Pennsylvania
Department of
Environmental Protection

June 30, 2025

Ms. Debra Raggio
Executive VP, Head of Regulatory Compliance
KDI Wyalusing Power LLC
111 W 19th Street, 8th Floor
New York, NY 10011

Re: Plan Approval Application 08-00060A
Wyalusing Energy Center
Wyalusing Township, Bradford County

Dear Ms. Raggio:

Please find enclosed a copy of the proposed Plan Approval for the construction of the Wyalusing Energy Center to be located in Wyalusing Township, Bradford County. The Department will submit a notice to the *Pennsylvania Bulletin* for publication, stating the Department's intent to issue a Plan Approval to KDI Wyalusing Power LLC for the project. Please review the proposed plan approval and if you have any comments, please forward them to my attention within 30 days of the receipt of this letter.

If you have any questions concerning the terms and conditions of the proposed plan approval, please contact Joseph Piktel, Project Manager, Facilities Permitting Section, Air Quality Program, at 570- 321-6559.

Sincerely,

Jared Dressler
On behalf of

Muhammad Q. Zaman
Environmental Program Manager
Air Quality Program

Enclosures

cc: ONBASE: KDI Wyalusing Power LLC (08-00060)
Central Office, Harrisburg

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
Department of Environmental Protection
June 30, 2025

SUBJECT: Application Review Memo for Plan Approval
KDI Wyalusing Power, LLC
Wyalusing Township, Bradford County
Plan Approval Application ***08-00060A***

TO: Muhammad Q. Zaman
Regional Environmental Program Manager
Air Quality Program

Jared Dressler
On behalf of

THROUGH: Brian K. Bailey, P.E. BKB
Chief, Facilities Permitting Section
Air Quality Program

FROM: Joseph L. Piktel JLP
Facilities Permitting Section
Air Quality Program

Background

The Department has received a plan approval application from ALL4 Consulting on behalf of KDI Wyalusing Power, LLC (KDI) proposing to construct and operate the Wyalusing Energy Center (WEC) located in Wyalusing Township, Bradford County. KDI (Klondike Digital Infrastructure) is an affiliate of New Fortress Energy. This location was previously issued plan approval 08-00058A for the construction of a LNG processing plant in 2019, however, the plant never was constructed and the plan approval expired. The proposed Wyalusing Energy Center will consist of eight GE Model TM2500 self-contained combustion turbines. All turbines will operate in simple cycle mode, where the thermal energy from combustion of fuel is converted to mechanical energy, which drives an integral compressor and electric generator. The combustion turbines will be used to generate up to 218 megawatts of electricity to power a data center to be owned and operated by a third party whom at this time is unknown. The WEC will not be connected to the electrical grid and will only be used to power the data center. The actual amount of electricity generated will be determined by the demand of the proposed data center. Because the WEC will not be connected to the grid it will not be possible to export any extra power generation. The project will also contain a diesel fire pump for fire suppression.

The application contained the Act 14 notices and receipt confirmations, which indicate the notifications were received by the township and county on October 17, 2018. The compliance review form was reviewed by the Department's Operations Section with no issues being noted.

Process Description

Simple cycle gas plants are a type of natural gas power plant which operate by propelling hot gas through a turbine, in order to generate electricity. They differ from combined cycle gas plants because their waste heat is *not* supplied to another external heat engine. These turbines have a high specific power, which means that the power they provide for how massive they are is relatively high.

Fresh air is compressed and mixed with pipeline natural gas and is combusted. The hot gases are then passed through the turbine and then through an oxidation catalyst and a selective catalytic reduction (SCR) unit to control emissions from the turbine. The turbine is used to power an electrical generator that will send electricity to the data center.

Each CT will be equipped with selective catalytic reduction (SCR) for nitrogen oxides (NOX) control and oxidation catalysts for carbon monoxide (CO) and volatile organic compound (VOC) control. One aqueous ammonia tank will be installed to support SCR emissions control technology. The proposed facility will also include a demineralized water treatment system (to support turbine air emissions control), and a water intake pump which will be powered by electric generators. The only source of air emissions outside of the natural gas turbines will be from a diesel-fired emergency firewater pump engine.

Regulatory Analysis

New Source Performance Standards (NSPS)

40 CFR Part 60, Subpart KKKK – Standards of Performance for Stationary Combustion Turbines

40 CFR Part 60, Subpart KKKK – Standards of Performance for Stationary Combustion Turbines. Subpart KKKK applies to owners or operators of a stationary CTs with a heat input at peak load equal to or greater than 10 million British thermal units per hour (MMBtu/hr) based on the higher heating value (HHV) and that commenced construction, modification, or reconstruction after February 18, 2005. Because the construction of the CTs will commence after February 18, 2005, and the CTs will have a heat input at peak load equal to or greater than 10 MMBtu/hr based on the HHV of natural gas, 40 CFR Part 60, Subpart KKKK requirements will apply to the proposed stationary CTs.

The turbines will be subject to the NOx and SO2 emission limits specified in 40 CFR Part 60 Sections 60.4320 and 60.4330. KDI has proposed to demonstrate compliance with 40 CFR Part 60, Subpart KKKK requirements via several methods. For NOx emissions limits, KDI will operate the emissions control(s) that are determined to meet PADEP's Best Available Technology (BAT) requirements. A NOx CEM will be used to monitor hourly NOX emissions and additional CMS data (e.g., O2, fuel flowmeter, steam flow, watt meter, etc.) will be collected to demonstrate compliance with the NOX emissions standards. The use of natural gas to fire the CTs will ensure that the SO2 emissions standard is met and KDI will use natural gas supplier data to document the sulfur content of the fuel.

