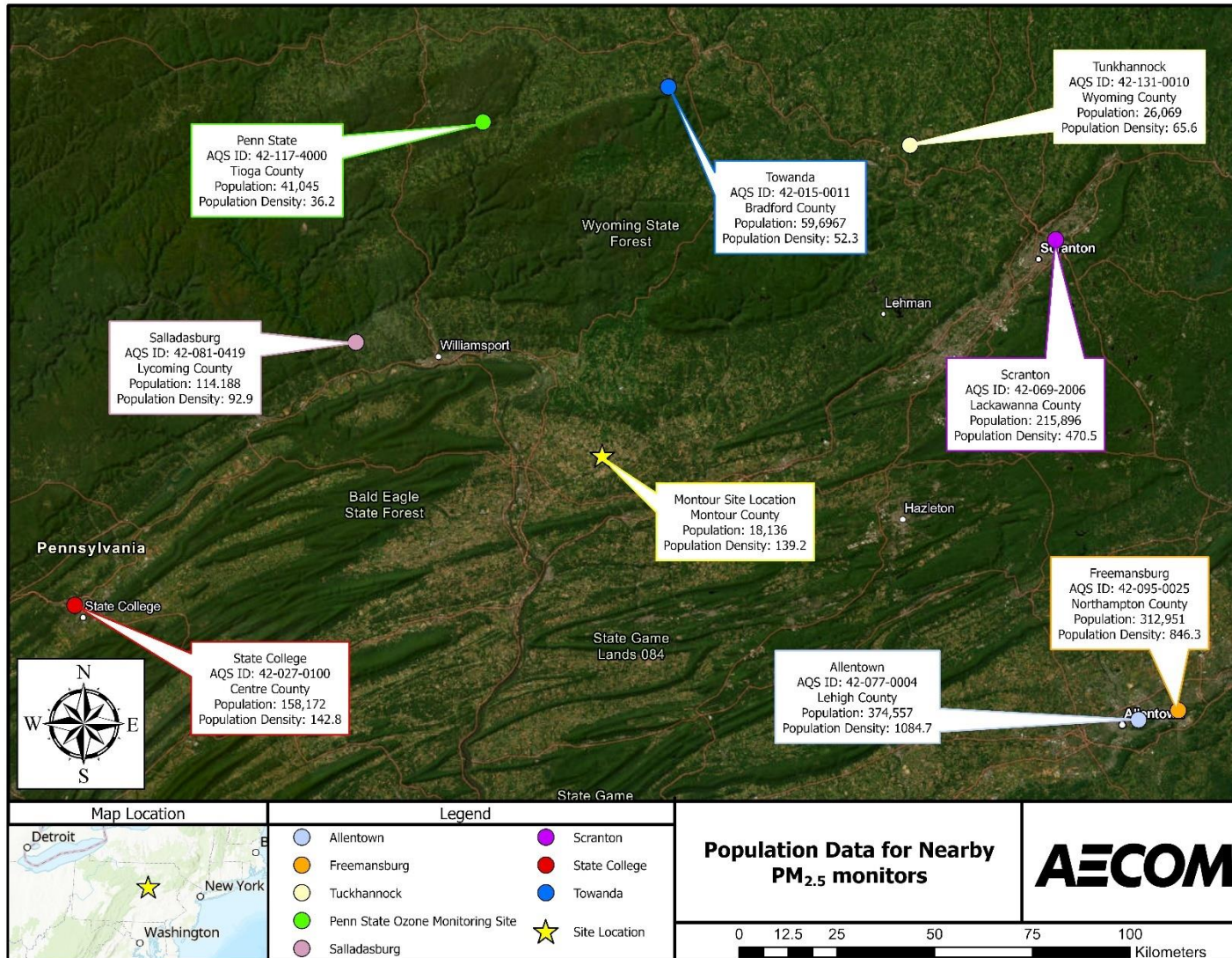
Table 4-9. PM_{2.5} Ambient Background Concentrations

Pollutant	Averaging Period	AQS Site ID	Local Site Name	2023-2025 Design Value (µg/m ³)	2023 Concentration (µg/m ³)	2024 Concentration (µg/m ³)	2025 Concentration (µg/m ³)
PM _{2.5}	24-hour ⁽¹⁾	420270100	State College	22	31.3	13.3	20.2
	Annual			7.2	8.92	6.05	6.70

(1) Concentrations reflect the 98th percentile value.

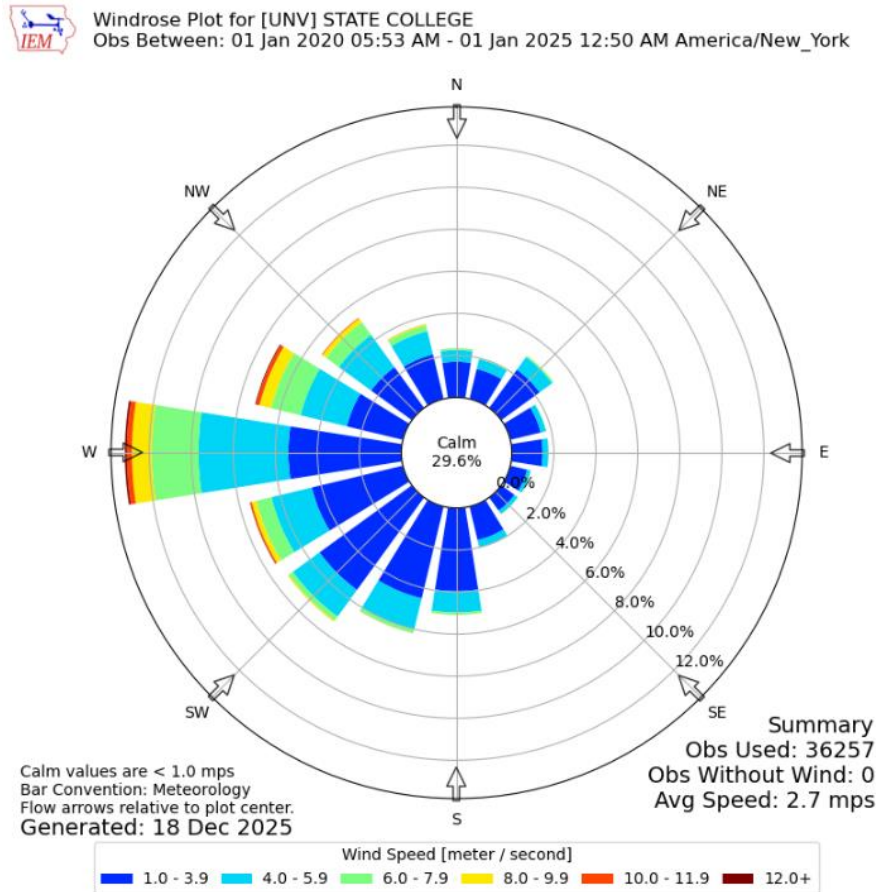
⁵ Available at <https://www.epa.gov/outdoor-air-quality-data/interactive-map-air-quality-monitors>
 Prepared for: Montour CT Project LLC

Figure 4-23. Location of Nearby PM_{2.5} Monitors



Source: US Census, 2020

Figure 4-24. Windrose Representative of Winds at State College PM_{2.5} Monitor



Source: <https://www.mesonet.agron.iastate.edu/sites/locate.php>

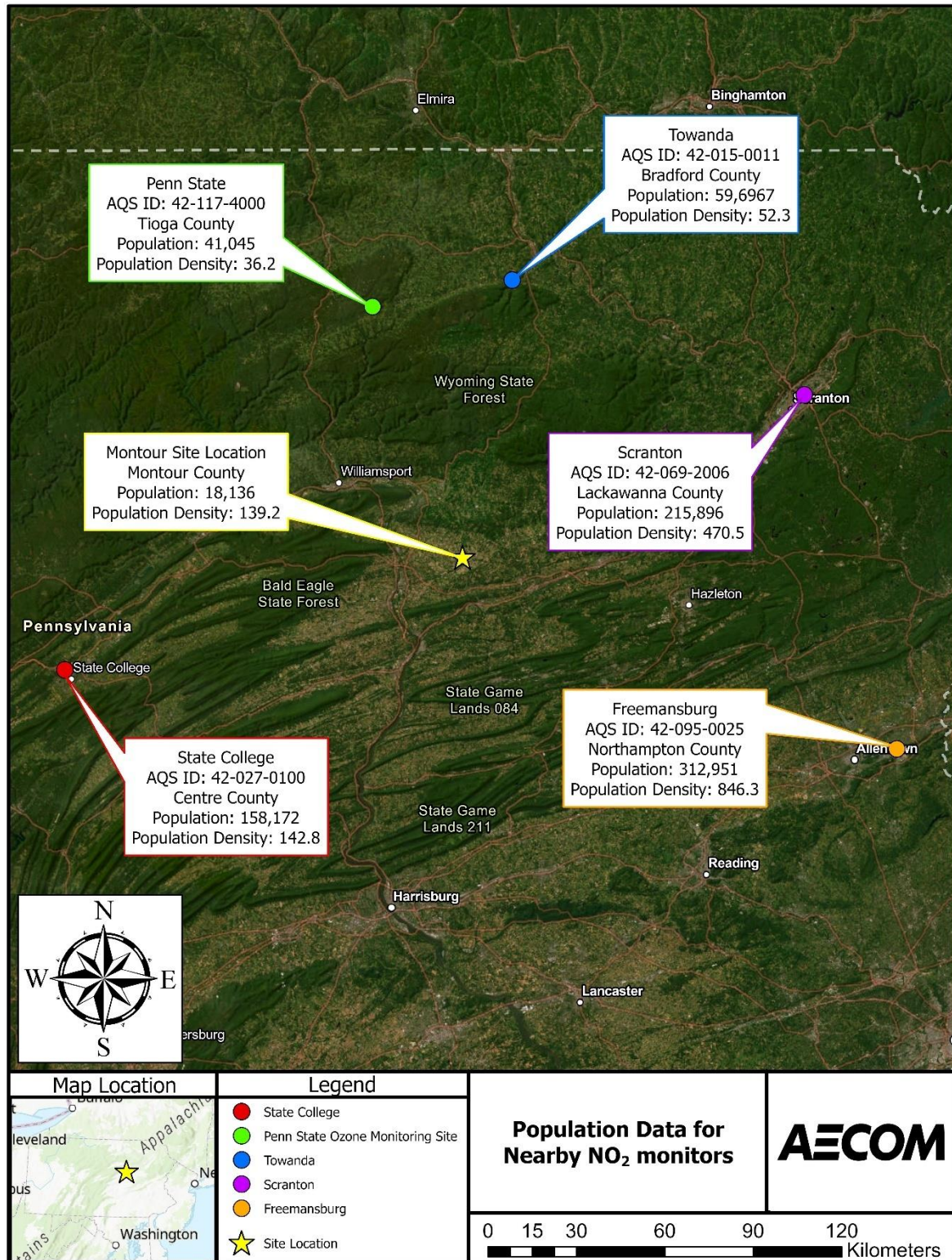
4.10.2 NO₂ Background Monitor Selection

Using the U.S. EPA Air Quality Design Values interactive map, five (5) NO₂ monitors were considered: State College (AQS Site ID: 42-027-0100), Penn State (AQS Site ID: 42-117-4000), Towanda (AQS Site ID: 42-015-0011), Scranton (AQS Site ID: 42-069-2006), and Freemansburg (AQS Site ID: 42-095-0025) (see **Figure 4-25**). Factors considered when determining the most representative monitor include proximity to the CCCT Project, prevailing winds, and population density near the monitor vs. the source.

The Penn State and Towanda monitors were quickly ruled out due to not meeting the minimum data requirements. The Freemansburg monitor, located 75 miles southeast of the CCCT Project site, is in Northampton County which has a population density six (6) times larger than the population density of the CCCT Project located in Montour County. The State College monitor is the closest monitor to the CCCT Project (65 miles west southwest) that meets the minimum data requirements and has a comparable population density to the CCCT Project (see county population densities in **Figure 4-25**). The wind rose shown in **Figure 4-24** also indicates that the State College monitor is located in an upwind direction of the CCCT Project. Based on these factors the State College monitor provides a good representation of background NO₂ concentration in the vicinity of the CCCT Project.

U.S. EPA's March 2011 clarification memo (U.S. EPA, 2011) regarding 1-hour SO₂ NAAQS modeling allows for an approach using the 99th percentile monitored values whereby the background values vary by season and by hour of the day. This approach was applied using data from 2023-2025 at State College. The NO₂ concentrations that were used in this modeling analysis and were entered into the AERMOD input file in units of parts per billion (ppb), are listed in **Table 4-10**.

Figure 4-25. Location of Nearby NO₂ Monitors



Source: US Census, 2020

Table 4-10 Season-Hour of Day 99th Percentile NO₂ Ambient Background Concentrations for State College Monitor 2023-2025

Hour Ending	3-Year (2023-2025) Averaged 99 th Percentile Hourly NO ₂ Concentrations by Season (ppb) ¹			
	Winter	Spring	Summer	Fall
1	22.63	15.30	8.97	15.70
2	21.33	13.98	8.95	13.20
3	19.00	13.00	8.97	13.17
4	19.63	15.20	8.30	13.53
5	20.47	16.90	9.83	12.80
6	19.80	18.27	8.40	15.30
7	20.70	17.83	8.17	15.43
8	21.40	15.03	8.37	14.17
9	18.17	13.33	7.70	12.57
10	15.23	10.63	5.67	9.50
11	11.90	6.63	5.13	7.27
12	11.20	4.63	4.00	5.87
13	9.37	3.83	3.30	5.93
14	9.73	3.97	2.73	6.10
15	9.63	4.00	2.93	6.00
16	9.40	4.00	2.73	6.03
17	10.53	4.63	2.90	7.27
18	11.60	4.93	2.70	9.20
19	15.10	5.37	3.23	13.07
20	21.03	8.80	4.63	16.87
21	24.47	13.00	7.40	19.03
22	24.00	13.87	8.87	18.47
23	23.63	16.33	9.07	18.23
24	23.00	15.57	9.87	16.27

¹ Due to the calibration schedule used by PADEP, hour ending 2 data was not valid for the 2023 winter, spring and summer months. As a result, the average of hour 1 and hour 3 were used to calculate the hour 2 values for winter, spring, and summer.

5. Class II Area Significant Impact Level Analysis Results

5.1 Operating Scenario Analysis Results

Prior to performing the Class II Area SIL analysis, an analysis of various operating scenarios for the two (2) GE 7HA.02 was performed to determine the worst-case operating scenario in terms of modeled ground-level concentrations. The analysis was conducted with emission rates and flue gas exhaust characteristics (flow rate and temperature) expected to represent the worst-case parameters among the range of possible values considered for the CCCT Project. Since emission rates and flue gas characteristics for a given operating load vary as a function of ambient temperature, data was derived for select ambient temperatures and operating scenarios for each turbine, as previously discussed in **Section 4.2**. The modeling analysis was performed using the data in **Table 4-1** and **Table 4-2**, with AERMOD and the associated databases/methodologies described in **Section 4**.

