06/02/2026

Andy Woerner
Will-Power OH LLC - Apollo
2000 Commerce Dr
Pittsburgh, PA 15275

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL

Facility ID: 0387022027
Permit Number: P0139272
Permit Type: Initial Installation
County: Wood

Yes	TOXIC REVIEW
No	PSD
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
Yes	CEMS
Yes	MACT/GACT
Yes	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
Yes	MODELING SUBMITTED
No	MAJOR GHG
No	SYNTHETIC MINOR TO AVOID MAJOR GHG

Dear Permit Holder:

Enclosed please find a final Ohio Environmental Protection Agency (EPA) Air Pollution Permit-to-Install (PTI) which will allow you to install or modify the described emissions unit(s) in a manner indicated in the permit. Because this permit may contain several conditions and restrictions, we urge you to read it carefully. In this letter, you will find the information on the following topics:

- **Pay any applicable permit fee**
- **How to appeal this permit**
- **How to save money, reduce pollution and reduce energy consumption**
- **How to give us feedback on your permitting experience**
- **How to get an electronic copy of your permit**
- **What should you do if you notice a spill or environmental emergency?**

Pay any applicable permit fee

If there is an enclosed invoice that is associated with this permit action, you must pay the invoice in 30 days. This permit fee supports Ohio EPA's activities to review and issue the necessary approvals for construction or modification of the affected sources. Failure to provide the applicable permit fee within 30 days may result in the accrual of substantial interest penalties. This permit is also conditioned on the payment of any applicable permit fee.

How to appeal this permit

The issuance of this PTI is a final action of the Director and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of $70.00, made payable to "Ohio Treasurer Robert Sprague," which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy

of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
30 East Broad Street, 4th Floor
Columbus, OH 43215

How to save money, reduce pollution and reduce energy consumption

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact the Small Business Environmental Assistance Program in our Compliance Assistance & Special Projects unit - ***Contacts | Ohio Environmental Protection Agency***. Additionally, all or a portion of the capital expenditures related to installing air pollution control equipment under this permit may be eligible for financing and state tax exemptions through the Ohio Air Quality Development Authority (OAQDA) under Ohio Revised Code Section 3706. For more information, see the OAQDA website: ***Ohio Air Quality Development Authority | Ohio.gov***

How to give us feedback on your permitting experience

Please complete a survey at ***DAPC - Customer Satisfaction Survey*** and give us feedback on your permitting experience. We value your opinion.

How to get an electronic copy of your permit

This permit can be accessed electronically via the eBusiness Center: Air Services in Microsoft Word format or in Adobe PDF on the Ohio EPA document search webpage: ***eDocument Search.***

What should you do if you notice a spill or environmental emergency?

Any spill or environmental emergency which may endanger human health or the environment should be reported to the Emergency Response 24-HOUR EMERGENCY SPILL HOTLINE toll-free at (800) 282-9378. Report non-emergency complaints to the appropriate district office or local air agency.

If you have any questions regarding your permit, please contact at Ohio EPA DAPC, Northwest District Office at (419)352-8461

Sincerely,

Robert Hodanbosi
Chief, Division of Air Pollution Control

cc: U.S. EPA
Ohio EPA-NWDO; Michigan; Indiana; Canada

Response to Comments

Facility ID:	0387022027
Facility Name:	Will-Power OH LLC - Apollo
Facility Description:	Will-Power OH LLC - Apollo
Facility Address:	11902 Middleton Pike Bowling Green, OH 43402 Wood County
Permit:	P0139272, Permit-To-Install - Initial Installation
A public notice for the draft permit issuance was published in the Ohio EPA Weekly Review on 03/05/2026. The comment period ended on 05/01/2026.	
Hearing Date (if held):	04/08/2026
Hearing Public Notice Date (if different from draft public notice):	

The following comments were received during the comment period specified. Ohio EPA reviewed and considered all comments received during the public comment period. By law, Ohio EPA has authority to consider specific issues related to protection of the environment and public health. Often, public concerns fall outside the scope of that authority. For example, concerns about zoning issues are addressed at the local level. Ohio EPA may respond to those concerns in this document by identifying another government agency with more direct authority over the issue.