40 CFR Part 60, Subpart TTTT – Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units

40 CFR Part 60, Subpart TTTT applies, with certain exceptions, to owners or operators of any steam generating unit, integrated gasification combined cycle (IGCC), or stationary CT that commenced construction after January 8, 2014 or commenced modification or reconstruction after June 18, 2014 and that have a base load rating greater than 250 MMBtu/hr and serves a generator capable of selling greater than 25 MW of electricity to a utility power distribution system. The proposed CTs will be exclusively used to generate electric power for adjacent data center operations. KDI will not be providing power to a utility power distribution system and will not be connected to the regional electric grid. Therefore, NSPS Subpart TTTT does not apply to the Project.

40 CFR Part 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

The proposed CTs will be exclusively used to generate electric power for adjacent data center operations. KDI will not be providing power to a utility power distribution system and will not be connected to the regional electric grid. Therefore, NSPS Subpart TTTTa does not apply to the Project.

40 CFR Part 60, Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

The requirements of 40 CFR Part 60, Subpart IIII apply to the owners and operators of stationary compression ignition (CI) internal combustion engines (ICE) that commence operation after July 11, 2005 and were manufactured after April 1, 2006 (for engines that are not fire water pump engines) and after July 1, 2006 (for fire water pump engines). 40 CFR Part 60, Subpart IIII will apply to the CI ICE that will drive the proposed 125 BHP diesel-fired fire water pump.

The emissions standards applicable to the engine driving the proposed fire water pump are presented at 40 CFR §60.4205(c), where owners and operators of fire water pump engines with a displacement of less than 30 liters per cylinder must comply with the emissions standards presented in 40 CFR Part 60, Subpart IIII, Table 4. For a fire water pump of 2009 model year or later with a power rating greater than or equal to 75 kW (i.e., 100 BHP) but less than 130 kW (i.e., 175 BHP).

Since October 1, 2010, 40 CFR §60.4207(b) requires that engines use compliant fuel in accordance with 40 CFR §80.510(b). Such fuel must have a maximum sulfur content of 15 parts per million (ppm) and have either a minimum cetane index of 40 or a maximum aromatic content of 35% by volume. The fire pump CI ICE that will be part of the Project will be newly purchased from the ICE manufacturer which means that compliance with the emissions limit of 40 CFR Part 60, Subpart IIII are initially certified by the manufacturer. Subsequently, KDI will demonstrate compliance with the emissions limits and requirements of 40 CFR Part 60, Subpart IIII by following the manufacturer's written instructions for operation of the CI ICE. KDI will only change those emission-related settings that are permitted to be changed based on the manufacturer's guidance. Additionally, KDI will only use ultra-low sulfur diesel (ULSD) to fire the fire water pump engine.

National Emission Standards for hazardous Air Pollutants (NESHAP)

This facility is defined an area source of HAP emissions since it does not have the potential to emit more than 25 TPY of all hazardous air pollutants or 10 tons of any individual hazardous air pollutant. Therefore, the proposed combustion turbines are not subject to the NESHAP for Stationary Combustion Turbines (40 CFR Part 63, Subpart YYYY).

The proposed diesel fire pump engine is subject to the NESHAP for Stationary Reciprocating Internal Combustion Engines (40 CFR Part 63, Subpart ZZZZ). Compliance with ZZZZ will be shown by complying with the provisions of NSPS Subpart IIII min accordance with 40 CFR Part 63 Section 63.6590(c)(1).

Prevention of Significant Deterioration (PSD) Non Attainment New Source Review (NNSR)

The applicability of NNSR under 40 CFR Part 51.165 is evaluated for proposed construction, reconstruction, and modification projects that result in an emission increase of a criteria pollutant for which the area is not attaining the NAAQS. Bradford County, Pennsylvania has been designated as "in attainment" for all regulated NSR pollutants. However, because Pennsylvania is included in the northeast Ozone Transport Region (OTR), the entire state is considered as moderate non-attainment for ozone regardless of the county-specific NAAQS designation. Therefore, Bradford County, Pennsylvania, is considered a moderate ozone nonattainment area. The major source emission thresholds for a moderate nonattainment area are 100 tpy for NOX and 50 tpy for VOCs. The emissions regulated as ozone precursors are NOX and VOC. NNSR applies to new major sources or major modifications at existing sources for pollutants. Emissions for NOX and VOC for the project are below 100 tpy and 50 tpy, respectively; therefore, NNSR does not apply to the project.

Reasonably available Control Technology

This proposed facility does not have the potential to emit 100 tons per year of nitrogen oxides or 50 tons per year of volatile organic compounds (VOCs). Therefore, this facility is not subject to any RACT, RACT2 or RACT3 requirements.

Acid Rain Program

The proposed combustion turbines at the WEC are new units but are not subject to the Federal Acid Rain Program under 40 CFR 40 CFR Part 72.6(b)(8) because they are non-utility units.

Best Available Technology (BAT) Discussion and Emissions

As the proposed facility is new, the project is subject to the Department's BAT requirements of 25 Pa. Code Section 127.1 and 127.12. The project is required to control air emissions to the maximum extent from the eight (8) GE TM2500 combustion turbines through the installation of the BAT. Under 25 Pa. Code Section 121.1, BAT is defined as equipment, devices, method, or techniques that will prevent, reduce, or control emissions of air contaminants to the maximum degree possible and which are

available or may be made available. The project is only subject to PADEP BAT and is not subject to U.S. EPA best available control technology (BACT) or lowest achievable emission rate (LAER) because KDI is requesting that limitations be placed on the operation of the sources such that it is a minor source for all pollutants.