Table 5-1 shows the worst-case turbine operating scenario for the GE 7HA.02 is startup for the 1-hour and 8-hour averaging period and 100% load with duct burner for 24-hour and annual averaging periods. Annual modeling of the startup scenarios was not conducted as it is not feasible to startup and shutdown these units every hour over the course of a year and annual emissions under normal operations represents a higher emission profile compared to an emission profile that includes startup and shutdown.

Based on these results, except for annual averaging periods, two (2) scenarios were then carried out for the SIL modeling analyses presented in **Section 5.2**. These included a “Base Case” and “Worst Case”. These two scenarios include the following:

- Base Case: two (2) GE 7HA.02 at 100% load + Duct Burner
- Worst Case: two (2) GE 7HA.02 during startup

Only the Base Case was modeled for the annual averaging period as this results in the highest annual emission profile for the CCCT Project.

Table 5-1. Load Analysis Results

Turbine Scenario	Maximum Modeled Concentration ($\mu\text{g}/\text{m}^3$) ¹							
	1-hr NO ₂	Annual NO ₂	1-hr CO	8-hr CO	24-hr PM _{2.5}	Annual PM _{2.5}	24-hr PM ₁₀	Annual PM ₁₀
100% + Duct Burner	21.97	0.64	14.85	9.40	3.84	0.52	3.84	0.52
100%	16.44	0.48	11.14	7.12	2.94	0.39	2.94	0.39
75%	15.54	0.47	10.55	6.96	2.86	0.39	2.86	0.39
MECL	14.36	0.47	9.66	6.26	2.60	0.37	2.60	0.37
Startup (2 units)	167.46	--	772.18	421.19	2.94	--	2.94	--

Bold value denotes worst-case load scenario.

(1) Sum of the model concentration for the two (2) CCCT turbines.

5.2 SIL Results

The Class II Area SIL analysis was conducted using AERMOD for the base case and worst-case operating scenario as determined in **Section 5.1** for PM₁₀, PM_{2.5}, NO₂, and CO. For the annual averaging period, only the base case is evaluated for the SIL analysis as it results in the highest annual emission profile for the CCCT Project.

For those pollutants and averaging periods with modeled concentrations less than their SILs, no further modeling is required because, by definition, those pollutants and averaging periods cannot cause or contribute to a violation of the NAAQS or exceedances of the PSD increments. For those pollutants and averaging periods with significant modeled concentrations, the significant impact area (SIA) was determined, and a cumulative NAAQS and PSD Increment analysis was conducted. For PM_{2.5}, the secondary PM_{2.5} was included in the SIL modeling as discussed in **Section 4.8** as well as the NAAQS and PSD Increment modeled concentrations.

The SIL modeling was performed using the 5-years of meteorological data, as described in **Section 4.6**, in accordance with U.S. EPA guidance and the form of the design concentration consistent with the pollutants and averaging periods being modeled. Specifically, the determination of significance for the CCCT Project was based on the following:

- PM_{2.5} 24-hour NAAQS – Highest 24-hour average modeled concentration averaged over 5 (five) years.
- PM_{2.5} Annual NAAQS – Highest annual average modeled concentration averaged over 5 (five) years.
- PM_{2.5} 24-hour PSD Increment – Highest 24-hour average modeled concentration per year taken over 5 (five) years.
- PM_{2.5} Annual PSD Increment – Highest annual average modeled concentration per year taken over 5 (five) years.
- PM₁₀ 24-hour NAAQS – Highest 24-hour average modeled concentration per year taken over 5 (five) years.
- PM₁₀ 24-hour PSD Increment – Highest 24-hour average modeled concentration per year taken over 5 (five) years.
- PM₁₀ Annual PSD Increment – Highest annual average modeled concentration per year taken over 5 (five) years.
- NO₂ 1-hour NAAQS – Highest 1-hour average modeled concentration averaged over 5 (five) years.
- NO₂ Annual NAAQS – Highest annual average modeled concentration per year taken over 5 (five) years.
- NO₂ Annual PSD Increment – Highest annual average modeled concentration per year taken over 5 (five) years.
- CO 1-hour NAAQS – Highest 1-hour average modeled concentration per year taken over 5 (five) years.
- CO 8-hour NAAQS – Highest 8-hour average modeled concentration per year taken over 5 (five) years.

A comparison of the overall maximum modeled concentrations with the SILs is presented in **Table 5-2** for the worst-case operating scenario. As is depicted in **Table 5-2**, 1-hour and 8-hour CO, annual NO₂, and 24-hour and annual PM₁₀ modeled concentrations are below their respective SIL. As such, no further analyses were performed for 1-hour and 8-hour CO, annual NO₂, and 24-hour and annual PM₁₀. Modeled concentrations of 1-hour NO₂, 24-hour PM_{2.5}, and annual PM_{2.5} are greater than their respective SILs. Note that 24-hour and annual PM_{2.5} were evaluated based on maximum modeled concentration per meteorological year (for PSD increment) and maximum averaged modeled concentration over the 5-years of meteorological data (for NAAQS). Based on these results, a Class II Area cumulative impact analysis for 1-hour NO₂, 24-hour PM_{2.5}, and annual PM_{2.5} was warranted. This cumulative analysis is documented in **Section 6**.

The isopleths for 1-hour NO₂, 24-hour PM_{2.5}, and Annual PM_{2.5} SIL results are plotted in **Figure 5-1**, **Figure 5-2**, and **Figure 5-3** respectively. In **Figure 5-1**, the maximum concentration is located approximately 4.3-km southeast of the CCCT Project boundary for 1-hour NO₂, but the area of receptors exceeding the SIL is rather expansive. The significant impacts are less widespread for 24-hour and Annual PM_{2.5} as seen in **Figure 5-2** and **Figure 5-3**. The maximum concentration locations for 24-hour and annual PM_{2.5} are located approximately 4.3-km southeast of the CCCT Project.

Table 5-2. Summary of Maximum AERMOD Concentrations to Significant Impact Levels

Pollutant	Averaging Period	Maximum Modeled Concentration ($\mu\text{g}/\text{m}^3$)	U.S. EPA SIL ($\mu\text{g}/\text{m}^3$)	Exceeds SIL? (Yes or No)	Significant Impact Area Distance (km)
CO	1-hr (Base Case) ¹	14.8	2000	No	--
	1-hr (Worst Case) ²	772.2	2000	No	--
	8-hr (Base Case) ¹	9.4	500	No	--
	8-hr (Worst Case) ²	421.2	500	No	--
NO ₂	1-hr ARM2 (Base Case) ¹	21.4	7.5	Yes	68.8
	1-hr ARM2 (Worst Case) ²	128.9	7.5	Yes	68.8
	Annual	0.71	1	No	--
PM ₁₀	24-hour (Base Case) ¹	3.84 ⁽³⁾	5	No	--
	24-hour (Worst Case) ²	2.94 ⁽³⁾	5	No	--
	Annual ¹	0.58 ⁽⁴⁾	1	No	--
PM _{2.5}	24-hour (Base Case) ¹	3.07 ⁽³⁾	1.2	Yes	13.9
	24-hour (Worst Case) ²	2.55 ⁽³⁾	1.2	Yes	13.9
	Annual ¹	0.52 ⁽⁴⁾	0.13	Yes	25.4

- (1) Base Case: two (2) GE 7HA.02 at 100% load + Duct Burner
 (2) Worst Case: two (2) GE 7HA.02 at startup
 (3) Highest 24-hour average modeled concentration averaged over five (5) years.
 (4) Highest annual average modeled concentration averaged over five (5) years.
 (5) Highest 24-hour average modeled concentration per year over five (5) years.
 (6) Highest annual average modeled concentration per year over five (5) years.

Figure 5-1: 1-hour NO₂ SIL Isoleth (Worst Case Scenario)

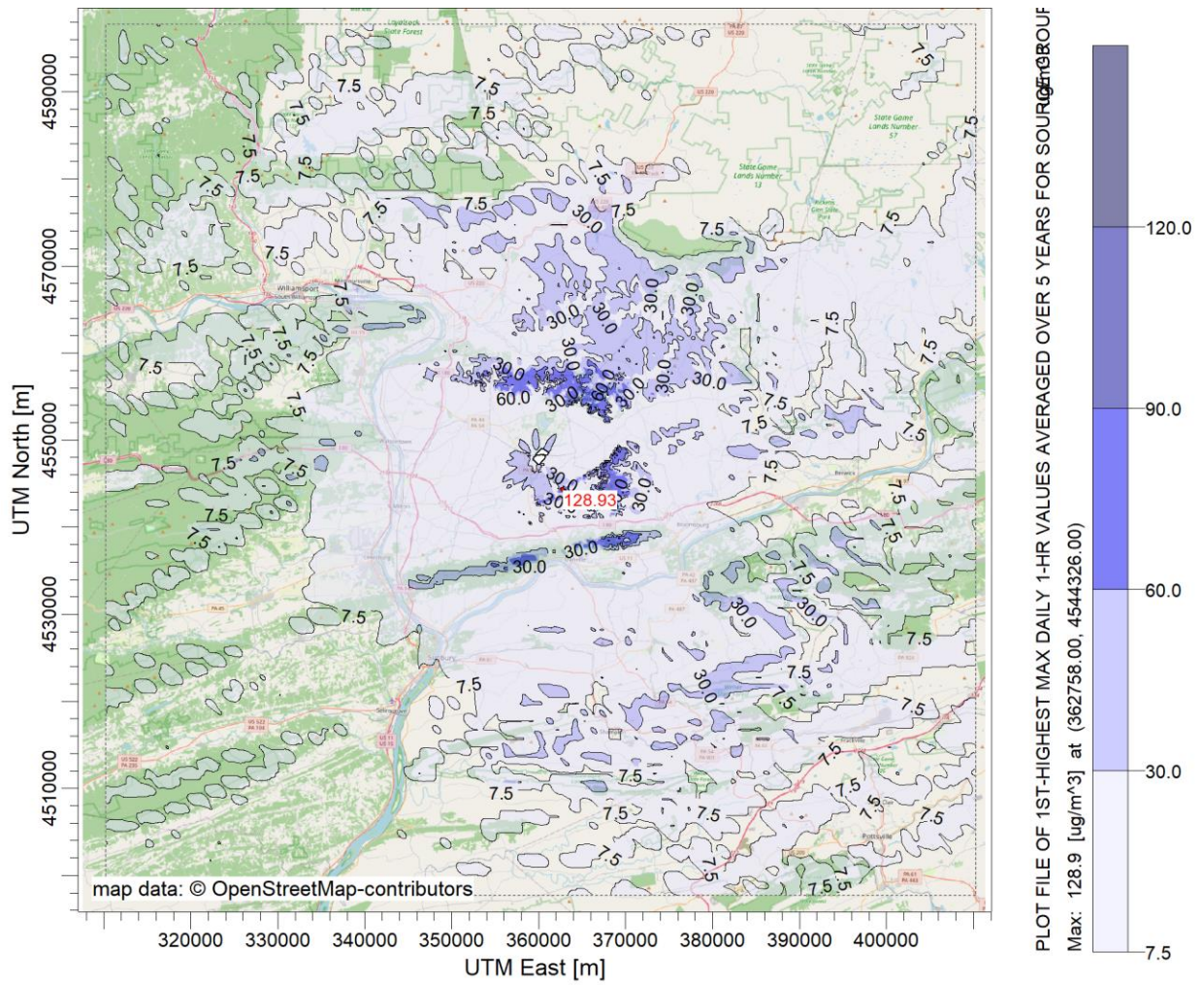


Figure 5-2: 24-hour PM_{2.5} SIL Isopleth (Worst Case Scenario)