To help you review this document, the questions are grouped by topic and organized in a consistent format. PDF copies of the original comments in the format submitted are available upon request.

1. Topic: Facility Operations

Comment 1: Multiple commenters are concerned about the number of startups and shutdowns allowed by the draft permit-to-install (PTI). Questions include why so many startups and shutdowns are being permitted, how these events' emissions were calculated, why they were given this exemption, and if health impacts from these events have been considered.

Response 1: These events are not exempt from permitting. Will-Power has conservatively estimated the emissions from startup and shutdown events, using a worst-case air emissions scenario. The events have been included in the draft PTI, Potential-to-Emit (PTE) calculations, and air dispersion modeling results. The emissions from startup and shutdown events were calculated based on

manufacturers' specifications and the assumption that all emissions are uncontrolled. Will-Power's air dispersion modeling results met Ohio's air quality standards with these conservative estimates.

Comment 2: Multiple commenters asked about the lack of inclusion of natural gas pipelines in this draft PTI. One commenter requested that Ohio EPA mandate a third-party leak detection and quantification program across the full Williams natural gas supply chain serving the proposed facility.

Response 2: The natural gas pipelines that serve Williams are not owned by Williams. The companies that own each pipeline have been appropriately permitted by Ohio EPA, Division of Air Pollution Control. A leak detection program for a natural gas-fired power plant is not required, since natural gas is used only as a fuel source.

Comment 3: Multiple commenters were concerned about the possible usage of dirty natural gas, or 'fracked' gas.

Response 3: All natural gas used in the engines and turbines at the proposed facility will use pipeline-quality natural gas from the regulated supplier that meets strict specifications, regardless of origin.

Comment 4: Multiple commenters were concerned with a term in the draft PTI that states, "For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit." Why was this term included in the draft PTI if the facility is not permitted to use fuels other than natural gas?

Response 4: The inclusion of this term does not allow the facility to burn other fuels in the engines and turbines. This term is a standard term used across Ohio EPA air permitting for fuel-burning equipment. The facility is required to report all deviations, including the use of unpermitted fuel in its equipment, which allows Ohio EPA to assess compliance.

Comment 5: Multiple comments expressed concern with future expansions to the proposed Will-Power facility.

Response 5: Any proposed future expansion is not addressed in this project. Should Will-Power propose an expansion, a detailed application would be required, and Ohio EPA would review the information submitted. A final permit is required before any changes to the operation are made. All permitting actions are ***public noticed,*** and public hearings can be requested for any permitting action. The public can also ***sign up*** to receive a weekly email listing all permit actions in Ohio, organized by county.

Comment 6: Multiple commenters are concerned about the modular design of the turbine generators being installed at the proposed project site, citing modular units as less efficient than conventional turbines.

Response 6: Regardless of the turbines' construction or operating efficiency, the facility must comply with all air emission rules and regulations. The facility will also be required to perform emissions testing to ensure that the supplied emissions data for these units is accurate.

2. Topic: Public Health & Air Emissions

Comment 7: Multiple commenters expressed concerns about the health impacts of air pollution from the Will-Power facility. The comments consistently referenced:

(1) Elevated rates of asthma, lung, and cardiovascular disease.

(2) Special considerations taken for the vulnerable populations, including children and the elderly.

(3) Cumulative health risks associated with the addition of Will-Power to the existing air pollution levels in Wood County.

Response 7: Ohio EPA issues and enforces permits for installing and operating air pollution sources to ensure compliance with air quality standards that protect public health and the environment. Permits are based on technical review and the best available science and are not issued if health-based standards would be exceeded.