Combustion Turbines

NOx

NOx is formed during the combustion of fuel and is generally classified as either thermal NOX or fuel-related NOx. Thermal NOx is produced at very high temperatures by the reaction of atmospheric oxygen and nitrogen and is heavily influenced by combustion temperature. Fuel NOx results from oxidation of nitrogen contained in the fuel. Fuel-related NOx from natural gas combustion is generally minimal; therefore, NOx formation from natural gas combustion is primarily thermal NOx.

Reduction in NOx can be achieved through both the use of combustion controls and also on the back end (control devices). Available combustion controls include water or steam injection and use of low emission combustors. Many modern combustion turbines utilize dry low-NOx (DLN) combustors for natural gas firing where natural gas and air are pre-mixed prior to combustion. DLN combustors are designed to operate below the stoichiometric air-to-fuel ratio, thereby reducing thermal NOx formation by reducing peak flame temperatures.

SCR is the most commonly used post combustion control method. KDI is proposing to install water injection and the use of an SCR on the proposed combustion turbines. With the use of water injection and SCR, KSI is able to meet a NOx emission rate of 2.5 ppmvd corrected to 15% O2. This is much lower than the NSPS standard of 25 ppm at corrected to 15% oxygen and the BAT established of 9 ppmv in the GP5 that applies to natural gas production facilities. The proposed SCR is manufactured by SISU Energy and Environmental. The proposed SCR technology uses ammonia as a reagent. The SCR injects the reagent into the flue gas stream, and then the flue gas passes through a catalyst bed where the NOx is reduced to nitrogen and water. SCR has been in widespread use on combustion turbines for many years. Each stack will be equipped with NOx CEMS that will verify compliance with the NOx limitation.

CO and VOC

CO and VOC are formed during the incomplete combustion of fuel, in this case natural gas. Reduction in CO emissions and VOC formation can be achieved using good combustion practices and post combustion controls. KDI is proposing good combustion practices and use of an oxidation catalyst as BAT for CO and VOC control. The proposed oxidation catalyst is a BASF model CAMET oxidation catalyst. The catalyst is capable of providing 90% destruction efficiency for CO and VOC. The vendor is guaranteeing a CO and VOC emission rate of 5.0 ppmv and 1.32 ppmv corrected to 15% oxygen respectively. After researching the RACT/BACT/LAER clearinghouse the proposed emission rates for these pollutants are acceptable as meeting BAT for this type of process. KDI is also proposing to install CO CEMS to continuously monitor the CO emissions. The CO CEMS will be used as a surrogate to indicate continuous compliance with VOC limits. KDI will submit quarterly CEMS reports for NOX and CO, and will track fuel use at each CT.

Particulate Matter (PM) and SOx

In the simple cycle combustion process, PM is produced in various forms from the combustion of natural gas. PM is produced by incomplete combustion, thermal decomposition of methane resulting in carbon that condenses into soot, sulfates from sulfur in the natural gas that condenses into particles and secondary particle formation of organic aerosols and nitrates. For the proposed WEC, total PM emissions from the combustion turbines are considered equivalent to emissions of PM10 and PM2.5. Emissions of PM2.5, PM10, and PM are assumed to include both the filterable and condensable portion of PM. Reduction of PM can be achieved by optimizing combustion of the natural gas fuel, secondary physical controls such as filters and fuel treatment.

With respect to BAT for total particulate matter, PM10, PM2.5 and sulfur oxides, the exclusive use of natural gas is considered best available technology for these pollutants. I am unaware of any other combustion turbines that are required to have additional controls for these pollutants when natural gas is the only fuel being burned. Review of the EPA Clearinghouse does not show any other control technologies in use to control these pollutants.

Greenhouse Gases (GHG)

KDI submitted a top down analysis which listed numerous methods which are proposed to be employed to reduce minimize emissions to maximum and most feasible extent possible. These included good combustion practices, energy efficient and inherently low-emitting processes, effective work practices, and optimized combustion turbine design. The only additional method of emission reduction, which KDI presented as technically and economically infeasible, was the utilization of carbon capture and sequestration (CCS). The gist of the rejection of CCS was due to lack of nearby geological formations of sufficient capacity to store the CO2 along with the lack of access to nearby CO2 pipelines which route the CO2 to proper storage facilities. The Department agrees with the conclusion therein of technical and economic infeasibility for CCS.

The proposed CTs are highly efficient, and the implementation of a maintenance program will not only retain the energy efficiency of the units but also help ensure minimized GHG emissions. The Facility will employ periodic CT maintenance and tuning; install instrumentation and controls to monitor and optimize air flow and fuel combustion; and follow an inspection routine to identify leaks from valves, flanges, and piping.

Sulfur hexafluoride (SF6) emissions can occur from circuit breakers utilized to connect power plants to the electrical grid. Because the combustion turbines are not being connected to the grid there will be no SF6 emissions resulting from the project.

Startup and Shutdown

Startup and shutdown periods serve to thermally stabilize a given unit to ensure efficient and proper operation of the unit. Startup times for simple cycle turbines are relatively short compared to combined

cycle. KDI has provided information that total startup time will not exceed 30 minutes for a startup event. Emissions during startup are more due to the fact that proper temperature has not yet been achieved such that control devices are not yet controlling emissions to their maximum extent.

KDI has proposed a maximum of 365 startup events per year (averaging out to one per day) for all eight of the proposed turbines. Potential emissions were conservative based on the assumption that there would be one turbine startup event and one corresponding turbine shutdown event 365 times per year. This estimate is inclusive of all eight proposed turbines. This allows KDI to rotate the use of turbines as needed, allowing for required maintenance and testing of each turbine throughout the year. This also includes startup/shutdown events related to increased demand operations. The simple cycle turbines do not have a lengthy shutdown process and will be equipped with emissions controls. Based on combustion turbine data, during the shutdown process the control devices will still be effective and operational, maintaining the necessary heat to reduce emissions for the duration of the shutdown event. The turbine manufacturer has provided the following table showing expected emissions from the startup events.