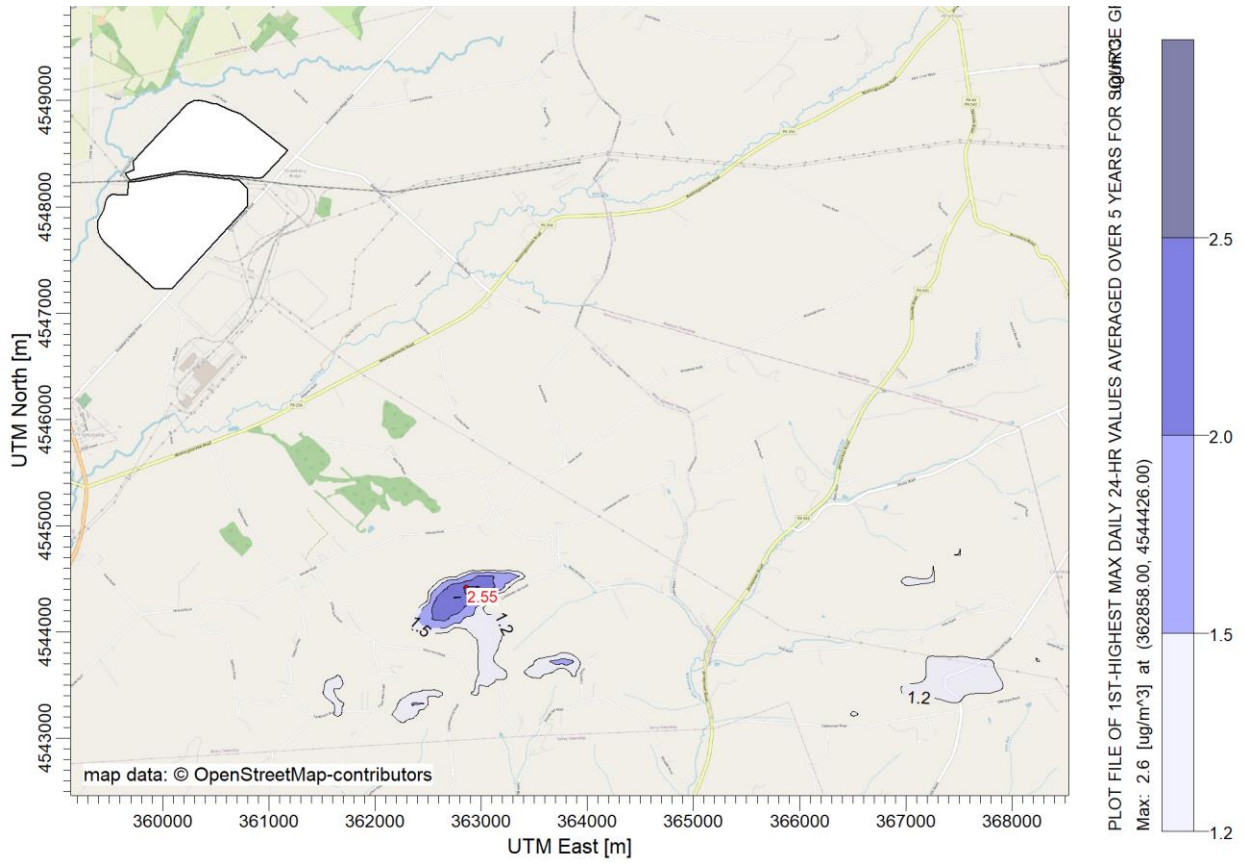
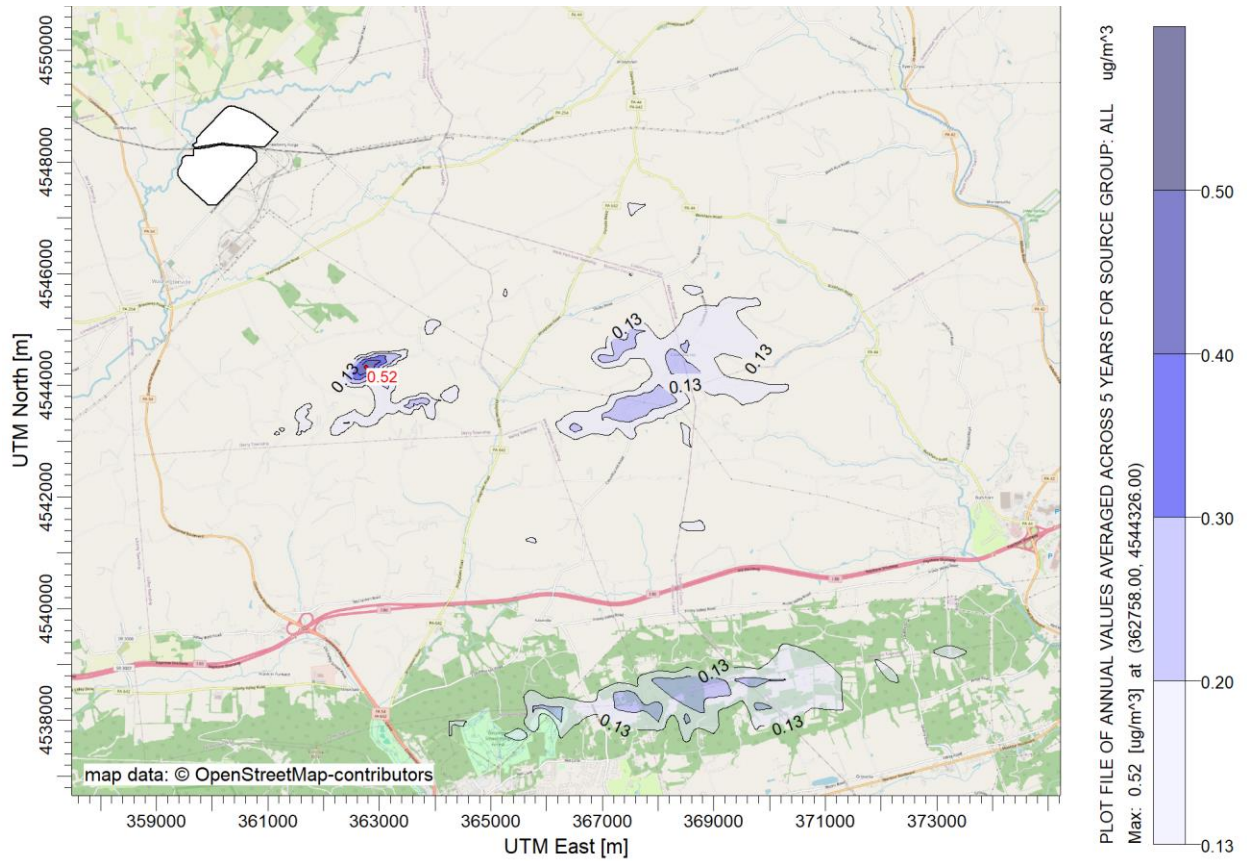


Figure 5-3: Annual PM_{2.5} SIL Isoleth



6. Class II Area Cumulative Impact Analysis Results

6.1 Class II Area Air Quality Standards and PSD Increments

The discussion below applies only to those pollutants and averaging periods for which a modeled impact is predicted with AERMOD to exceed the relevant SIL. The cumulative impact analyses were conducted using methods and data described in **Section 4** with the exception that the receptors were limited to those at which the CCCT Project has a significant modeled concentration.

The evaluation of whether the CCCT Project may cause or contribute to an exceedance of the PSD increments and NAAQS is based on the sum of the following:

- Modeled concentrations attributable to the CCCT Project;
- Modeled concentrations from “nearby” sources; and
- Representative ambient background concentration (NAAQS only).

Modeled concentrations attributable to the CCCT Project and “nearby” sources were estimated using AERMOD. An inventory of sources was developed based on information obtained from PADEP to assess cumulative impacts. The modeled design 1-hour (NO₂) and 24-hour and annual (PM_{2.5}) concentrations from the CCCT Project, as well as influencing nearby emission sources, were compared with the NAAQS and PSD increments. Just as was done for the SIL modeling, primary plus secondary PM_{2.5} impacts from the CCCT Project were accounted for using the secondary PM_{2.5} concentrations estimated in **Section 4.8** for the cumulative analysis. For the NAAQS analysis, a conservative background concentration (see **Section 4.10**) was added to modeled design concentrations.

6.2 Nearby Source Inventory

For PSD permitting, a cumulative impact analysis needs to appropriately characterize the spatial nature of air quality near a new or modified source to identify the potential for NAAQS or PSD increment exceedances. Characterization of local air quality around a new or modifying source for each pollutant and averaging period necessitates a full and comprehensive accounting for all source contributions. A cumulative impact analysis should account for the combined impacts of all direct and precursor emissions of a pollutant from:

- the new or modifying source,
- direct emissions from nearby sources, and
- monitored background concentrations accounting for primary and/or secondary impacts from regional background sources and nearby sources not explicitly modeled.

Appropriately accounting for all source contributions is an inherently discretionary exercise with use of best professional judgment in determining a representative background concentration and identifying nearby sources that need to be explicitly modeled. The development of the background source inventory for the CCCT Project relied on U.S. EPA’s *Guidance on Developing Background Concentrations for Use in Modeling Demonstrations* (Background Concentration Guidance), which was finalized November 20, 2024 (U.S. EPA, 2024i).

The regional source inventory development included ambient background concentrations (see **Section 4.10**) to account for non-modeled sources and the modeling of direct source emissions which are not adequately represented by the background monitors. The regional source inventory considered the extent of the CCCT Project’s significant impact area when determining the relevant sources to directly model. Based on U.S. EPA Guidance, the hypothetical example in Appendix C of the Background Concentration Guidance, generally sources with less than 25 tons per year of actual NO₂ and/or PM_{2.5} emissions are likely represented in the selected regional monitors and as such were excluded from any modeling.

Inventory lists of nearby NO₂ and PM_{2.5} sources within approximately 50-km of the CCCT Project were obtained from PADEP. These lists included sources in Montour, Columbia, Northumberland, Union, and Lycoming Counties. Of the sources provided, only three (3) sources had 2024 actual PM_{2.5} emissions greater than 25 TPY. These sources included: Hamilton Patriot Generation Plant, Sunbury Hummel Station Natural Gas Plant, and US Gypsum Washingtonville. These sources were included in the model as they would not be adequately captured by the selected background monitoring site. For NO₂, fourteen (14) sources had 2024 actual emissions greater than 25 TPY. These sources included: Hamilton Patriot Generation Plant, Sunbury Hummel Station Natural Gas Plant, Schuylkill Energy/St. Nicholas Cogeneration, Gilberton Power John B. Rich Memorial Power Station, Caithness Moxie Freedom Generation Plant (now owned by Talen Energy), Regency Marcellus Gas Gathering Quaker State Road Compressor Station, Transcontinental Gas Pipeline Compressor Stations 517 and 607, NextEra Renewable Fuels/Lyco Landfill, EQT Vargo Compressor Station, Northeast Pipeline Barto Compressor Station, Bucknell University Lewisburg Campus, and US Gypsum Washingtonville.

Figure 6-1 shows the locations of the background sources. All fourteen (14) NO₂ sources were included in the model.

In addition to the sources listed above, existing sources at Montour SES were included in the cumulative impact analysis:

- Modeled Source ID: FGD – combined stack
 - Source ID 031 – Natural Gas-Fired Unit 1 Boiler
 - Source ID 032 – Natural Gas-Fired Unit 2 Boiler
- Modeled Source ID 033A_34 – combined stack
 - Source ID 033A – Natural Gas-Fired Auxiliary Boiler 11A
 - Source ID 034 – Oil-Fired Auxiliary Boiler 11B
- Source ID 041A/B/C – Three (3) Natural Gas-Fired Fuel Gas Heaters
- Source ID P201A – Diesel-Fired Emergency Generator 1A D398
- Source ID P202A – Diesel-Fired Emergency Generator 1B D398
- Source ID P203 – Diesel-Fired Emergency Generator 2 D343
- Source ID P301A/B – Two (2) Diesel-Fired Engine-Pumps
- Source ID P302 – Diesel-Fired Emergency Service Water Pump 1A
- Source ID 402 – Diesel-Fired Gas Conditioning Yard Emergency Generator

The emergency generators and pump engines are considered intermittent sources as they operate less than 500 hours per year and are therefore not included in the 1-hour NO₂ NAAQS modeling (U.S. EPA 2011). All sources are included in the 24-hour and annual PM_{2.5} modeling. For annual PM_{2.5} modeling, the emission rates reflected the annual operating hour limitations.

6.3 NAAQS Analysis Results

A cumulative dispersion modeling analysis was conducted using AERMOD with the meteorological data discussed in **Section 4.6** Error! Reference source not found., CCCT Project source data, ambient monitoring data, and the regional source inventory described in **Section 6.2** to determine model concentrations to be compared to the NAAQS for the applicable averaging periods. In addition to CCCT Project sources modeled for the SIL analysis, any existing sources at Montour SES that have the potential to emit the pollutant of concern were included in the NAAQS modeling, as discussed above. The analysis compared the modeled design concentrations for 1-hour NO₂, 24-hour PM_{2.5}, and annual PM_{2.5} from the proposed CCCT Project and existing sources, as well as influencing nearby emission sources, to the NAAQS. For the NAAQS analysis, the background concentrations were added to modeled design short-term and annual impacts. **Section 4.10** provided details on the background concentrations selected for this application.

The modeled concentrations presented in **Table 6-1** represent the CCCT Project (including the secondary PM_{2.5} estimated in **Section 4.8**) and nearby background sources. The modeled concentrations were added to representative ambient background concentrations to estimate the total concentrations that were then compared to the NAAQS. As shown, the total concentrations for 1-hour NO₂, 24-hour and annual PM_{2.5} are less than the NAAQS. The results of the

cumulative modeling analysis indicate that the CCCT Project will not cause or contribute to a violation of the 1-hour NO₂, 24-hour PM_{2.5} and annual PM_{2.5} NAAQS.

Table 6-1. Summary of NAAQS Analysis

Pollutant	Averaging Period	Rank	Load Scenario	Modeled Concentration (µg/m ³)	Secondary PM _{2.5} ⁽⁴⁾ (µg/m ³)	Ambient Background Concentration (µg/m ³)	Total Concentration ⁽³⁾ (µg/m ³)	NAAQS (µg/m ³)	Exceeds NAAQS?
NO ₂	1-hour	8 th	Base Case	67.69	--	Included ⁽¹⁾	67.69	188	No
			Worst Case	162.40	--	Included ⁽¹⁾	162.40	188	No
PM _{2.5}	24-hour	8 th	Base Case	2.68	0.029	21.6 ⁽²⁾	24.31	35	No
			Worst Case	2.34	0.029	21.6 ⁽²⁾	23.97	35	No
	Annual	1 st	--	0.67	0.002	7.2 ⁽²⁾	7.89	9	No

- (1) Season hour of day background concentrations calculated from State College, PA monitor, see **Table 4-10**.
- (2) Ambient background concentrations from the State College, PA monitor, see **Table 4-9**.
- (3) Total concentration includes CCCT Project, nearby sources, and monitored background concentrations.
- (4) For Secondary PM_{2.5} concentrations for 24-hour and annual averaging periods, see **Table 4-7**.

Figure 6-1. Location of Background Sources

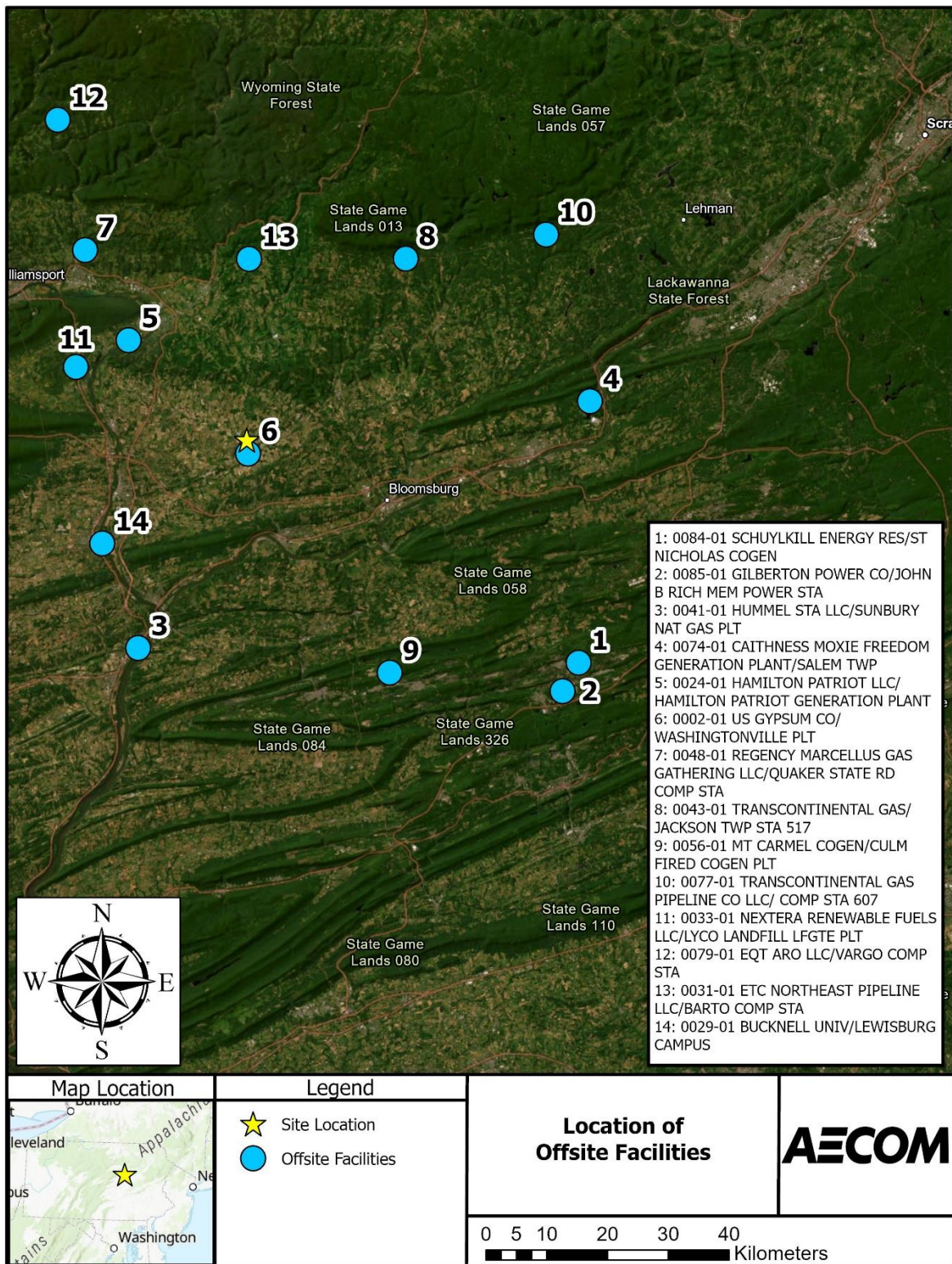


Figure 6-2 displays the locations of the maximum cumulative NAAQS impacts for the 1-hour NO₂ and 24-hour and annual PM_{2.5} results presented in **Table 6-1**. For 1-hour NO₂ (base and worst-case), 24-hour PM_{2.5} (base and worst-case), and Annual PM_{2.5}, maximum modeled locations are approximately 4.3-km to the southeast of the CCCT Project sources. All maximum modeled concentrations fell within the original 100-m spaced receptor grid, so no further refinement modeling was needed.