Ohio EPA's air permitting process ensures that facility emissions do not exceed the National Ambient Air Quality Standards (NAAQS), which protect public health, especially for sensitive groups like children and the elderly. All permit applications undergo a thorough technical review, including air dispersion modeling when needed, to evaluate potential impacts on surrounding areas. Compliance with this permit is expected to protect public health and welfare now and in the future.

Facilities receiving permits for installation and operation are required to meet the primary and secondary NAAQS for carbon monoxide (CO), nitrogen oxides (NO_x), lead (Pb), ozone (O_3), sulfur dioxide (SO_2), particulate matter ($PM_{2.5}$), and PM_{10}.

Air permitting standards, such as NAAQS, are developed by U.S. EPA through a separate science-based process that involves extensive health risk assessments, peer-reviewed research, and public input. Permits-to-install ensure that facilities are built to comply with these established standards, and the requirements established in the permit-to-install are based on the best available science and regulatory framework.

Some comments raised broader concerns about community health outcomes, including elevated rates of ***asthma*** and ***cancer***. These are important community concerns and Ohio EPA's sister agency, the Ohio Department of Health (ODH) and ***local health departments*** have the authority to conduct health assessments or investigate disease patterns. Additionally, U.S. EPA offers programs that support community-based air monitoring and participatory science initiatives.

3. **Topic:** Air Quality & Monitoring

Comment 8: Commenters expressed concern over the lack of adequate air monitoring near the Will-Power facility. They emphasized that the current air monitoring practices and locations were insufficient to adequately protect public health and did not reflect the actual pollution levels faced by nearby residents.

Response 8: Ohio EPA operates a ***State and Local Air Monitoring Station*** (SLAMS) network, which is reviewed annually and approved by U.S. EPA. The placement of monitors is determined through a network assessment process that considers factors such as:

- Population density and community demographics
- Proximity to emission sources
- Historical air quality data
- Local meteorological conditions (e.g., prevailing wind direction)
- Community input

While the Will-Power facility does not currently have a dedicated SLAMS monitor, the surrounding regional monitors, including the Bowling Green air monitoring site at 347 N. Dunbridge Road (AQS ID 39-173-0003), are part of a network designed to evaluate compliance with NAAQS and to characterize

air quality across the region. For more information on air monitoring, please review Ohio EPA's complete ***Air Monitoring Network Plan***.

Regarding requests for fenceline or real-time monitoring, Ohio EPA notes that such systems are not required under current federal or state regulations unless specific risk-based criteria are met.

We encourage community members to report air quality concerns through our ***online complaint tracker*** or contact our Northwest District Office directly by phone at 419.352.8461.

Comment 9: Will monitoring data be made publicly available in real time?

Response 9: Real-time air quality monitoring and forecasts across the country are available on ***U.S. EPA's Air Now website***. While this facility will have air monitoring and reporting requirements, those will not be available in real time. However, they will be public records that can be ***requested***.

Comment 10: Commenters expressed concern that even if the project meets applicable NAAQS on an individual basis, incremental increases in nitrogen oxides could contribute to regional ozone formation and cumulative air quality impacts.

Response 10: Air dispersion modeling is an evaluation technique used to characterize pollution within a defined area resulting from the operation of a source or group of sources. The permitted amount of nitrogen dioxide (NO_X or NO_2) emissions required state-only computer dispersion modeling for this facility. Predicted NO_2 concentrations were compared to the GAII (Generally Acceptable Incremental Impact). Ohio EPA's annual GAII for NO_2 is one-half of the Prevention of Significant Deterioration (PSD) increments set by the ***Ohio Administrative Code (OAC) 3745-31-11*** to maintain attainment of the NAAQS.

Comment 11: Commenters referenced ***Ohio Administrative Code (OAC) 3745-31-05(A)(1)***, stating that the permitting record must demonstrate that emissions under realistic operating conditions will not interfere with attainment or maintenance of ambient air quality standards.