	NOx	CO	VOC	PM
LB/Event	5.66	22.16	1.07	1.50
TPY*	1.03	4.04	0.20	0.27

*Based upon 365 startups per year

Combined Cyle VS Simple Cycle

The proposed simple cycle CTs have been selected by the KDI in order to meet the required power demand of the planned adjacent data center. There is not sufficient electrical power from the local electric transmission grid to accommodate the power demand of the planned data center, requiring the construction and operation of a dedicated, constant, and reliable power supply. The simple cycle CTs will provide and generate reliable, constant power for the proposed data center, and will not to sell power to the grid.

Simple cycle CTs are more responsive, with faster startup times, compared to combined cycle CTs. Because the proposed data center requires a constant primary power supply, a redundant combined cycle unit would need to be constructed as a back-up plant in the event of a malfunction, required maintenance outage, or test program. This would significantly increase the potential emissions profile of the facility.

Combined cycle CTs are suitable for large electric generating stations providing power directly to the regional electric grid. The required power load for the planned data center can be met by six of the eight CTs for the majority of ambient conditions and load requirements. In the event of increased demand due to ambient conditions (e.g., efficiency of CT decreases during hot and humid conditions), a seventh, and, in extreme cases, an eighth CT will provide supplemental power as needed. Additionally, in the event that an upset or malfunction occurs for one of the six simple cycle CTs, a spare/backup CT would be brought online as a replacement to provide "prime power" during the maintenance time of the CT. The project design and configuration is best suited to the use of simple cycle CTs, employing enough units to provide constant and reliable power to the proposed data center.

While there is some redundancy built into the simple cycle CT configuration, in order for a combined cycle configuration to provide the same redundancy, a second CT, heat recovery steam generator (HRSG), would need to be installed. Because there is no intent to generate or provide surplus power to the grid, this would be an unnecessary installation and modification of the project's intent and design. Simple cycle CTs, as designed, are best suited for this installation and thus should be considered as BAT.

Fire Pump Engine

KDI is proposing to construct and operate a Peerless pump model PVF fire water pump fired by a diesel engine rated at 125 bhp for fire suppression. KDI is requesting to restrict operation of the fire pump to less than 500 hours in any 12 consecutive month period. The engine will be subject to the emission limitations specified in 40 CFR Part 60 Subpart IIII Section 60.4205(c) and Table 4 of Subpart IIII. KDI is also requesting that these emission limits be established as BAT for the unit. Table 4 lists the emission limits at the following

NMHC + NOX – 3.50 g/hp-hr
CO – 3.7 g/hp-hr
PM – 0.22 g/hp-hr

The fuel used by the fire pump engine must also meet the minimum requirements found in 40 CFR Part 60 Section 60.4207 (meets the definition of ultra low sulfur diesel fuel). The Department recommends establishing this as a BAT requirement as well. The unit will be equipped with a non-resettable hour meter in accordance with 40 CFR part 60 Subpart IIII Section 60.4209.

Projecting the emissions from the proposed fire pump on an annual basis show that because of the 500 hour limit being requested by KDI, emissions would be considered insignificant and the source would be exempt from plan approval requirements if proposed on its own.

Ammonia Storage Tank

The proposed project will have a 22,000-gallon tank for storage of 19% aqueous ammonia (NH3) for use in the SCR system to control NOx emissions from the combustion turbines. The Risk Management Plan (RMP) Rule, promulgated in 40 CFR Part 68, implements Section 112(r) of the CAAA of 1990 and establishes guidance for chemical accident prevention at facilities using, storing, manufacturing, or handling extremely hazardous substances. The RMP Rule includes a "List of Regulated Substances" including their synonyms and threshold quantities to help assess if a process is subject to the RMP Rule or the General Duty Clause of CAA Section 112(r). Aqueous ammonia, which will be used by the SCR system for NOX emissions control, is a Regulated Substance under Section 112(r). The threshold quantity in the RMP Rule List of Regulated Substances pursuant to 40 CFR §68.130 for aqueous ammonia is 20,000 pounds with a concentration 20% or greater. Because aqueous ammonia will be stored on-site in one storage tank with a capacity of 22,000 gallons with a concentration of less than 20% by weight, the concentration applicability criteria will not be met, and the provisions of 40 CFR Part 68 will not apply to the proposed tank. Since no VOC containing substance will be stored in the proposed storage tank 25 Pa. Code Section 129.57 does not apply in this situation.

Potential Emissions

KDI has proposed a maximum fuel usage of 18,560 MMSCF of natural gas in any 12 consecutive month period. This equates to an annual heat input of 19,021,256 MMBTU/yr. Assuming the proposed maximum of 365 start ups in any 12 consecutive month period along with 500 hours per 12 consecutive month period operation for the diesel fire pump, the potential emissions from the sources at the facility are as follows (Values in tons per year):

	NOx	CO	PM	VOC	HAP	CO2e
Turbines*	74.24	93.18	91.63	40.22	5.07	1,113,659
Fire Pump	0.20	0.25	0.02	0.01	Trace	36
Total	74.44	93.43	91.65	40.23	5.07	1,113,695

*Includes emission from startup and shutdown

The use of SCR for control of NOx emissions through the use of ammonia will result in ammonia slip (emissions) from the turbines. KDI has proposed an ammonia slip rate of 5ppmv. Although ammonia is not a regulated pollutant it is still considered an air contaminant and its emissions be accounted for in the BAT analysis. An ammonia slip of 5ppmv is consistent with BAT determinations made for similar sized projects and is acceptable in this case.