6.4 PSD Increment Analysis Results

A summary of the PSD increment analysis is presented in **Table 6-2** for 1-hour NO₂, 24-hour PM_{2.5}, and annual PM_{2.5}. The modeled concentrations presented in **Table 6-2** represent the CCCT Project (including the secondary PM_{2.5} estimated in **Section 4.8**), and nearby background PSD increment-consuming sources. The results of the cumulative modeling analysis indicate that the CCCT Project will not cause or contribute to an exceedance of the 1-hour NO₂, 24-hour PM_{2.5} and annual PM_{2.5} PSD increments.

As shown in **Figure 6-3**, the maximum 24-hour and annual PM_{2.5} averaging period concentrations are located 4.3-km from the CCCT Project sources and are separated from each other by approximately 223-m. The locations of maximum concentrations are within the 100-m spaced domain and therefore do not need to be refined further.

Table 6-2. Summary of PSD Increment Analysis

Pollutant	Averaging Period	Rank	Scenario	Modeled Concentration (µg/m ³)	Secondary PM _{2.5} ⁽¹⁾ (µg/m ³)	Total Concentration (µg/m ³)	PSD Increment (µg/m ³)	Exceeds PSD Increment?
PM _{2.5}	24-hour	2 nd	Base Case	3.89	0.029	3.92	9	No
			Worst Case	3.71	0.029	3.74	9	No
	Annual	1 st	--	0.73	0.002	0.74	4	No

1) For Secondary PM_{2.5} concentrations for 24-hour and annual averaging periods, see **Table 4-7**.

Figure 6-1. Location of Background Sources

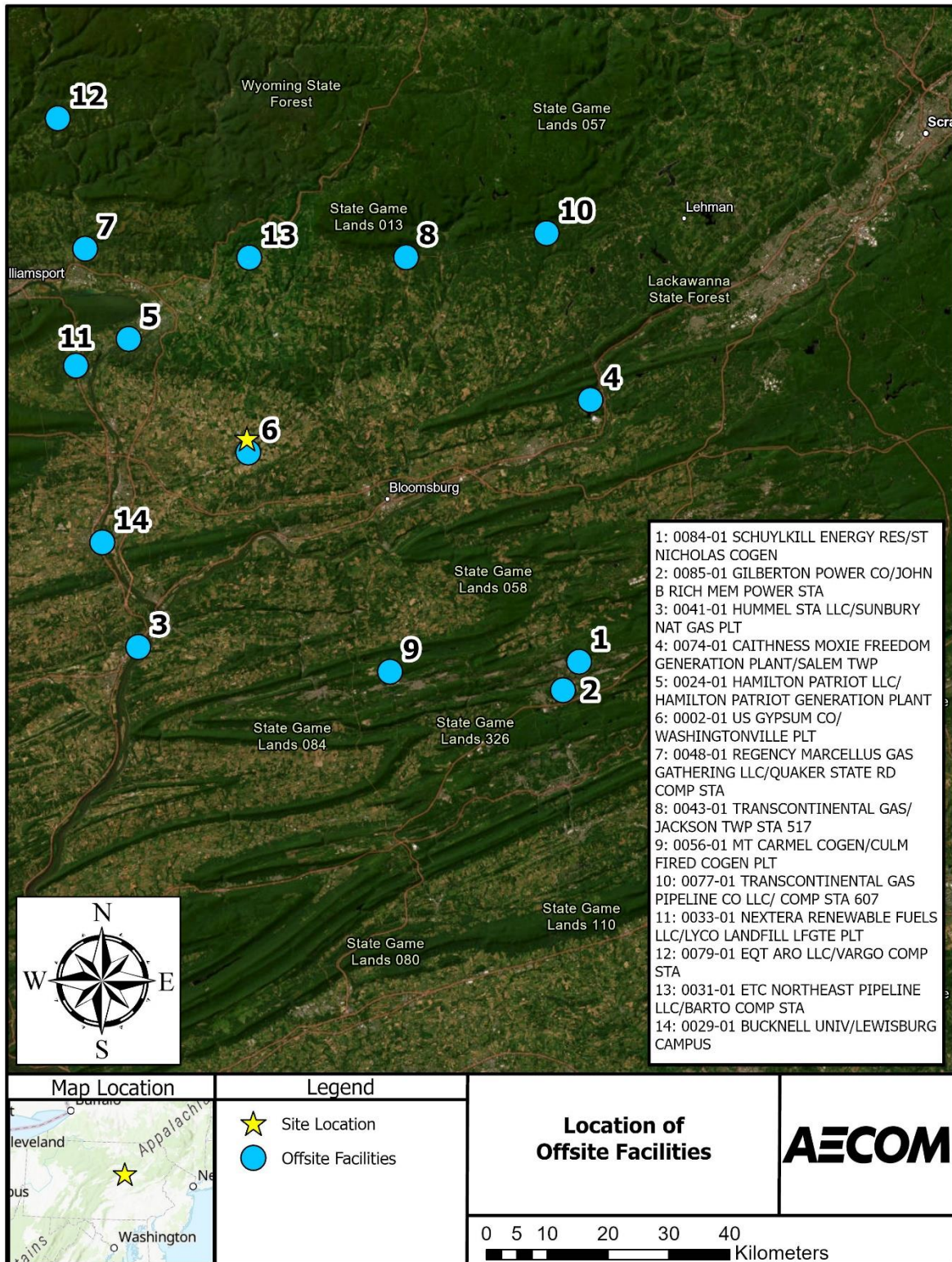


Figure 6-2. Location of Maximum Cumulative NAAQS Impacts for NO₂ and PM_{2.5}

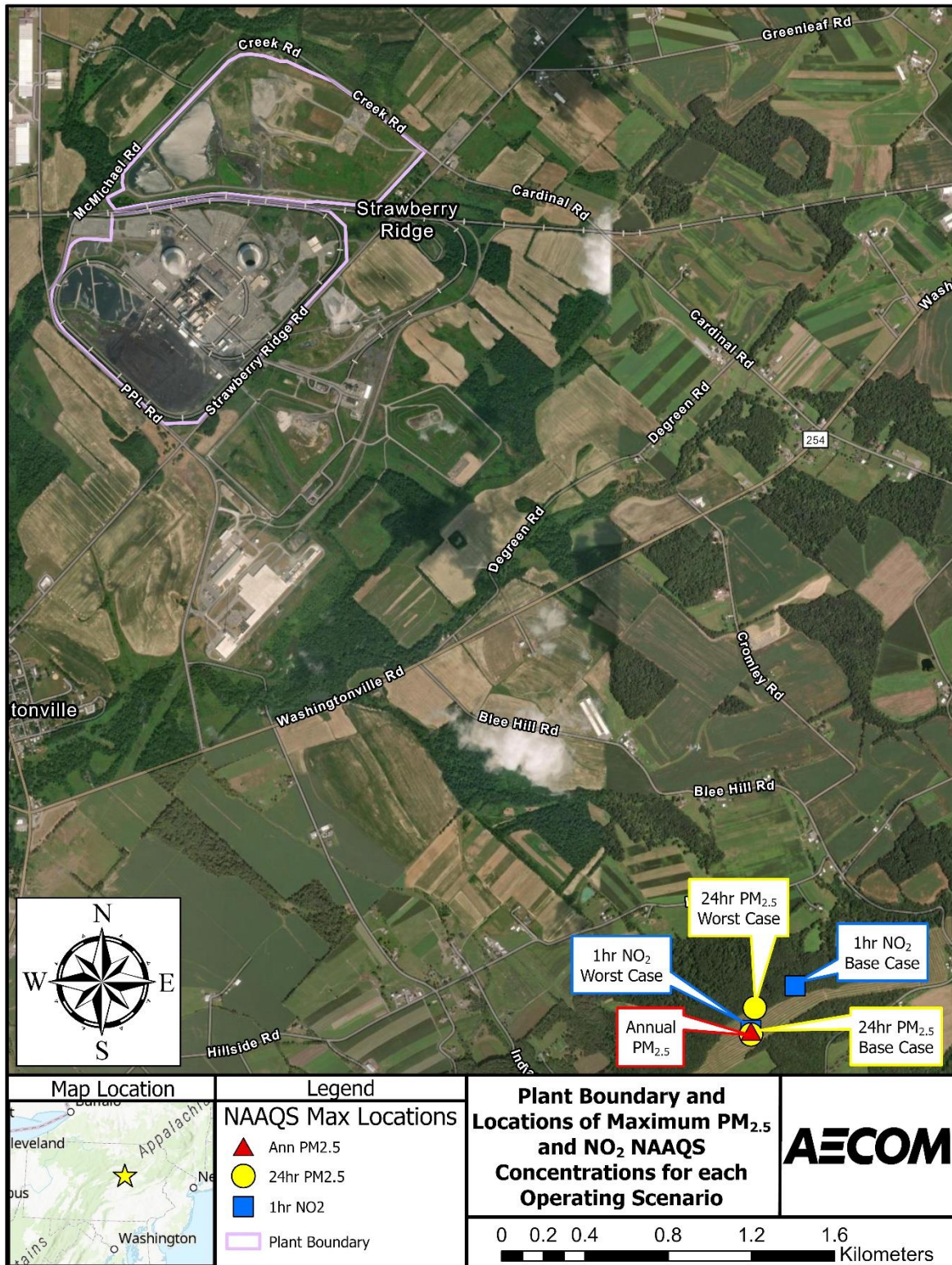
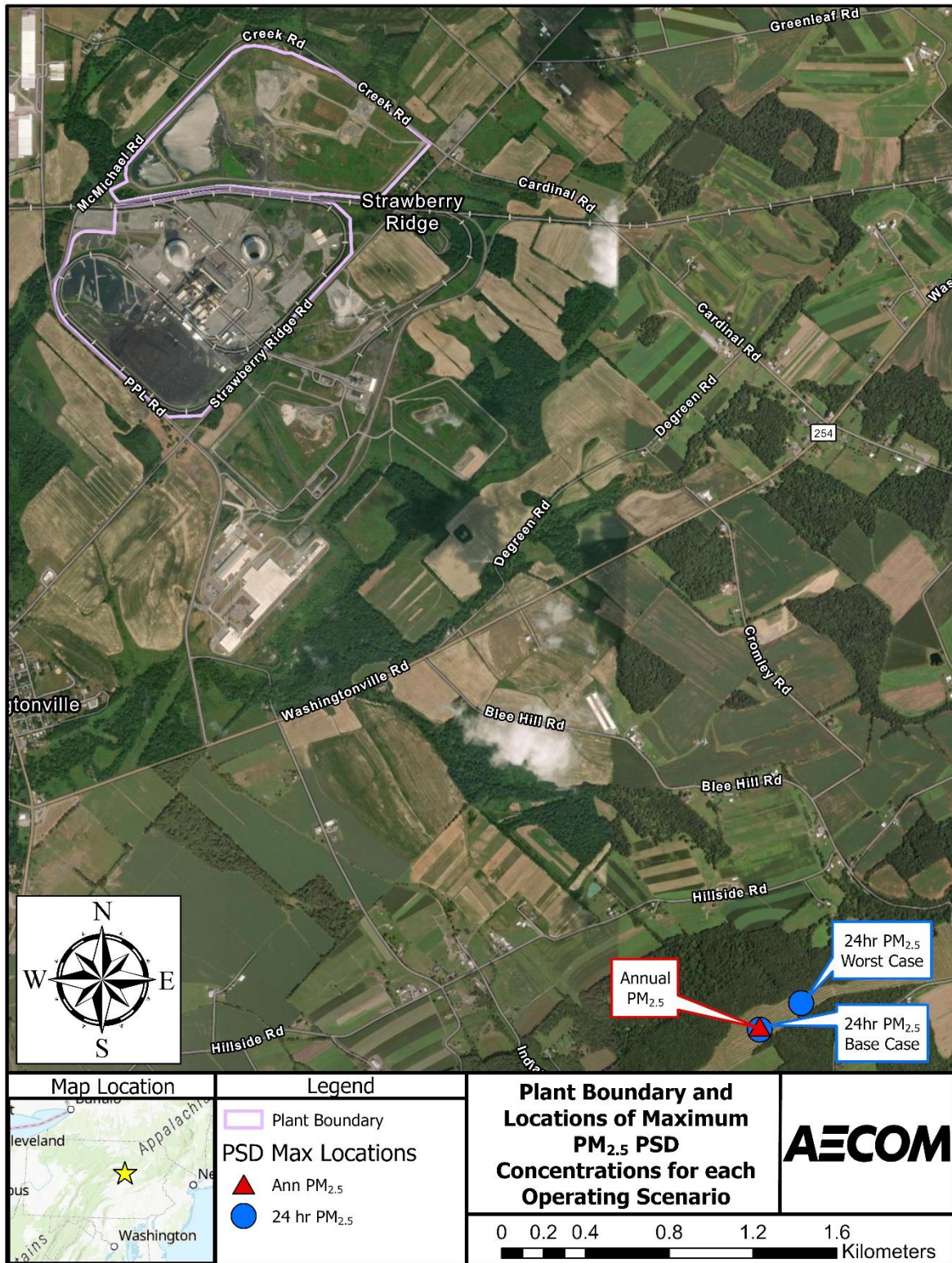


Figure 6-3: Location of Maximum Cumulative PSD Impacts for PM_{2.5}



7. Other PSD Requirements

7.1 Class I Area Impact Analysis

PSD Class I areas are areas of special national or regional value from a natural, scenic, recreational, or historical perspective. The PSD program provides special protection for such areas. According to 40 CFR §52.21(p), sources located within 300-km of a Class I area may be required to demonstrate that the CCCT Project will not cause or contribute to an exceedance of the PSD Class I increments or adversely affect certain air quality-related values. The two (2) PSD Class I areas located within 300-km of the CCCT Project are pictured in **Figure 7-1** and their approximate distances are:

- Brigantine Wilderness: 254-km
- Shenandoah National Park: 273-km

7.1.1 Air Quality Related Values

Per guidance in *Federal Land Managers' Air Quality Related Values Work Group* (NPS 2010), if the sum of short-term project emissions for pollutants that trigger PSD Review (NO_x, H₂SO₄ and PM₁₀ (filterable)) expressed in tons per year is less than ten times the distance to the Class I area (in kilometers), the Federal Land Managers (FLM) will likely decide that an analysis of AQRVs (including regional haze and acid deposition) is not necessary (referred to as the "Q/D" screen). The 2010 guidance states that a proposed source with a Q/D ratio less than 10 will likely not have an adverse impact on air quality related values, where 'Q' is the annual steady-state equivalent emission rate based on the sum of NO_x, SO₂, filterable PM₁₀, and H₂SO₄ emissions (expressed in tons per year, based on maximum 24-hour emissions) and 'D' is the distance (km) to the closest Class I area.