Response 11: Ohio EPA's air permitting process is designed to ensure that emissions from permitted facilities do not cause or contribute to violations of the NAAQS. Under Ohio's permitting framework, the requirements of OAC 3745-31-05(A)(1) are partially implemented through established dispersion modeling programs, specifically state allowable impact modeling and air toxics modeling as specified in ***Ohio's Engineering Guide #69***, as well as modeling conducted under federal Prevention of Significant Deterioration/New Source Review (PSD/NSR) programs as specified in U.S. EPA's Guideline on Air Quality Models (***Appendix W of 40 CFR Part 51***), when potential emissions trigger the requirement for modeling.

4. **Topic:** Emissions Questions

Comment 12: One commenter submitted a report that claimed carbon monoxide (CO) emissions are above PSD levels and that ammonia (NH_3) emissions are abnormally high.

Response 12: It is unclear how the emissions factor data for CO and NH_3 were derived within the commenter's evidential report. The factors Ohio EPA used to determine potential CO emissions are based on manufacturer specifications for the make and model of each turbine or engine being installed. The potential NH_3 emissions are a very conservative estimate as the majority of the ammonia will be emitted from the selective catalytic reduction (SCR) systems. All modeling was performed with the maximum potential-to-emit in mind, and even at the highest conservative

estimates, the emissions of NH_3 remain below the maximum acceptable ground-level concentration (MAGLC).

Comment 13: One commenter asked why the facility can choose from two NO_x emissions standards in 40 CFR, Part 60, Subpart JJJJ. The commenter also asked if 1.0 g NO_x/HP-hr or 82 ppmvd at 15% O_2 is more stringent.

Response 13: The two standards are set forth in ***40 CFR Part 60, Subpart JJJJ Table 1***. The federal rule allows a facility to choose which standard they want to comply with based on its specific operating scenario. There is no direct conversion between the two standards, so neither is more stringent than the other.

Comment 14: One commenter asked whether each engine must be tested under 40 CFR Part 60, Subpart JJJJ. The commenter also asked how each unit's runtime is measured.

Response 14: Each engine is required to be tested every 8,760 hours of operation or every three years, whichever comes first. The facility is required to perform monitoring and recordkeeping of per-unit runtime, per 40 CFR 60.4243(b)(2)(iii). They are required to perform testing based on this monitoring and recordkeeping, when appropriate.

5. **Topic:** Permit & Permitting Process

Comment 15: One commenter asked whether this facility is a "non-stationary" or a "major stationary source," and whether there is a tax break for this classification.

Response 15: Apollo is a stationary source that does not meet the definition of a major stationary source for PSD or Maximum Available Control Technology (MACT). Tax implications are outside of the scope of Ohio EPA and should be directed to ***Ohio Department of Taxation***.

Comment 16: One commenter questioned why the four gas-fired turbine emissions unit (EU) groups have differing emissions limitations from group to group.

Response 16: These are all gas-fired turbines, but each EU group is a separate turbine model. Each turbine model has unique emission limitations based on specific exhaust data provided by the manufacturer.

Comment 17: Commenters asked why some groups have annual SO_2 and/or PM_{10}/$PM_{2.5}$ emissions limitations, and others do not. Does including SO_2 and PM_{10}/$PM_{2.5}$ limitations allow the use of dirtier fuel?

Response 17: The same pipeline quality natural gas will be used for all emissions units at the facility. Emissions groups with SO_2 and PM_{10}/$PM_{2.5}$ limits are larger units than the others. These units require more gas due to the size of the turbines, so their SO_2 and PM_{10}/$PM_{2.5}$ emissions exceed 10 tons per year (tpy), the level at which Ohio EPA can establish an emissions limit for these pollutants.

Comment 18: Multiple commenters were concerned with the *de minimis* determination for 22 natural gas-fired line heaters, asking what requirements these line heaters are subject to and if their emissions have been evaluated in conjunction with other EUs.