KDI has provided the Department with the emission profiles of the proposed combustion turbine supplied by the manufacturer over various atmospheric operating conditions and operating loads. Potential emission calculations were calculated using average atmospheric conditions for the location of the facility. Stack testing will be required in order to verify these emission rates.

The plan approval will limit the annual natural gas usage at the facility to 18,560 MMSCF in any 12 consecutive month period as a BAT condition. This condition is practically enforceable which allows the facility to become minor (non major) with respect to air emissions. The permittee shall also continuously monitor the amount of fuel burned by each of the turbines and keep appropriate monthly records to confirm compliance with the gas usage limit.

The Department is also establishing emission limits for the first 12 months of operation of the facility in order to confirm that the facility is a minor facility with respect to emissions. The NOx, CO , VOC and PM emissions have month to month rolling totals for the first twelve months of operation in order to verify that the source is indeed a minor facility. Once they first 12 months of operation have occurred they will be only subject to the 12 consecutive month rolling totals for the turbines.

Conclusion

Based on my review of the information provided by KDI in their plan approval application, I recommend that plan approval be granted provided that the project is constructed as described in the plan approval application and is operated in compliance with the following conditions:

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

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

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

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

5. Pursuant to the best available technology requirements of 25 Pa. Code Sections 127.1 and 127.12, the volatile organic compound emissions (measured as propane) from each of the turbines shall not exceed 1.32 ppmv corrected to 15% O2 and 2.19 lb/hr.

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

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

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

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

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

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

12. Pursuant to the best available technology requirements of 25 Pa. Code Sections 127.1 and 127.12, (a) The permittee shall install, certify, maintain and operate continuous emission monitoring systems (CEMS) for nitrogen oxide emissions, carbon monoxide as well as volumetric flow on the exhaust of the turbines in accordance with all applicable requirements specified in 25 Pa. Code Chapter 139 and the Department's "Continuous Source Monitoring Manual." No CEMS or flow

monitoring system may however be installed unless Phase I approval has first been obtained from the Department. (b) The permittee shall submit a Phase I application to the Department for all CEMS and flow monitoring systems to be associated with each turbine at least 180 days prior to the expected commencement of operation of each respective unit.

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

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

15. The permittee shall keep comprehensive records of the following relating to the operation of the combustion turbine: (a) The amount on natural gas burned on a monthly basis (b) The number of hours and the corresponding 12 consecutive month period (CMP) totals each turbine has been operated (c) Tariff sheet or transportation contract for the natural gas being burned showing it meets the definition of pipeline quality. (d) Stack test reports showing that each turbine complies with all emission limitations (e) The rolling 12 CMP emission totals for NOx, CO, PM, SOx, VOC, formaldehyde and CO2e (f) The number of startup and shut downs for the turbine each month. These records shall be retained for a minimum of five years and be presented to the Department upon request.

16. The permittee shall keep comprehensive records annually, due March 1 each year, the following relating to the operation of each combustion turbine: (a) The amount on natural gas burned on a monthly basis (b) The number of hours and the corresponding 12 CMP totals each turbine has been operated (c) Tariff sheet or transportation contract for the natural gas being burned showing it meets the definition of pipeline quality. (d) The rolling 12 CMP emission totals for NOx, CO, PM, SOx, VOC, formaldehyde and CO2e (e) The number of startup and shut downs for the turbine each month.

17. Pursuant to the best available technology requirements of 25 Pa. Code Sections 127.1 and 127.12, each catalytic oxidizer associated with the turbines shall be changed out after 26,280 hours of operation of the turbine.

18. Pursuant to the best available technology requirements of 25 Pa. Code Section 127.1 and 127.12, the total number of startups for all eight (Source ID P101 - P108) combustion turbines shall not exceed 365 in any 12 consecutive month period.

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

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

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

22. Pursuant to the best available technology provisions of 25 Pa. Code Sections 127.1 and 127.12, the air contaminant emissions from the exhaust of Source P201 shall not exceed the following limitations: (a) nitrogen oxides + NMHC – 7.8 g/bhp-hr (b) carbon monoxide – 3.7 g/bhp-hr and 0.06 tpy (c) volatile organic compound – 0.15 g/bhp-hr (d) particulate matter (PM/PM10/PM2.5) – 0.22 g/bhp-hr.

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

24. The fire pump engine shall be equipped with a non-resettable hour meter.

25. (a) The permittee shall record the hours that Source P201 operated through the non-resettable hour meter and shall calculate the 12-consecutive month total hours of operation, including supporting documentation, to verify compliance with the operational restriction specified in this plan approval on a monthly basis. Additionally, the permittee shall record the time of operation of the engine and the reason the engine was in operation during that time. (b) The information used to demonstrate compliance with this condition shall be kept for a minimum of five years and shall be made available to the Department upon request.

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
AIR QUALITY PROGRAM

PLAN APPROVAL

Issue Date: Effective Date:

Expiration Date:

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

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

Plan Approval No. 08-00060A

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

Owner Information

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

Plant Information

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

Responsible Official

Name: DEBRA L RAGGIO
Title: EXECUTIVE VP
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MUHAMMAD Q. ZAMAN, ENVIRONMENTAL PROGRAM MANAGER, NORTHCENTRAL REGION

Plan Approval Description

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

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Note: These same sub-sections are repeated for each source!