The sum of the preliminary estimated CCCT Project emissions for the pollutants that trigger PSD review listed above were used to perform a Q/D screening calculation as shown in **Table 7-1**. Based on the Q/D, Montour SES plans to prepare a Request for Applicability of Class I Area Modeling Analysis to the United States Forest Service (USFS) and the National Park Service (NPS) for review to confirm that an assessment of AQRVs is not required. Montour SES will forward USFS and NPS response to PADEP once it is received.

Table 7-1. Q/D Screening Calculation

Averaging Period	NO _x (TPY)	PM ₁₀ (TPY)	SO ₂ (TPY) ⁽²⁾	H ₂ SO ₄ (TPY)	Distance (km)	Total Q/D
Brigantine Wilderness						
24-hour	341.27 ⁽¹⁾	212.23	0	40.39	254	2.34
Annual	293.14	212.23	0	40.39	254	2.14
Shenandoah National Park						
24-hour	341.27 ⁽¹⁾	212.23	0	40.39	273	2.18
Annual	293.14	212.23	0	40.39	273	2.00

(1) Emissions are TPY Equivalent. Assumes one cold start (171.4 lb/hr) and highest hourly emission rate (33.2 lb/hr) for 23 hours for both units and converted to TPY $((171.4 + (23 \times 33.2)) \times 2)$.

(2) Non-PSD pollutant.

Figure 7-1. PSD Class I Areas



7.1.2 Class I PSD Increments

In accordance with Appendix W (Section 4.2.c.i), because AERMOD is proposed for the CCCT Project's nearfield assessment, it can be utilized in a screening-level analysis to estimate the project's potential for a significant modeled concentration at the PSD Class I areas. As such, AERMOD was used to assess the Class I PSD increments for PM₁₀, PM_{2.5}, and NO₂. AERMOD was applied with a ring of receptors placed at 50-km (see **Figure 7-2**), the maximum distance at which AERMOD is considered valid. For conservatism, receptors were not limited to directions in which the plume could be transported from the source to the Class I area(s). At these receptors, the maximum modeled concentrations associated with the project were compared to the Class I PSD SILs (see **Table 3-3**). As shown in **Table 7-2**, the maximum modeled CCCT Project concentrations are greater than the Class I area SILs for 24-hour and annual PM_{2.5} and 24-hour PM₁₀.

Table 7-2. Class I Area – SIL Modeling Results

Pollutant	Averaging Period	Maximum Modeled Concentration (µg/m ³)	Class I SILs (µg/m ³)	Exceeds Class I Area SIL?
NO ₂	Annual	0.08	0.1	No
PM ₁₀	24-hour (Base Case) ¹	0.51	0.3	Yes
	24-hour (Worst Case) ²	0.31	0.3	Yes
	Annual	0.06	0.2	No
PM _{2.5}	24-hour (Base Case) ¹	0.51	0.27	Yes
	24-hour (Worst Case) ²	0.31	0.27	Yes
	Annual	0.06	0.03	Yes

(1) Base Case: two (2) GE 7HA.02 at 100% load + Duct Burner
 (2) Worst Case: two (2) GE 7HA.02 at startup

Since the AERMOD concentrations at 50-km are greater than the SIL for 24-hour and annual PM_{2.5} and 24-hour PM₁₀, the AERMOD modeling results were extrapolated out to the Class I area distances. To create an equation to extrapolate the concentrations at 50-km out to the distance of each Class I area, more receptors were needed. Additional receptors were arranged in arcs spaced 1 degree apart within a sector in which the emissions from the plant could be transported to the Class I areas. The arcs were placed in 1-km increments from the center of the CCCT Project out to a distance of 50-km (see

Figure 7-3 and Figure 7-4).

The AERMOD results at each downwind arc were then used to formulate an equation to approximate the modeled concentrations beyond 50-km using the change in concentration as a function of distance from the CCCT Project. Once the maximum AERMOD concentration for each downwind arc was summarized for PM_{2.5}, it was added to the maximum secondary PM_{2.5} concentrations from the MERPs View Qlink website. Data from the MERPs View Qlink website was pulled for Adams County and Chester County at distances of 240-km, 260-km, and 280-km. The maximum 24-hour and annual values between the two counties and three distances was added to the maximum AERMOD concentration for each downwind arc. The maximum secondary 24-hour PM_{2.5} concentration is 2.785E-02 µg/m³ and the maximum secondary annual PM_{2.5} concentration is 7.298E-04 µg/m³. Then the combined primary plus secondary PM_{2.5} values were plotted as shown in **Figure 7-6, Figure 7-7, Figure 7-9, and Figure 7-10** for the 24-hour and annual PM_{2.5} for each Class I area. The maximum AERMOD concentration for each downwind arc was summarized and plotted for 24-hour PM₁₀ for each Class I area in **Figure 7-5 and Figure 7-8**.

Based on the plots, Excel was used to generate a best-fit exponential equation to then calculate the concentration of 24-hour and annual PM_{2.5} and 24-hour PM₁₀ at the distance of the Class I areas for the Base Case as it represented a slightly higher 24-hour average concentration at 50-km. The equations used to extrapolate the modeled concentrations out to the Class I area distances are as follows:

24-hour PM₁₀ equation (Brigantine Wilderness) → $y = 17.721e^{-0.08x}$

24-hour PM_{2.5} equation (Brigantine Wilderness) → $y = 14.999e^{-0.075x}$

Annual PM_{2.5} equation (Brigantine Wilderness) → $y = 1.5695e^{-0.072x}$

24-hour PM₁₀ equation (Shenandoah National Park) → $y = 0.3022e^{-0.028x}$

24-hour PM_{2.5} equation (Shenandoah National Park) → $y = 0.2944e^{-0.021x}$

Annual PM_{2.5} equation (Shenandoah National Park) → $y = 0.014e^{-0.018x}$

Where y is the calculated concentration in $\mu\text{g}/\text{m}^3$ and x is the distance in kilometers.

Applying each equation results in modeled concentrations less than the Class I SILs for 24-hour PM₁₀ and 24-hour and annual PM_{2.5} (see **Table 7-3**).

Table 7-3. Extrapolated PM₁₀ and PM_{2.5} Modeled Concentrations at the Class I Area Distances

Pollutant	Averaging Period	Class I Area	Distance (km)	Concentration ($\mu\text{g}/\text{m}^3$)	Class I SILs ($\mu\text{g}/\text{m}^3$)	Exceeds Class I Area SIL?
PM ₁₀	24-hour (Base Case)	Brigantine Wilderness	254	2.65E-08	0.3	No
	24-hour (Base Case)	Shenandoah National Park	273	1.45E-04	0.3	No
PM _{2.5}	24-hour (Base Case)	Brigantine Wilderness	254	7.99E-08	0.27	No
	24-hour (Base Case)	Shenandoah National Park	273	9.53E-04	0.27	No
	Annual	Brigantine Wilderness	254	1.79E-08	0.03	No
	Annual	Shenandoah National Park	273	1.03E-04	0.03	No

Figure 7-2. 50-km ring of Receptors Used for Class I Modeling

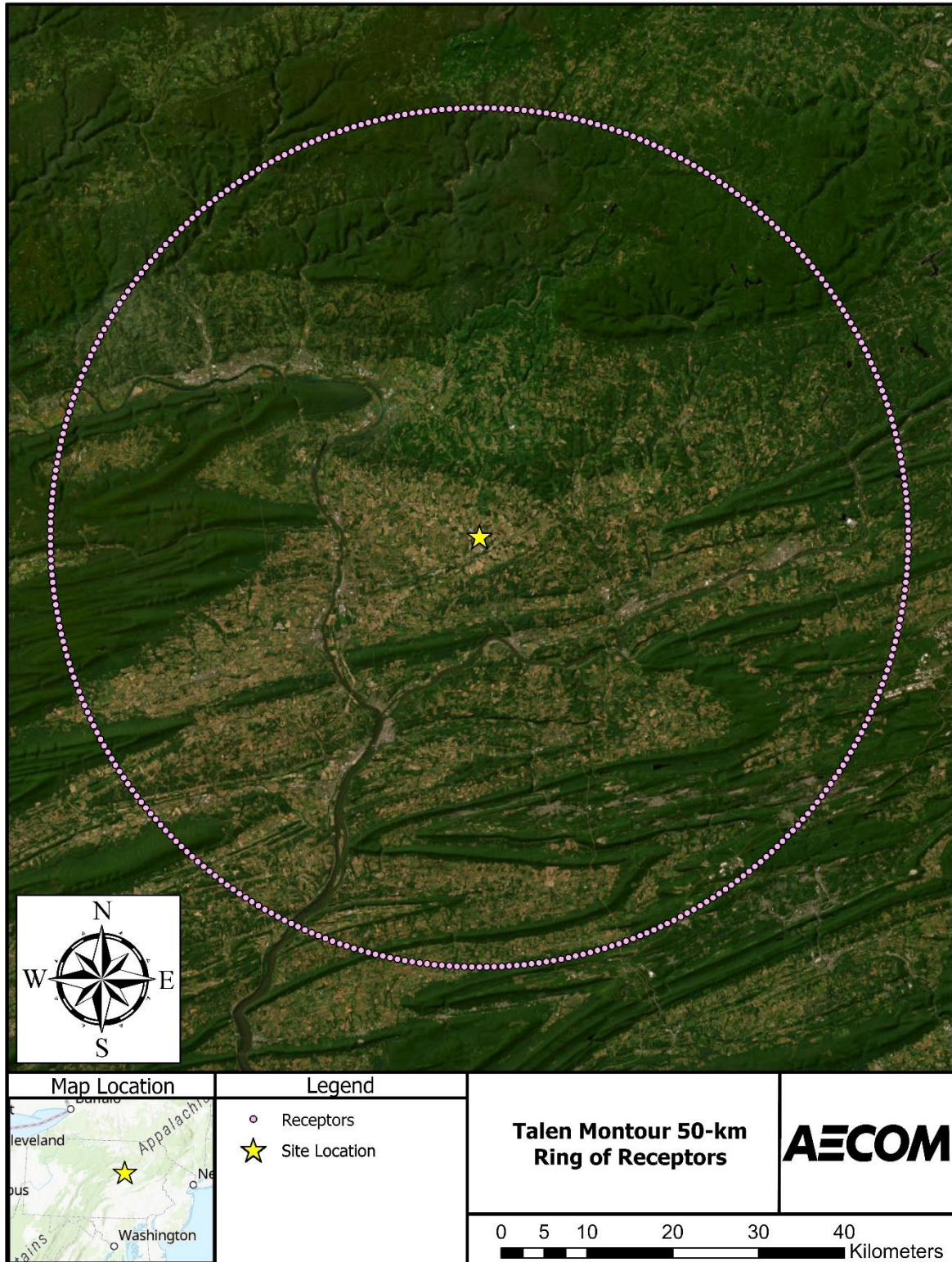


Figure 7-3. 50-km arc of Receptors Used for Class I Modeling (Brigantine Wilderness)



Figure 7-4. 50-km arc of Receptors Used for Class I Modeling (Shenandoah National Park)

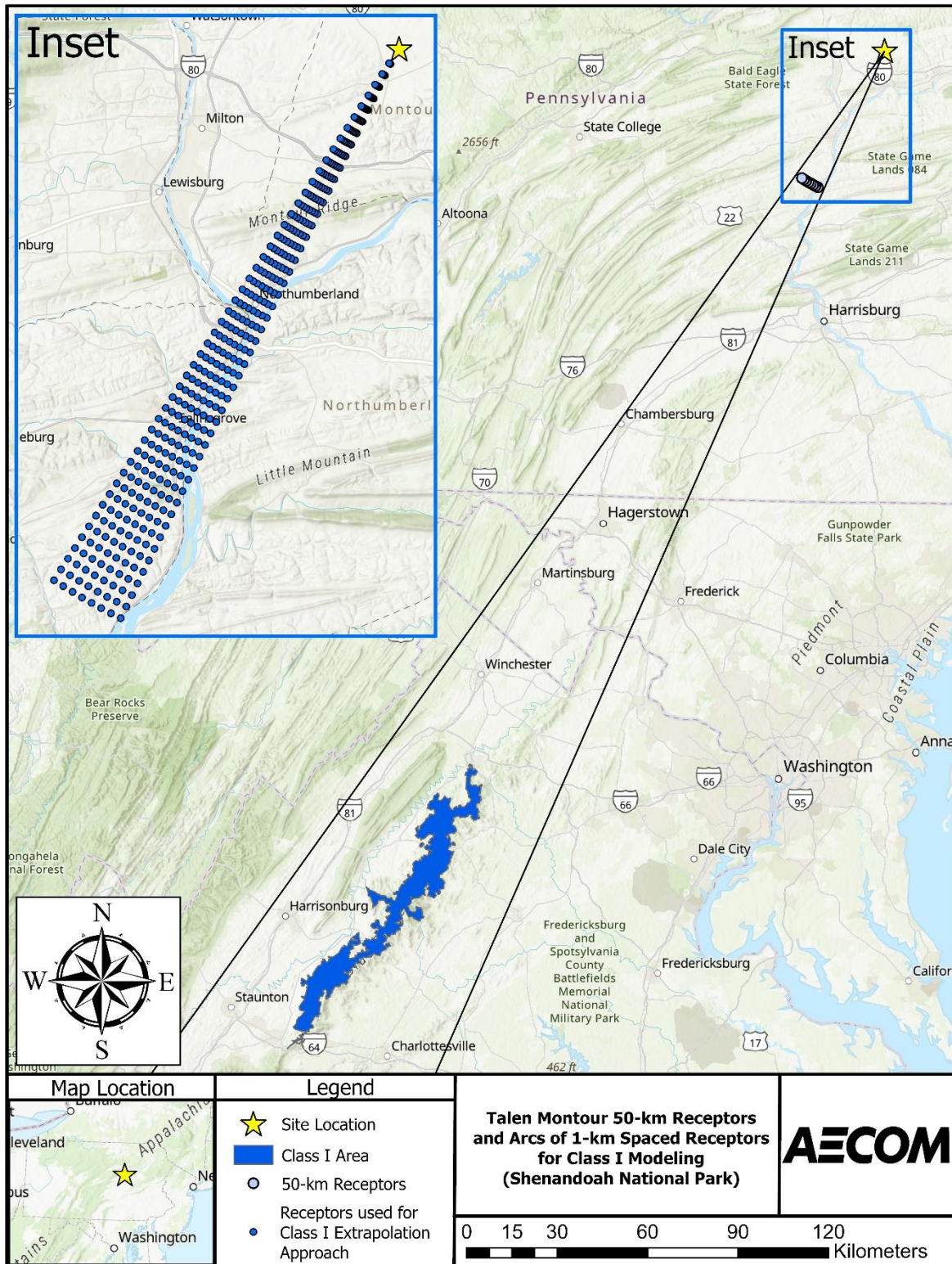


Figure 7-5. Arc-Maximum Concentration of 24-hour PM₁₀ (Base Case) by Distance from CCCT Project (Brigantine Wilderness)