Response 18: The natural gas-fired lined heaters are considered *de minimis* because each unit emits less than 10 pounds of each criteria pollutant per day, and the combined emissions from all line heaters are less than 25 tons of each criteria pollutant per year. The highest NOx emissions rate is

14.68 tpy from all line heaters combined. The requirements for *de minimis* sources are outlined under the ***Ohio Administrative Code (OAC) Rule 3745-15-05.***

Comment 19: Commenters asked that emissions from the emergency generators be calculated at 8,760 hours. One commenter requested copies of the emissions calculations and the Permit-by-Rule (PBR) requirements.

Response 19: Emissions calculations for the emergency generators were based on 500 hours of operation because of their status as emergency engines. This approach was approved by U.S. EPA in a ***Sept. 6, 1995 memorandum*** and is still used today. The public can access the company's emissions calculations by submitting a ***public records request.*** The PBR requirements are published under ***Ohio Administrative Code (OAC) 3745-31-30***.

Comment 20: Multiple commenters were concerned with the lack of renewable energy requirements in the draft permit.

Response 20: Ohio EPA does not dictate which type of fuel is used in engines or turbines, nor does it require companies to research whether alternative energy sources are currently available. Our role is to verify that the proposed project meets all state and federal air pollution regulations.

Comment 21: Multiple commenters were concerned about the determination of Will-Power as a non-major source for PSD, as emissions of criteria pollutants are expected above 100 tpy. One commenter spoke to concerns with synthetic minor permitting.

Response 21: Will-Power is not taking synthetic minor restrictions, nor is the draft PTI a synthetic minor permit. For this facility to be subject to PSD, the potential to emit must be over 250 tpy of a single criteria pollutant. The facility has the potential to emit 234.62 tons of CO, the highest among all criteria pollutants.

Comment 22: Multiple commenters raised concerns that the Ohio EPA's current permitting approach fails to consider the cumulative and aggregate emissions from both Will-Power and the neighboring facility. They argue that they should be evaluated as a single source due to overlapping emissions and historical ties.

Response 22: Ohio EPA follows a 2019 U.S. EPA memorandum titled, "***Interpreting 'Adjacent' for New Source Review and Title V Source Determinations in All Industries Other Than Oil and Gas***". This memorandum cites three criteria that must be met for adjacent facilities to be considered a single source. These criteria include: (1) sources must belong to the same industrial grouping (SIC code); (2) sources must be under common control or ownership; and (3) sources must be located on contiguous or adjacent properties. Will-Power and the adjacent facility do not meet all three criteria for a single-source determination and, as such, cannot be considered a single source for permitting and compliance purposes.

Although the facilities do not meet the single-source determination criteria, they are each still required to meet the NAAQS for the given attainment area. These standards ensure public health and welfare are protected from any combination of air emissions sources in an air quality control region.

Comment 23: The narrative paragraph in the Permit Strategy Write-Up specifies 21 sources and Table 1 specifies 22 – which is it? Or are these different, additional sources?

Response 23: Ohio EPA agrees that there was a typographical error in the Permit Strategy Write Up (PSWU). This document was issued with the draft PTI and has been corrected internally. There are 22 line heater sources.

6. Topic: Compliance

Comment 24: How often will inspections take place, and are they performed by Ohio EPA inspectors?

Response 24: Title V facilities typically undergo a full compliance inspection every two years. These inspections are conducted by Ohio EPA staff and are a thorough review to determine compliance with all applicable air emissions regulations and issued air permit(s). Ohio EPA conducts additional inspections as necessary based on information received from compliance reports, during performance tests, emissions monitoring results, incidents of abnormal operations, and/or complaints.

Comment 25: Multiple commenters requested that the facility install Continuous Emissions Monitoring Systems (CEMS) for all pollutants. Commenters also requested that the CEMS be monitored and calibrated independently. Commenters requested that the data be publicly accessible in real time.

Response 25: NO_x CEMs will be installed on multiple groups of turbines, as required by 40 CFR Part 60, Subpart KKKKa. The facility is required to conduct quarterly calibrations and an annual relative accuracy test audit (RATA). The RATA is performed by a third-party contractor, and Ohio EPA will be onsite to witness the test. The results from these CEMS will be available via public records request. Will-Power is required to demonstrate compliance with the emission limitations for other pollutants through stack testing, so additional CEMS are not necessary at this time.