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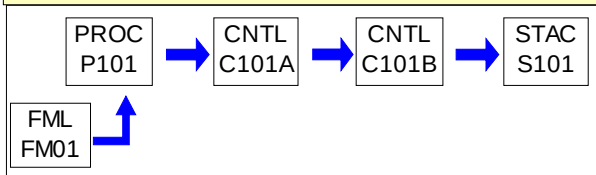
Source ID	Source Name	Capacity/Throughput	Fuel/Material
P101	COMBUSTION TURBINE 1	330.800 MMBTU/HR	
P102	COMBUSTION TURBINE 2	330.800 MMBTU/HR	
P103	COMBUSTION TURBINE 3	330.800 MMBTU/HR	
P104	COMBUSTION TURBINE 4	330.800 MMBTU/HR	
P105	COMBUSTION TURBINE 5	330.800 MMBTU/HR	
P106	COMBUSTION TURBINE 6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

PERMIT MAPS

PERMIT MAPS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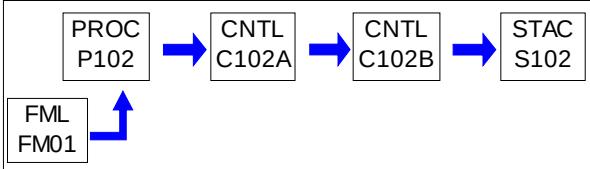
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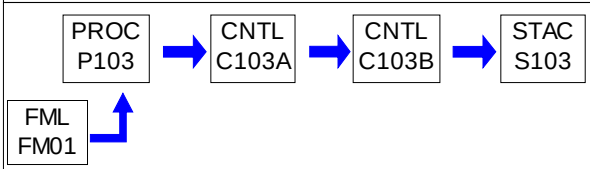
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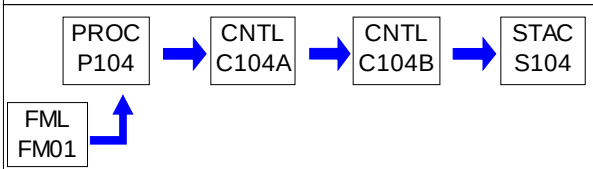
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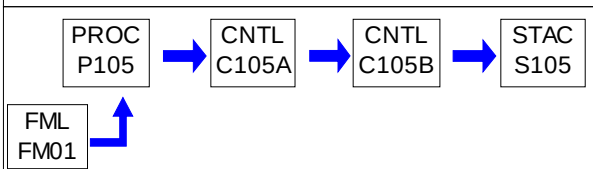
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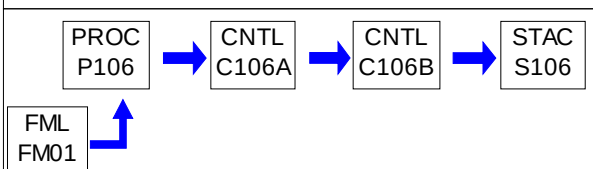
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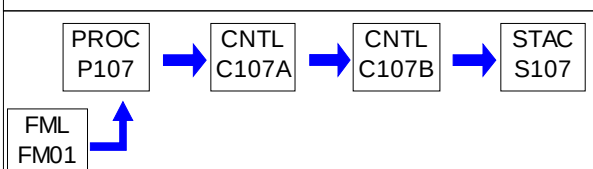
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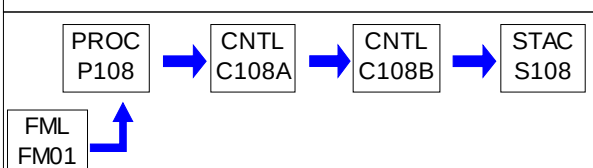
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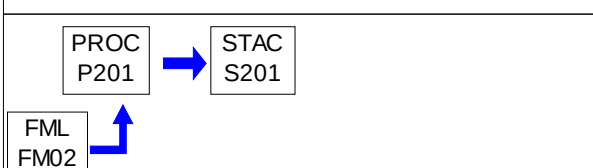
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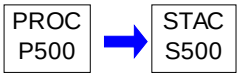
PERMIT MAPS



SECTION B. General Plan Approval Requirements

#001 [25 Pa. Code § 121.1]

Definitions

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

#002 [25 Pa. Code § 127.12b (a) (b)]

Future Adoption of Requirements

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

#003 [25 Pa. Code § 127.12b]

Plan Approval Temporary Operation

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

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

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

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

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

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

#004 [25 Pa. Code § 127.12(a) (10)]

Content of Applications

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

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

Public Records and Confidential Information

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

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

SECTION B. General Plan Approval Requirements

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

#006 [25 Pa. Code § 127.12b]

Plan Approval terms and conditions.

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

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

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

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

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

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

#007 [25 Pa. Code § 127.32]

Transfer of Plan Approvals

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

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

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

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

Inspection and Entry

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

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

SECTION B. General Plan Approval Requirements

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

#009 [25 Pa. Code 127.13a]

Plan Approval Changes for Cause

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

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

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

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

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

#010 [25 Pa. Code §§ 121.9 & 127.216]

Circumvention

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

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

#011 [25 Pa. Code § 127.12c]

Submissions

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

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

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

Risk Management

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

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

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

SECTION B. General Plan Approval Requirements

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

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

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

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

#013 [25 Pa. Code § 127.25]

Compliance Requirement

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

SECTION C. Site Level Plan Approval Requirements

I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §123.1]

Prohibition of certain fugitive emissions

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

(1) Construction or demolition of buildings or structures.

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

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

(4) Clearing of land.

(5) Stockpiling of materials.

(6) Open burning operations.

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

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

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

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

 # 002 [25 Pa. Code §123.2]

Fugitive particulate matter

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

 # 003 [25 Pa. Code §123.41]

Limitations

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

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

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

 # 004 [25 Pa. Code §123.42]

Exceptions

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

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

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

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

SECTION C. Site Level Plan Approval Requirements

II. TESTING REQUIREMENTS.

 # 005 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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

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

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

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

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

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

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

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

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

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

 # 006 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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

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

SECTION C. Site Level Plan Approval Requirements

particulate matter. The permittee shall follow the Notification and Reporting requirements specified in Section C of this plan approval.