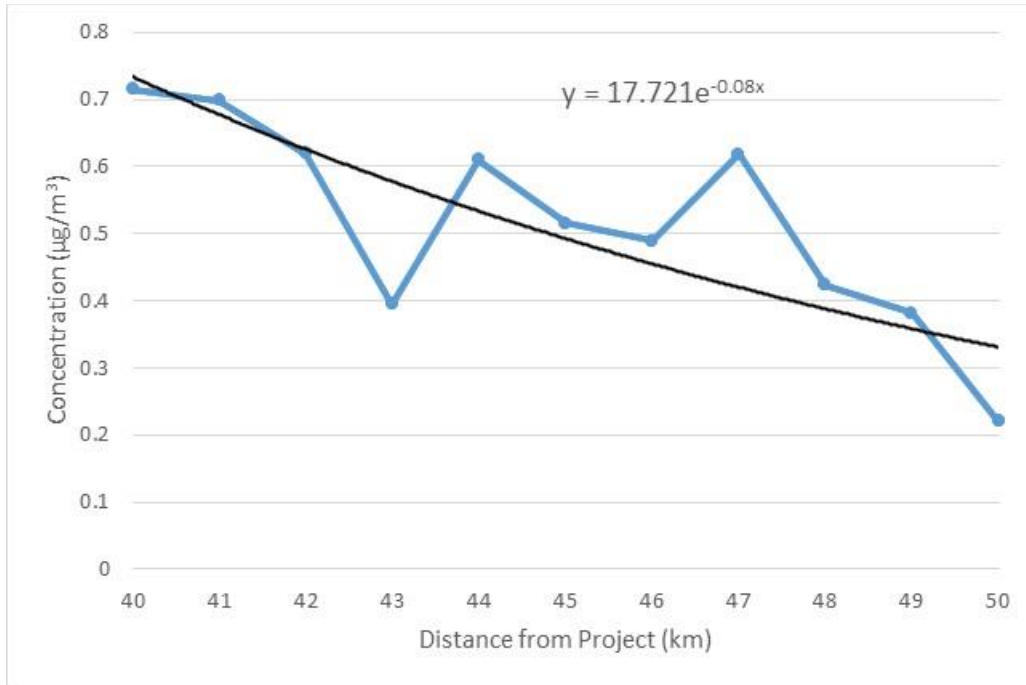


Figure 7-6. Arc-Maximum Concentration of 24-hour PM_{2.5} (Base Case) by Distance from CCCT Project (Brigantine Wilderness)

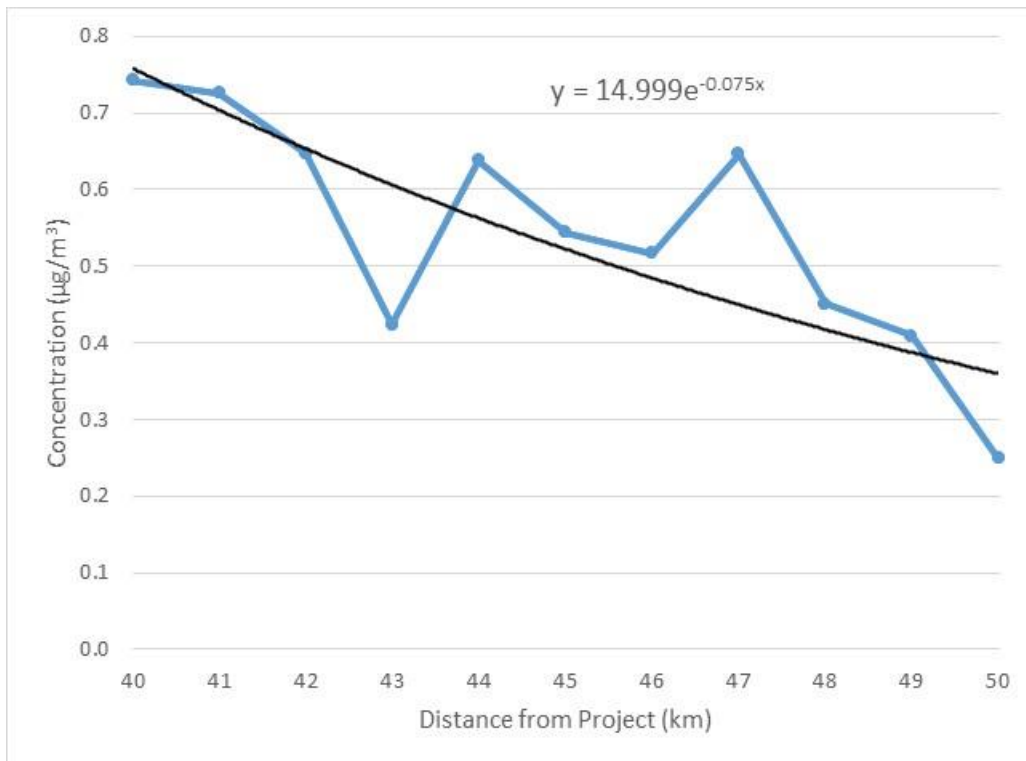


Figure 7-7. Arc-Maximum Concentration of Annual PM_{2.5} by Distance from CCCT Project (Brigantine Wilderness)

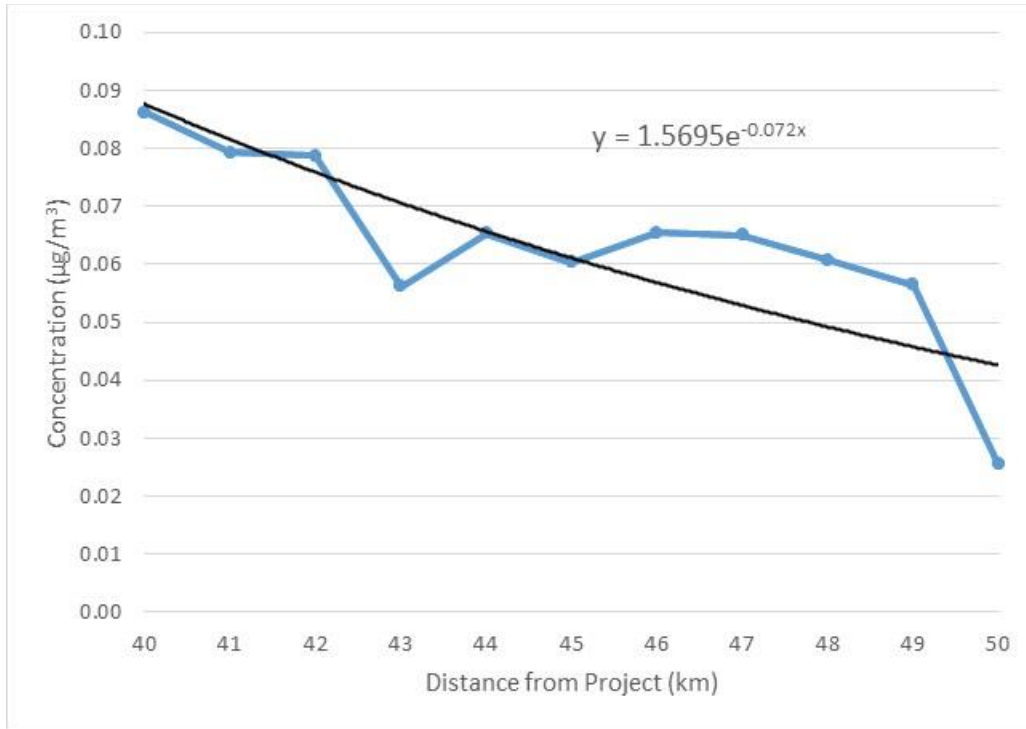


Figure 7-8. Arc-Maximum Concentration of 24-hour PM₁₀ (Base Case) by Distance from CCCT Project (Shenandoah National Park)

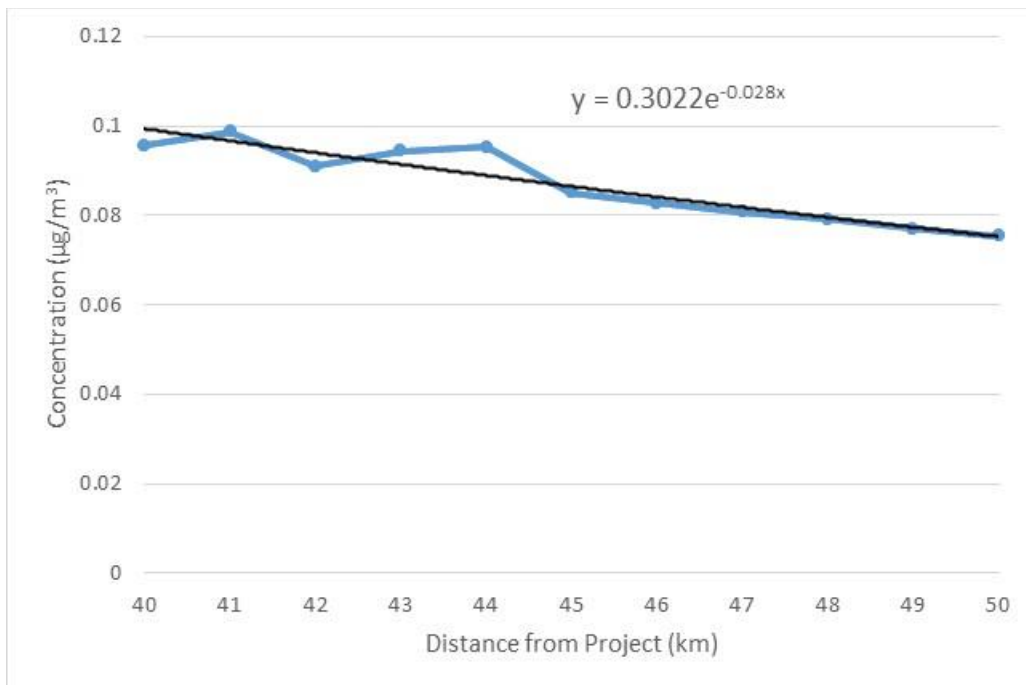


Figure 7-9. Arc-Maximum Concentration of 24-hour PM_{2.5} (Worst Case) by Distance from CCCT Project (Shenandoah National Park)

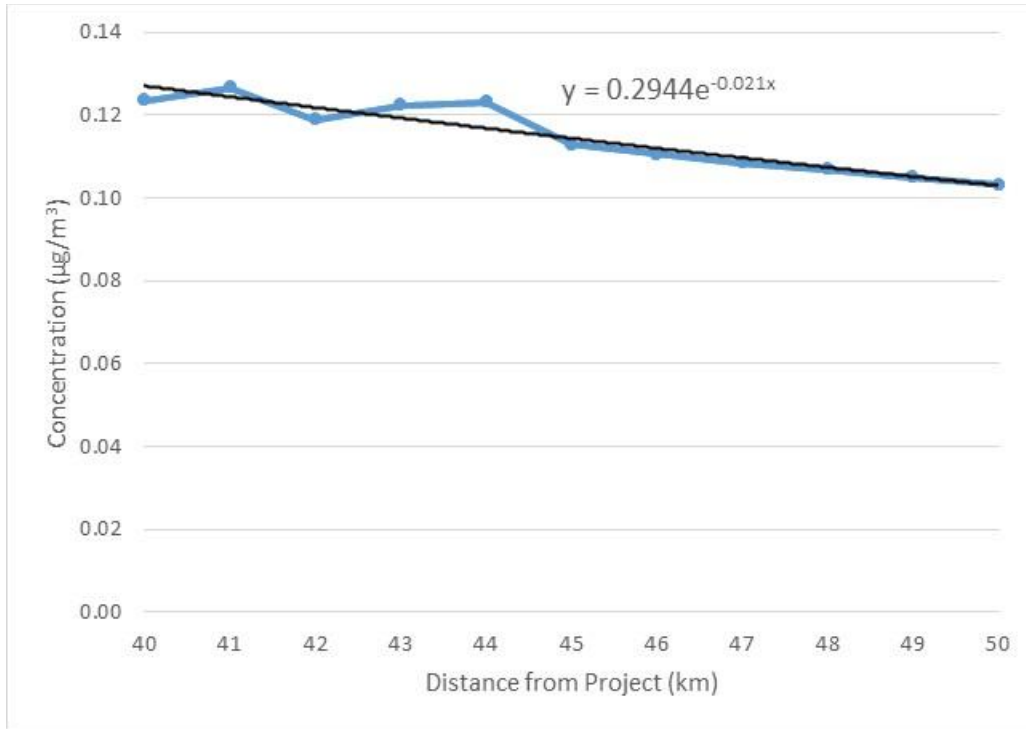
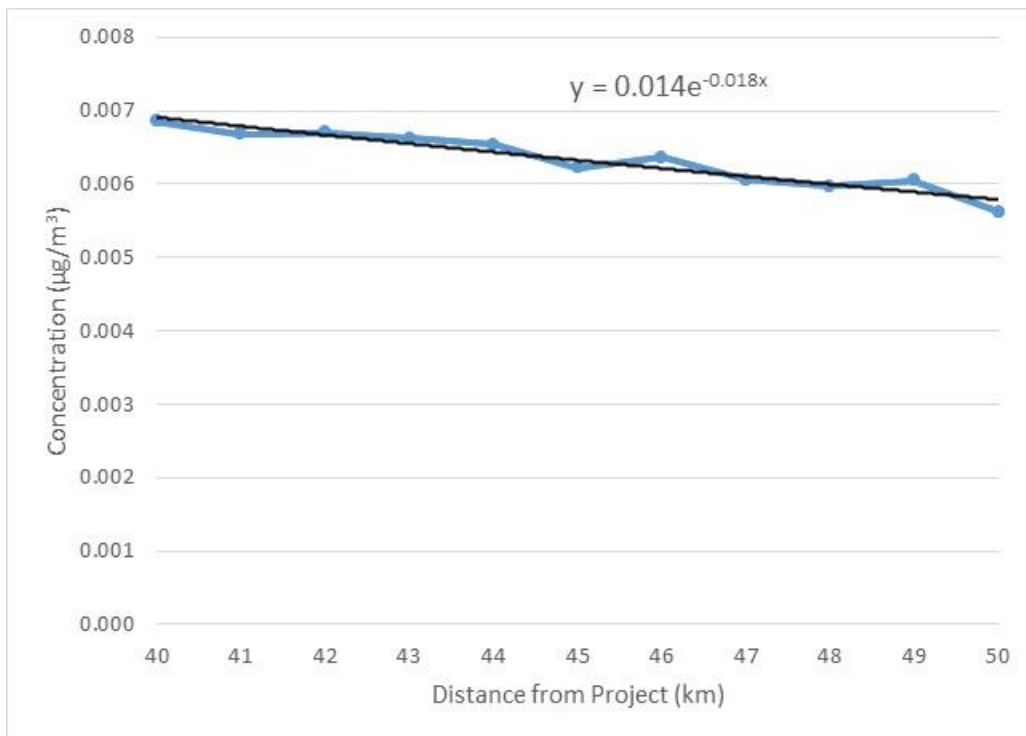


Figure 7-10. Arc-Maximum Concentration of Annual PM_{2.5} by Distance from CCCT Project (Shenandoah National Park)



7.2 Class II Visibility

A Class II visibility analysis is required for state parks and state historic sites located within the CCCT Project's vicinity. This analysis was performed beginning with a screening procedure similar to that outlined in the U.S. EPA document *Workbook for Estimating Visibility Impairment* (U.S. EPA 1980a).