Comment 26: Multiple commenters asked for stronger requirements to ensure the use of SCR control and asked if Ohio EPA can curtail operations if the facility exceeds permitted limitations.

Response 26: The facility is required to comply with the permit terms and conditions at all times, including the requirement to use an SCR on all generator engines and turbines. Failure to comply with the permit will result in violations being cited. Ohio EPA has the authority to escalate enforcement against a facility for non-compliance and ensure the facility returns to compliance. Results of escalated enforcement can include warning letters, consensual agreements, unilateral orders, referral to the Ohio Attorney General's Office, court orders, etc.

Comment 27: Multiple commenters were concerned with Ohio EPA relying on manufacturers' specifications to establish the permitted emissions limitations and asked how Ohio EPA can confirm that the supplied specifications are correct.

Response 27: The PTI for Will-Power requires emissions testing for NO_x, CO, and volatile organic compounds (VOCs) for all power-generating engines and turbines contained in the permit. The results of this empirical testing will be compared to the permitted emissions limitations.

Comment 28: One commenter expressed concern that the Apollo site will be allowed to operate without proper oversight.

Response 28: Will-Power will be regulated by multiple local, state, and federal regulatory agencies. With regard to this permitting action, Ohio EPA's Division of Air Pollution Control will be the regulatory agency overseeing compliance with applicable state and federal regulations. The facility is required to conduct emissions monitoring, maintain records, and, at a minimum, submit quarterly reports.

Additionally, Ohio EPA will review records, conduct onsite inspections, and observe any emissions tests the facility is required to perform.

7. **Topic:** Modeling/Cumulative Impact

Comment 29: Multiple commenters asked Ohio EPA to ensure that the modeling used representative, local meteorological data for Wood County, including worst-case conditions. Commenters also asked if the modeling reflected the maximum potential emissions, including startups and shutdowns.

Response 29: Our air dispersion modeling used historical meteorological data from the closest ***National Weather Service*** station, in accordance with ***Engineering Guide 69***. The maximum potential emissions, including from startup and shutdown, were included in the modeling along with all line heaters, permit-by-rule units, and permitted EUs.

Comment 30: What are the exposure limits, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound emitted from the emissions units per unit? Operating parameters and limitations must be outlined for each piece of equipment that is regulated to ensure emission limits are not exceeded.

Response 30: The Threshold Limit Values (TLVs) are established by the American Conference of Governmental Industrial Hygienists as the recommended exposure limit for an 8-hour workday. TLVs are used as the basis for determining the Maximum Acceptable Ground-Level Concentrations (MAGLCs), which are then compared with the air dispersion modeling results. The following summarizes the results of dispersion modeling for these air toxic pollutants with the potential to emit greater than 1 tpy from the entire facility:

i. Toxic Contaminant: ammonia

TLV (mg/m^3): 17.41

Predicted One-Hour Maximum Ground-Level Concentration ($\mu g/m^3$): 30.43

MAGLC ($\mu g/m^3$): 414.60

ii. Toxic Contaminant: formaldehyde

TLV (mg/m^3): 0.123

Predicted Annual and One-Hour Maximum Ground-Level Concentration ($\mu g/m^3$): 0.129 (annual) and 12.22 (1-hour)

Alternative acceptable concentration ($\mu g/m^3$): 0.8 (annual) and 49 (1-hour max)

iii. Toxic Contaminant: acetaldehyde

TLV (mg/m^3): 33.20

Predicted One-Hour Maximum Ground-Level Concentration ($\mu g/m^3$): 1.59

MAGLC ($\mu g/m^3$): 790.36

Modeling demonstrated that all air toxics are emitted below the MAGLC. The facility is required to operate in the manner modeled or additional modeling is required. Modeling is performed on an aggregate basis, with all air toxics emitted from each EU at the facility accounted for. It is not performed for each EU, individually.