(b) Nitrogen oxide (NOx) stack testing must be conducted in accordance with the provisions of 40 CFR Part 60 Subpart KKKK Section 60.4400 and must be done on all eight turbines.

(c) SO2 stack testing must be conducted in accordance with the provisions of 40 CFR Part 60 Subpart KKKK Section 60.4400 and must be done on all eight turbines.

 # 007 [25 Pa. Code §139.1]

Sampling facilities.

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

 # 008 [25 Pa. Code §139.11]

General requirements.

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

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

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

III. MONITORING REQUIREMENTS.

 # 009 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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

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

IV. RECORDKEEPING REQUIREMENTS.

 # 010 [25 Pa. Code §135.3]

Reporting

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

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

SECTION C. Site Level Plan Approval Requirements

the Department upon request.

V. REPORTING REQUIREMENTS.

 # 011 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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

 # 012 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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

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

(c) The report shall describe the following:

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

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

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

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

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

VI. WORK PRACTICE REQUIREMENTS.

 # 013 [25 Pa. Code §123.1]

Prohibition of certain fugitive emissions

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

SECTION C. Site Level Plan Approval Requirements

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

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

(3) Paving and maintenance of roadways,

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

VII. ADDITIONAL REQUIREMENTS.

 # 014 [25 Pa. Code §129.14]

Open burning operations

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

VIII. COMPLIANCE CERTIFICATION.

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

IX. COMPLIANCE SCHEDULE.

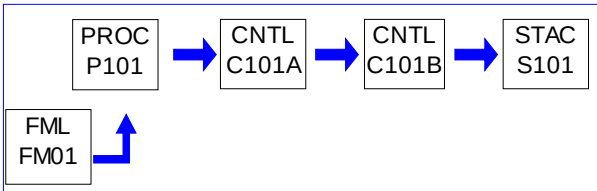
No compliance milestones exist.

SECTION D. Source Level Plan Approval Requirements

Source ID: P101 Source Name: COMBUSTION TURBINE 1

Source Capacity/Throughput: 330.800 MMBTU/HR

Conditions for this source occur in the following groups: TURBINES



I. RESTRICTIONS.

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

 # 001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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

SECTION D. Source Level Plan Approval Requirements

Source ID: P102 Source Name: COMBUSTION TURBINE 2

Source Capacity/Throughput: 330.800 MMBTU/HR

Conditions for this source occur in the following groups: TURBINES

I. RESTRICTIONS.

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

 # 001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

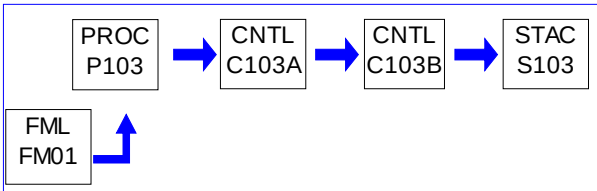
Source ID P102 is a 31 MW General Electric model TM2500 natural gas fired combustion turbine. The air contaminant emissions from which shall be controlled by a BASF model CAMET oxidation catalyst (ID C102A) and a SISU Energy Selective Catalytic Reduction unit (ID C102B).

SECTION D. Source Level Plan Approval Requirements

Source ID: P103 Source Name: COMBUSTION TURBINE 3

Source Capacity/Throughput: 330.800 MMBTU/HR

Conditions for this source occur in the following groups: TURBINES



I. RESTRICTIONS.

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

 # 001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

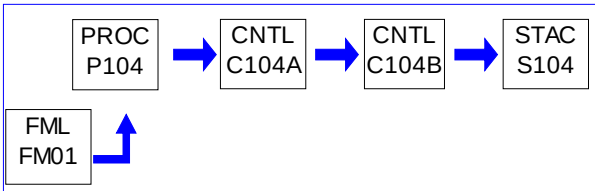
Source ID P103 is a 31 MW General Electric model TM2500 natural gas fired combustion turbine. The air contaminant emissions from which shall be controlled by a BASF model CAMET oxidation catalyst (ID C103A) and a SISU Energy Selective Catalytic Reduction unit (ID C103B).

SECTION D. Source Level Plan Approval Requirements

Source ID: P104 Source Name: COMBUSTION TURBINE 4

Source Capacity/Throughput: 330.800 MMBTU/HR

Conditions for this source occur in the following groups: TURBINES



I. RESTRICTIONS.

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

 # 001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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

SECTION D. Source Level Plan Approval Requirements

Source ID: P105 Source Name: COMBUSTION TURBINE 5

Source Capacity/Throughput: 330.800 MMBTU/HR

Conditions for this source occur in the following groups: TURBINES

I. RESTRICTIONS.

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

 # 001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

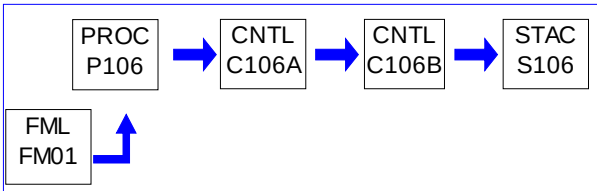
Source ID P105 is a 31 MW General Electric model TM2500 natural gas fired combustion turbine. The air contaminant emissions from which shall be controlled by a BASF model CAMET oxidation catalyst (ID C105A) and a SISU Energy Selective Catalytic Reduction unit (ID C105B).