The closest state park, Milton State Park, is approximately 17-km to the west-southwest of the CCCT Project. A visibility analysis was conducted with U.S. EPA's VISCREEN model. The analysis was conducted in accordance with U.S. EPA's Workbook for Plume Visual Impacts Screening and Analysis (Revised) ("Workbook"; U.S. EPA, 1992). The VISCREEN model was applied to estimate two visual impact parameters, plume perceptibility (ΔE) and plume contrast (C_p). Screening-level guidance indicates that values above 2.0 for ΔE and +/- 0.05 for C_p are considered perceptible. The analysis was conservatively based on the maximum hourly future NO_2 , SO_4 , and PM potential emission rates due to the CCCT Project.

The VISCREEN model Workbook offers two levels of analysis. The Level 1 screening analysis is the most simplified and conservative approach, employing worst-case default meteorological data, F stability (very stable) and 1 meter per second wind speed. The Level 2 analysis allows refinement of meteorological conditions and site-specific conditions such as complex terrain. In accordance with the Workbook, a visual range of 25-km was used in the application of VISCREEN (see Figure 9 of the Workbook). Initially, the Level 1 analysis was conducted and indicated ΔE and C_p values were above the screening thresholds. Therefore, a Level 2 analysis was conducted.

The Level 2 analysis was conducted with five years (2020-2024) of surface observations from Selinsgrove Airport (KSEG) and upper air data from Pittsburgh International Airport (KPIT). This is the same meteorological dataset discussed in **Section 4.6**.

The source data required by VISCREEN are PM_{10} emissions (48.20 – 9.21 = 38.99 lb/hr), NO_x emissions (342.80 lb/hr), and primary H_2SO_4 (9.21 lb/hr) for the CCCT Project (refer to **Table 2-3** for CCCT Project emissions for PM_{10} and, NO_x , and **Table 2-1** for H_2SO_4 , converted from tons/year)⁶. Note the PM_{10} emission were adjusted as to not double the H_2SO_4 as condensable particulate and primary sulfuric acid emissions. These emissions represent worst case emission rates.

The wind direction sector that would transport emissions from the CCCT Project site toward Milton State Park, along with the closest distance from the park to the CCCT Project site, are shown in **Table 7-4**. The wind direction sector is consistent with Workbook guidance that is +/- 11.25° to the left and right of the centerline of view from CCCT Project to state park. The location of Milton State Park relative to the CCCT Project site is shown in **Figure 7-11**.

Table 7-4. VISCREEN Level 2 Input Data

22.5° Wind Sector	Closest Distance to the Source (km)	Furthest Distance from the Source (km)	Level 2 Worst Case Stability Class	Level 2 Worst Case Wind Speed (m/s)
59.22 – 81.72	16.98	17.92	D	2

Based on this information, and the five years of meteorological data, a table of joint frequency of occurrence of wind speed, wind direction, and stability class was developed as outlined in the Workbook. The dispersion conditions, defined by wind speed and stability class, were ranked by evaluating the product of σ_y , σ_z , and u , where σ_y and σ_z are the Pasquill-Gifford horizontal and vertical diffusion coefficients for the given stability class and downwind distance and u is the wind speed. The dispersion conditions were then ranked in ascending order according to the value of $\sigma_y\sigma_zu$ as shown in **Table 7-5**.

According to the Workbook, VISCREEN is to be applied with the worst-case meteorological conditions that have a $\sigma_y\sigma_zu$ product with a cumulative probability of one percent. That is, the dispersion condition is selected such that the sum of all frequencies of occurrence of conditions worse than this condition totals one percent. Note that as recommended by the Workbook, dispersion conditions that result in greater than 12 hours of plume transport time are

⁶ Emissions from **Table 2-3** are by unit. So values from **Table 2-3** were multiplied by 2 to account for the 2 units of the Project sources.

discounted from the analysis, since it is unlikely that steady-state plume conditions would persist for more than 12 hours.

Table 7-5. Dispersion Condition Frequency Analysis

Stability Class	Dispersion Condition Wind Speed (m/s)	$\sigma_y\sigma_zU$ (m ³ /s)	Transport Time (hours)	Frequency by Time of Day (%)				Cumulative Frequency by Time of Day (%)			
				0-6	6-12	12-18	18-24	0-6	6-12	12-18	18-24
F	1	25006	10	0.475	0.110	0.027	0.219	0.475	0.110	0.027	0.219
F	2	50012	3	0.420	0.091	0.064	0.392	0.894	0.201	0.091	0.612
E	1	66606	10	0.000	0.000	0.009	0.009	0.894	0.201	0.100	0.621
F	3	75017	2	0.000	0.000	0.000	0.000	0.894	0.201	0.100	0.621
E	2	133212	3	0.018	0.009	0.055	0.027	0.913	0.210	0.155	0.648
D	1	160031	10	0.009	0.000	0.000	0.000	0.922	0.210	0.155	0.648
E	3	199818	2	0.164	0.027	0.055	0.265	1.086	0.237	0.210	0.913
E	4	266424	1	0.037	0.009	0.009	0.164	1.123	0.246	0.219	1.077
D	2	320061	3	0.000	0.027	0.018	0.000	1.123	0.274	0.237	1.077
E	5	333030	1	0.000	0.000	0.000	0.000	1.123	0.274	0.237	1.077
D	3	480092	2	0.009	0.064	0.073	0.009	1.132	0.338	0.310	1.086
D	4	640123	1	0.000	0.018	0.055	0.055	1.132	0.356	0.365	1.141
D	5	800154	1	0.027	0.027	0.064	0.037	1.159	0.383	0.429	1.177
D	6	960184	1	0.009	0.009	0.018	0.018	1.168	0.392	0.447	1.196
D	7	1120215	1	0.000	0.000	0.000	0.000	1.168	0.392	0.447	1.196
D	8	1280246	1	0.018	0.000	0.000	0.000	1.187	0.392	0.447	1.196

Notes: Bold denotes row the worst-case meteorological conditions during daytime hours (6am – 6pm).

According to **Table 7-5**, a cumulative frequency of 1 percent during daytime hours (6am to 6pm) would not occur. Since the frequency of winds flowing from Montour to the direction of Milton State Park is low (approximately 2 percent based on **Figure 4-6**), a cumulative frequency of 1 percent is not met. The first daytime (stability class D) in **Table 7-5** is row 6 (D stability, 1 m/s). However, this has a transport time of 10 hours compared to the next D stability on row 9 with wind speed of 2 m/s and transport time of only 3 hours. Due to the shorter transport time, D stability with wind speed of 2 m/s was identified as the worst-case meteorological conditions. Therefore, VISCREEN was applied with D stability and a wind speed of 2 m/s. As recommended by the Workbook, a visual range of 25 kilometers was used (see Figure 9 of the Workbook). The VISCREEN results are summarized in **Table 7-6** using maximum emissions during normal operations. VISCREEN provides results of ΔE and C_p for both sky and terrain backgrounds. The results are below the significance criteria for both sky and terrain above background for both ΔE and C_p for all view angles. Therefore, the plume is expected to be imperceptible against background sky and terrain.

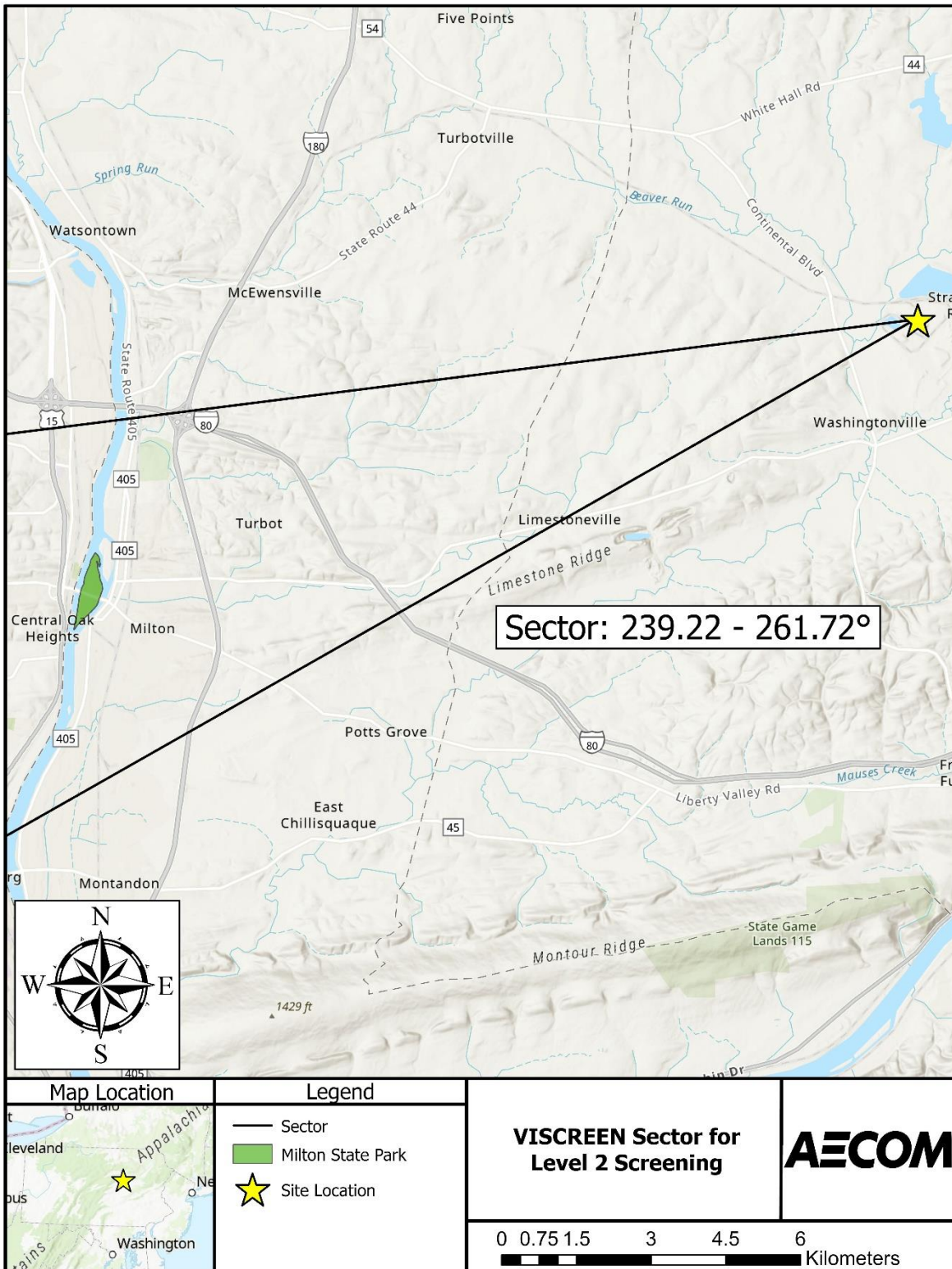
Table 7-6. VISCREEN Results Inside Class I Area

Background	Theta ¹	Azimuth	Distance	Alpha	ΔE		Contrast (C_p)	
					Criteria	Plume	Criteria	Plume
					SKY	10	98	17.9
SKY	140	98	17.9	71	2.00	0.413	0.05	-0.006 ²
TERRAIN	10	82	17.0	87	2.00	0.530	0.05	0.006
TERRAIN	140	82	17.0	87	2.00	0.132	0.05	0.004

1. VISCREEN results are provided for the two VISCREEN default worst-case theta angles. The two theta angles represent the sun being in front of the observer (theta = 10 degrees) and behind the observer (theta = 140 degrees).

2. A negative C_p means the plume has a darker contrast than the background sky.

Figure 7-11. VISCREEN Level 2 Analysis Wind Sector



7.3 Air Quality Review and Pre-construction Monitoring

According to 40 CFR §52.21(m), an analysis of ambient air quality in the vicinity of the CCCT Project for each pollutant subject to PSD review must be conducted.

Air quality data are obtained from pre-construction monitoring or, under certain conditions, from existing monitoring data. Existing air quality may be used in lieu of pre-construction monitoring if:

- The data are representative of the proposed facility's impact areas;
- The data are of similar quality as would be obtained if the applicant monitored according to the PSD requirements; and
- The data are current; that is, the data have been collected during the two-year period preceding the permit application, provided the data are still representative of current conditions.

As noted in 40 CFR §52.21(i)(5), PADEP may exempt the source from the PSD program's ambient air quality monitoring analysis requirements contained in 40 CFR §52.21(m) on a pollutant-by-pollutant basis, except for PM_{2.5}, if the net emissions increase of pollutants subject to PSD review will cause air quality impacts less than the significant monitoring concentrations (SMCs). In accordance with *Sierra Club v. U.S. EPA* 706 F.3d 428 (DC Cir. 2013), there is no exemption available for PM_{2.5}. Therefore, existing ambient monitoring data from PADEP's monitoring network will be used to satisfy the requirement for pre-construction monitoring, as described in **Section 4.10**. **Table 7-7** presents the applicable SMCs for the pollutants modeled.