Comment 31: Commenters requested ***AERMOD*** modeling files, Engineering Guide #69, and questioned if Will-Power's modeling results conflicted with Ohio EPA's results, and by how much.

Response 31: Ohio EPA used the standard practice for air dispersion modeling. Will-Power submitted AERMOD modeling files (U.S. EPA's preferred regulatory model) to demonstrate compliance with Ohio's GAII and air toxics policy. The inputs used for this model were confirmed by the modeling group, along with additional information, including emissions rate calculations and stack parameters. Ohio EPA did an independent screening using AERMOD, after ensuring all critical variables were valid. We confirmed that the modeling data provided by the facility is accurate. While there were differences between Ohio EPA's and Will-Power's modeling, both sets of results showed that the facility passed the dispersion modeling.

Engineering Guide #69 is available on Ohio EPA's website, and AERMOD modeling files are available via public records request.

Comment 32: Multiple commenters asked whether the modeling accounted for the potential increase in ambient temperature from the neighboring data center.

Response 32: The U.S. EPA-approved models do not currently have the capability to incorporate forecasted temperature changes into the modeling results. If needed, modeling can be rerun at a future date.

Comment 33: Multiple commenters requested that the agency conduct a comprehensive cumulative impact analysis for the proposed project. Commenters asked that the cumulative emissions from all existing, permitted, and reasonably foreseeable industrial sources be considered.

Response 33: The projected emissions from this project did not exceed the regulatory levels that would trigger PSD/NSR modeling, which includes a cumulative impact analysis. Because the project remained below these thresholds, the broader modeling analyses requested by commenters are not required under Ohio's permitting framework.

8. **Topic:** Agriculture, Ecosystem, Wildlife, & Environmental Assessment

Comment 34: Commenters are concerned about the proposed facility's impact on ecosystems, watersheds, wildlife, and farmland. They are concerned about air emissions from gas turbines and engines impacting livestock and depositing on farm crops.

Response 34: To ensure wildlife is not impacted, Ohio EPA consults with Ohio Department of Natural Resources (ODNR) and other agencies when drafting a permit that would affect waters of the state. Ohio EPA's Division of Surface Water issued a Construction Stormwater Permit (2GC08564*AG) to the site with an effective date of 1/4/2026. The agency does not anticipate that the facility's air emissions will impact wildlife, agriculture, or ecosystems.

Comment 35: Multiple commenters are concerned about the lack of CO_2 emissions regulations outlined in the draft PTI for Will-Power.

Response 35: Ohio EPA has limited authority for regulating CO_2 emissions under the Clean Air Act. Projects subject to CO_2 permitting regulations are those considered major sources under PSD. Compared to other pollutants regulated by Ohio EPA with established health-based standards, CO_2 requires substantially higher ambient concentrations before eliciting adverse health effects. Ambient concentrations are not anticipated to reach those levels due to atmospheric dispersion.

9. **Topic:** Transparency, Environmental Justice, & Public Process

Comment 36: Multiple commenters requested that Ohio EPA extend the public comment period. One commenter noted that the link to the permit in the public notice was broken.

Response 36: The comment period was extended from April 15 to May 1. The draft permit can be found in ***Ohio EPA's eDocument Search***.

Comment 37: Multiple comments referred to the project being pushed forward in secret and that construction began before a permit was issued. Commenters also referred to non-disclosure agreements (NDAs) being signed.

Response 37: Ohio EPA does not sign NDAs. All permitting actions, including receipt of air applications, are ***public noticed***. Public hearings can be requested for any permitting action, and the public can ***sign up*** to receive a weekly email listing all permit actions in Ohio, organized by county. The facility can begin pre-construction activities once an application is received and deemed complete, as outlined in ***Ohio Administrative Code (OAC) Rule 3745-31-33.***

Comment 38: Multiple commenters requested additional public hearings and a second extension to the public comment period deadline.