SECTION D. Source Level Plan Approval Requirements

Source ID: P106 Source Name: COMBUSTION TURBINE 6

Source Capacity/Throughput: 330.800 MMBTU/HR

Conditions for this source occur in the following groups: TURBINES



I. RESTRICTIONS.

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

 # 001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

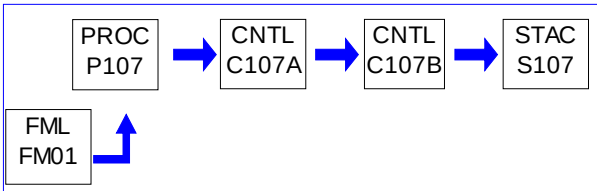
Source ID P106 is a 31 MW General Electric model TM2500 natural gas fired combustion turbine. The air contaminant emissions from which shall be controlled by a BASF model CAMET oxidation catalyst (ID C106A) and a SISU Energy Selective Catalytic Reduction unit (ID C106B).

SECTION D. Source Level Plan Approval Requirements

Source ID: P107 Source Name: COMBUSTION TURBINE 7

Source Capacity/Throughput: 330.800 MMBTU/HR

Conditions for this source occur in the following groups: TURBINES



I. RESTRICTIONS.

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

 # 001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

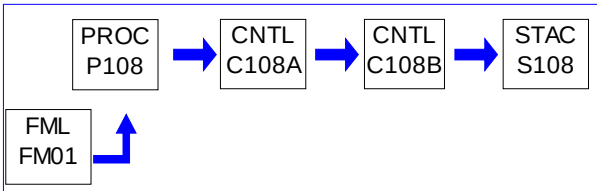
Source ID P107 is a 31 MW General Electric model TM2500 natural gas fired combustion turbine. The air contaminant emissions from which shall be controlled by a BASF model CAMET oxidation catalyst (ID C107A) and a SISU Energy Selective Catalytic Reduction unit (ID C107B).

SECTION D. Source Level Plan Approval Requirements

Source ID: P108 Source Name: COMBUSTION TURBINE 8

Source Capacity/Throughput: 330.800 MMBTU/HR

Conditions for this source occur in the following groups: TURBINES



I. RESTRICTIONS.

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

 # 001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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

SECTION D. Source Level Plan Approval Requirements

Source ID: P201 Source Name: FIRE PUMP

Source Capacity/Throughput:

I. RESTRICTIONS.

Emission Restriction(s).

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

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

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

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

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

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

Fuel Restriction(s).

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

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

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

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

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

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

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

(1) Minimum cetane index of 40.

(2) Maximum aromatic content of 35 volume percent.

Operation Hours Restriction(s).

 # 003 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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

SECTION D. Source Level Plan Approval Requirements

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

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

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

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

IV. RECORDKEEPING REQUIREMENTS.

 # 005 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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

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

 # 006 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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

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

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

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

V. REPORTING REQUIREMENTS.

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

Subpart A - General Provisions

Address.

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

R3_Air_Apps_and_Notices@epa.gov

and

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

SECTION D. Source Level Plan Approval Requirements

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

 # 008 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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

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

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

Am I subject to this subpart?

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

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

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

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

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

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

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

Am I subject to this subpart?

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

SECTION D. Source Level Plan Approval Requirements

Source ID: P500 Source Name: AMMONIA TANK

Source Capacity/Throughput:

PROC P500 → STAC S500

I. RESTRICTIONS.

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

 # 001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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

SECTION E. Source Group Plan Approval Restrictions.

Group Name: TURBINES
Group Description: CT 1 - CT 8
Sources included in this group

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

I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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

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

 # 002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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

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

 # 003 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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

 # 004 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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

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

 # 005 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Pursuant to the best available technology requirements of 25 Pa. Code Sections 127.1 and 127.12, the volatile organic compound emissions (measured as propane) from each of the turbines shall not exceed 1.32 ppmv corrected to 15% O2 and 2.19 lb/hr.

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 # 006 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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

 # 007 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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

 # 008 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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

 # 009 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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

 # 010 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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

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

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

 # 011 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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

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

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

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 # 012 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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

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

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

 # 013 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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

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

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

 # 014 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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

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

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(xii) 91.63 tons the first through twelfth months.

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

Fuel Restriction(s).

 # 015 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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

Throughput Restriction(s).

 # 016 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

 # 017 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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

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

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

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

 # 018 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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

 # 019 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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

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

Subpart KKKK - Standards of Performance for Stationary Combustion Turbines

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

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

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

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

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

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

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

IV. RECORDKEEPING REQUIREMENTS.

 # 021 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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

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

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

V. REPORTING REQUIREMENTS.

 # 022 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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

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

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

Subpart KKKK - Standards of Performance for Stationary Combustion Turbines

What reports must I submit?

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

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

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

VI. WORK PRACTICE REQUIREMENTS.

 # 024 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Pursuant to the best available technology requirements of 25 Pa. Code Sections 127.1 and 127.12, each catalytic oxidizer associated with the turbines shall be changed out after 26,280 hours of operation of the turbine.

VII. ADDITIONAL REQUIREMENTS.

 # 025 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Pursuant to the best available technology requirements of 25 Pa. Code Section 127.1 and 127.12, the total number of startups for all eight (Source ID P101 - P108) combustion turbines shall not exceed 365 in any 12 consecutive month period.

 # 026 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4305]

Subpart KKKK - Standards of Performance for Stationary Combustion Turbines

Does this subpart apply to my stationary combustion turbine?

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

SECTION F. Alternative Operation Requirements.

No Alternative Operations exist for this Plan Approval facility.

SECTION G. Emission Restriction Summary.

No emission restrictions listed in this section of the permit.

SECTION H. Miscellaneous.

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