Table 7-7. Significant Monitoring Concentrations

Pollutant	Averaging Period	Significant Monitoring Concentration (µg/m ³)
PM ₁₀	24-hour	10
NO ₂	Annual	14
CO	8-hour	575
PM _{2.5}	24-hour; Annual	0

Source: 40 CFR §52.21(i)(5)

7.4 Soil and Vegetation

The PSD regulations require an evaluation of the impact of the CCCT Project emissions on soils and vegetation. An analysis of the CCCT Project's potential impact on soils and vegetation in the vicinity of the facility was performed by comparing the maximum modeled impacts from the CCCT Project to the screening concentrations provided in U.S. EPA's "A Screening Procedure for the impacts of Air Pollution Sources on Plants, Soils, and Animals" (December 12, 1980) as well as secondary NAAQS. Secondary NAAQS have been designed by U.S. EPA to better protect public welfare against adverse effects caused by criteria air pollutants – including ecological effects such as damage to aquatic and terrestrial ecosystems. In addition, a comparison of CCCT Project modeled concentrations associated with non-criteria pollutants for which there are project emissions and ambient air screening concentrations in Table 5-3 of U.S. EPA 1980 guidance, (beryllium and lead) was performed. Specifically, CCCT Project modeled concentrations for beryllium and lead were estimated with AERMOD using the same methodologies described in **Section 4**. The highest modeled concentrations were compared to the AQRV screening concentrations summarized in **Table 7-8**.

The U.S. EPA screening guidance does not include any values for PM₁₀ or PM_{2.5}. As such, the highest predicted impacts from the CCCT Project used in the SIL analysis were compared to the secondary NAAQS, as shown in **Table 7-8**. The results of the CCCT Project's impact on soil and vegetation are shown in **Table 7-9**. As shown in **Table 7-9**, modeled concentrations are all well below applicable screening thresholds.

Table 7-8. Secondary NAAQS Values and 1980 AQRV Screening Concentrations

Pollutants	Secondary NAAQS ($\mu\text{g}/\text{m}^3$)
PM ₁₀	150 (24-hour)
PM _{2.5}	35 (24-hour) and 15 (annual)
NO ₂	3,760 (4-hour), 564 (1-Month), and 100 (annual)
Pollutants	AQRV Screening Concentrations ($\mu\text{g}/\text{m}^3$)
Beryllium	0.01 (month)
Lead	1.5 (3-month)

Table 7-9. Comparison of Modeled to Secondary NAAQS and 1980 AQRV Screening Concentrations

Pollutant	Averaging Period	Maximum Modeled Concentration ($\mu\text{g}/\text{m}^3$)	Secondary NAAQS ($\mu\text{g}/\text{m}^3$)	Exceeds Secondary NAAQS? (Yes or No)
PM ₁₀	24-hour	3.84 ⁽¹⁾	150	No
	24-hour	3.84 ⁽²⁾	35	No
PM _{2.5}	Annual	0.58	15	No
	4-hour	117.43	3,760	No
NO ₂	1-month	10.18	564	No
	Annual	0.71 ⁽¹⁾	100	No
Pollutant	Averaging Period	Maximum Modeled Concentration ($\mu\text{g}/\text{m}^3$)	AQRV Screening Concentration ($\mu\text{g}/\text{m}^3$)	Exceeds AQRV Screening Concentration? (Yes or No)
Beryllium ⁽²⁾	1-month	3.21E-06	0.01	No
Lead ⁽²⁾	3-month	1.34E-04 ⁽³⁾	1.5	No

(1) Value from **Table 5-2**.

(2) Base case stack parameters were used for modeling

(3) Conservatively modeled lead concentration using 1-month averaging period since AERMOD does not have a 3-month averaging period option

7.5 Growth-Related Impacts

The growth analysis required under PSD evaluates the impact associated with the CCCT Project and the general commercial, residential, and industrial growth associated with the CCCT Project. No specific growth is expected as a result of the CCCT Project. It is being developed in response to the anticipated electric load growth caused by a variety of factors, including onshoring of manufacturing, new data center construction, and electrification, but any potential project is independent of the CCCT Project. Therefore, no analysis of secondary impacts from associated growth is needed for this project. Should this change in the near future, the need for an analysis will be re-evaluated.

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APPENDIX F. MUNICIPAL NOTIFICATIONS



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600 Hamilton Street, Suite 600 • Allentown, PA 18101

SENT VIA UPS – DELIVERY RECEIPT REQUESTED

June 4, 2026

Ms. Rebecca Dressler
Commissioner - Chairman
Montour County Administration Center
435 East Front Street
Danville, PA 17821

**RE: County Notification
Air Quality Plan Approval Application – CCCT Project
Montour CT Project, LLC**

Dear Chairman Dressler:

I am writing to inform you of recent activity related to a potential new generation project that Talen Energy is exploring in Montour County.

Talen recently submitted new generation interconnection requests into the PJM interconnection queue as part of the first cycle of PJM's reformed interconnection process. Our requests are for projects at various locations across our footprint, totaling approximately two gigawatts. Talen's submissions were among approximately 800 projects submitted by various other parties at the launch of this process. One of the requests Talen submitted is for a potential project that would add two new natural gas-fired generation units within the footprint of our Montour power plant in Derry Township, Montour County. If developed, the project would use modern, efficient technology with best available emissions controls and operate alongside our existing natural gas-fired plant.

Our interconnection request is subject to a validation process managed by PJM, which is expected to extend through December 2026, with the full process estimated to take approximately 12-18 months. If the project is pursued, it will also be subject to a variety of approvals, including environmental and other permitting and robust evaluations to protect air quality.

In parallel with PJM's review, Talen is also pursuing an air plan approval construction permit with the Pennsylvania Department of Environmental Protection (PADEP) through the project, Montour CT Project, LLC. Pursuant to 25 Pa. Code § 127.43a of the Pennsylvania Code, Montour CT Project, LLC hereby notifies Montour County of the submittal of a plan approval application for the proposed natural gas combined cycle combustion turbine (CCCT) project to the PADEP concerning potential new operations in Derry Township, Montour County, Pennsylvania. The CCCT project proposes to install and operate two natural gas-fired CCCT electric generating units equipped with integrated natural gas duct burners. Emissions will be controlled by oxidation catalysts and selective catalytic reductions (SCRs). The CCCTs will produce steam for the generation of electricity.

Pennsylvania Code Title 25 (Environmental Protection – Air Resources) Section 127.43a requires county notification, including a 30-day comment period regarding the plan approval application, which begins upon receipt of this formal notification. During this comment period, PADEP will accept such comments. Comments are to be sent to:

Pennsylvania Department of Environmental Protection
Regional Air Quality Program Manager
Northcentral Regional Office
208 West Third Street, Suite 101
Williamsport, PA 17701-6448

Written comments should include the name, address, and telephone number of the person(s) submitting the comments, along with the name of the proposed project. We expect the permitting process to take approximately 12 months.

This project is in the very early stages of a process that takes years, and the next steps are still under review. As a long-standing member of the Montour County community, Talen understands the importance of ongoing communication about potential local investments, and we will share updates as these initial steps progress. In the meantime, please reach out if you have any questions or need more information.

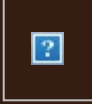
Regards,



Edward Werkheiser
Sr. Manager – Eastern Environmental Compliance Support

From: [UPS](#)
To: [Werkheiser, Edward](#)
Subject: UPS Ship Notification, Tracking Number 1ZY846W60190056358
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Message from TALEN ENERGY SUPPLY, LLC:

County Notification**Air Quality Plan Approval Application – CCCT Project**Montour CT Project, LLC

Shipment Details

From:	TALEN ENERGY SUPPLY, LLC
Tracking Number:	1ZY846W60190056358
Ship To:	Ms. Rebecca Dressler Montour County Administration Center Commissioner – Chairman 435 East Front Street DANVILLE, PA 17821 US
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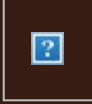
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TALEN ENERGY SUPPLY, LLC

COUNTY NOTIFICATION**AIR QUALITY PLAN APPROVAL APPLICATION - CCCT
PROJECT**MONTOUR CT PROJECT, LLC

Tracking Number: [1ZY846W60190056358](#)

Ship To: MONTOUR COUNTY ADMINISTRATION CENTE
COMMISSIONER - CHAIRMAN
435 EAST FRONT STREET
DANVILLE, PA 17821
US

Number of Packages: 1

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Edward Werkheiser • 484-294-8253 • edward.werkheiser@talenergy.com
Sr. Manager – Eastern Environmental Compliance Support | Talen Energy
600 Hamilton Street, Suite 600 • Allentown, PA 18101

SENT VIA UPS – DELIVERY RECEIPT REQUESTED

June 4, 2026

Mr. Gregory Molter
Chairman
Derry Township Municipal Building
21 Shed Road
Danville, PA 17821

**RE: Township Notification
Air Quality Plan Approval Application – CCCT Project
Montour CT Project, LLC**

Dear Chairman Molter:

I am writing to inform you of recent activity related to a potential new generation project that Talen Energy is exploring in Derry Township.

Talen recently submitted new generation interconnection requests into the PJM interconnection queue as part of the first cycle of PJM's reformed interconnection process. Our requests are for projects at various locations across our footprint, totaling approximately two gigawatts. Talen's submissions were among approximately 800 projects submitted by various other parties at the launch of this process. One of the requests Talen submitted is for a potential project that would add two new natural gas-fired generation units within the footprint of our Montour power plant in Derry Township, Montour County. If developed, the project would use modern, efficient technology with best available emissions controls and operate alongside our existing natural gas-fired plant.

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Regional Air Quality Program Manager
Northcentral Regional Office
208 West Third Street, Suite 101
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Written comments should include the name, address, and telephone number of the person(s) submitting the comments, along with the name of the proposed project. We expect the permitting process to take approximately 12 months.

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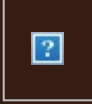
Regards,



Edward Werkheiser
Sr. Manager – Eastern Environmental Compliance Support

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To: [Werkheiser, Edward](#)
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Message from TALEN ENERGY SUPPLY, LLC:

Township Notifiation**Air Quality Plan Approval Application - CCCT Project**Montour CT Project, LLC

Shipment Details

From:	TALEN ENERGY SUPPLY, LLC
Tracking Number:	1ZY846W60194458167
Ship To:	Mr. Gregory Molter, Chairman Derry Township Municipal Bldg. 21 Shed Road DANVILLE, PA 17821 US
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Weight:	1.0 LBS

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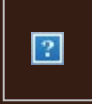
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TALEN ENERGY SUPPLY, LLC

TOWNSHIP NOTIFIATION**AIR QUALITY PLAN APPROVAL APPLICATION - CCCT
PROJECT**MONTOUR CT PROJECT, LLC

Tracking Number:	1ZY846W60194458167
Ship To:	DERRY TOWNSHIP MUNICIPAL BLDG. 21 SHED ROAD DANVILLE, PA 17821 US
Number of Packages:	1
UPS Service:	UPS Next Day Air®
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APPENDIX G. ACID RAIN PERMIT APPLICATION

Facility (Source) Name (from STEP 1)

STEP 3**Permit Requirements****Read the standard requirements.**

- (1) The designated representative of each affected source and each affected unit at the source shall:
 - (i) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR part 72 in accordance with the deadlines specified in 40 CFR 72.30; and
 - (ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit;
- (2) The owners and operators of each affected source and each affected unit at the source shall:
 - (i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and
 - (ii) Have an Acid Rain Permit.

Monitoring Requirements

- (1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the source or unit, as appropriate, with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
- (3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

Sulfur Dioxide Requirements

- (1) The owners and operators of each source and each affected unit at the source shall:
 - (i) Hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under 40 CFR 73.34(c)), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the source; and
 - (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
- (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
- (3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
 - (i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or
 - (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).
- (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

Nitrogen Oxides Requirements

The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

Facility (Source) Name (from STEP 1)

STEP 3, Cont'd.**Excess Emissions Requirements**

- (1) The designated representative of an affected source that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.
- (2) The owners and operators of an affected source that has excess emissions in any calendar year shall:
 - (i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
 - (ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

Recordkeeping and Reporting Requirements

- (1) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:
 - (i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
 - (ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.
 - (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,
 - (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
- (2) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

Liability

- (1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
- (2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
- (3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
- (4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.
- (5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.
- (6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit.
- (7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Facility (Source) Name (from STEP 1)

STEP 3, Cont'd.

Effect on Other Authorities

No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 shall be construed as:

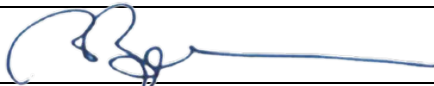
- (1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;
- (2) Limiting the number of allowances a source can hold; provided, that the number of allowances held by the source shall not affect the source's obligation to comply with any other provisions of the Act;
- (3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;
- (4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
- (5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

STEP 4

Certification

Read the certification statement, sign, and date.

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name	
Signature 	Date



Instructions for the Acid Rain Program Permit Application

The Acid Rain Program requires the designated representative to submit an Acid Rain permit application for each source with an affected unit. A complete Certificate of Representation must be received by EPA before the permit application is submitted to the Title V permitting authority. A complete Acid Rain permit application, once submitted, is binding on the owners and operators of the affected source and is enforceable in the absence of a permit until the Title V permitting authority either issues a permit to the source or disapproves the application.

Please type or print. If assistance is needed, contact the Title V permitting authority.

STEP 1 A Plant Code is a 4- or 5-digit number assigned by the Department of Energy's (DOE) Energy Information Administration (EIA) to facilities that generate electricity. For older facilities, "Plant Code" is synonymous with "ORISPL" and "Facility" codes. If the facility generates electricity but no Plant Code has been assigned, or if there is uncertainty regarding what the Plant Code is, send an email to the EIA. The email address is EIA-860@eia.gov.

STEP 2 In column "a," identify each unit at the facility by providing the appropriate unit identification number, consistent with the identifiers used in the Certificate of Representation and with submissions made to DOE and/or EIA. Do not list duct burners. For new units without identification numbers, owners and operators must assign identifiers consistent with EIA and DOE requirements. Each Acid Rain Program submission that includes the unit identification number(s) (e.g., Acid Rain permit applications, monitoring plans, quarterly reports, etc.) should reference those unit identification numbers in exactly the same way that they are referenced on the Certificate of Representation.

Submission Deadlines

For new units, an initial Acid Rain permit application must be submitted to the Title V permitting authority 24 months before the date the unit commences operation. Acid Rain permit renewal applications must be submitted at least 6 months in advance of the expiration of the acid rain portion of a Title V permit, or such longer time as provided for under the Title V permitting authority's operating permits regulation.

Submission Instructions

Submit this form to the appropriate Title V permitting authority. If you have questions regarding this form, contact your local, State, or EPA Regional Acid Rain contact, or call EPA's Clean Air Markets Hotline at (202) 343-9620.

Paperwork Burden Estimate

This collection of information is approved by OMB under the Paperwork Reduction Act, 44 U.S.C. 3501 et seq. (OMB Control No. 2060-0258). Responses to this collection of information are mandatory (40 CFR 72.30 and 72.31). An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The public reporting and recordkeeping burden for this collection of information is estimated to be 8 hours per response. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates and any suggested methods for minimizing respondent burden to the Regulatory Support Division Director, U.S. Environmental Protection Agency (2821T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed form to this address.