Response 38: To ensure the community had enough time to submit comments or concerns, Ohio EPA provided a 58-day comment period, which is four additional weeks beyond what is typically required. We do not anticipate holding additional public hearings for this permit.

Comment 39: Commenters expressed concern over the apparent lack of review of Environmental Justice concerns.

Response 39: As a recipient of federal funding, Ohio EPA must comply with ***Title VI of the Civil Rights Act***. We fulfill these obligations through technical review and public involvement on permit applications. Title VI prohibits states from using criteria or methods that result in discrimination based on race, color, or national origin. Ohio EPA considers all related permit comments to ensure compliance with Title VI. Ohio EPA issues permits based upon standards that are equally protective of all Ohioans. Individuals may also file environmental justice complaints under Title VI of the Civil Rights Act with U.S. EPA. Ohio EPA remains committed to transparency and encourages continued public engagement to ensure that environmental protections are upheld and that public health is protected.

10. **Topic:** Non-Ohio EPA Government Entities & Miscellaneous Topics

Comment 40: Multiple commenters asked questions about the Letter of Notification that was issued by the Ohio Power Siting Board.

Response 40: Questions on the Letter of Notification should be directed to the ***Ohio Power Siting Board (OPSB).***

Comment 41: Several comments focused on impacts to the watershed and local water systems.

Response 41: Impacts to private drinking water wells are managed by ***Ohio Department of Health*** and the ***local health department***. Water withdrawal concerns are managed by ***ODNR***.

Ohio EPA's Division of Surface Water administers the ***Construction Stormwater Program*** under the federal Clean Water Act. Construction sites disturbing one acre or more must obtain coverage. Facility

owners must also prepare a Stormwater Pollution Prevention Plan, submit a Notice of Intent, and receive Ohio EPA approval before starting work.

Ohio EPA's Division of Surface Water issued a Construction Stormwater Permit (2GC08564*AG) to the Will-Power site on Jan. 4, 2026.

Comment 42: Commenters expressed concern for topics unrelated to the proposed air permit, such as zoning issues, property values, data centers, tax abatements, utility costs, water usage, noise pollution, light pollution, and a lack of trust in officials and the permitting process. Overall, these submissions reflect significant apprehension with the proposed facility.

Response 42: These concerns are outside of Ohio EPA's permitting authority. Ohio EPA must issue permits that comply with Ohio's environmental laws and regulations. The draft air permit does meet those requirements. We encourage residents to engage with their local municipalities and county resources to address these issues.

Ohio Environmental Protection Agency

FINAL

Division of Air Pollution Control

Permit-to-Install

for

Will-Power OH LLC - Apollo

Facility ID:	0387022027
Permit Number:	P0139272
Permit Type:	Initial Installation
Issued:	06/02/2026
Effective:	06/02/2026

Ohio Environmental Protection Agency

Division of Air Pollution Control

Permit-to-Install

for

Will-Power OH LLC - Apollo

Table of Contents

Authorization

Facility ID:	0387022027
Facility Description:	Will-Power OH LLC - Apollo
Application Number(s):	A0080762, A0081069
Permit Number:	P0139272
Permit Description:	Initial Installation PTI for (6) natural gas fired engines and (21) natural gas fired turbines.
Permit Type:	Initial Installation
Permit Fee	$6,672.00
Issue Date:	06/02/2026
Effective Date:	06/02/2026

This document constitutes issuance of a Permit-to-Install for the emissions unit(s) identified on the following page to:

Will-Power OH LLC - Apollo
11902 Middleton Pike
Bowling Green, OH 43402

Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Northwest District Office
347 North Dunbridge Rd.
Bowling Green, OH 43402
(419)352-8461

The above-named entity is hereby granted a Permit-to-Install for the emissions unit(s) listed in this section pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Entered into the Journal of the Director on:

John Logue
Director

Date: 06/02/2026

Authorization (continued)

Permit Number:P0139272

Permit Description:Initial Installation PTI for (6) natural gas fired engines and (21) natural gas fired turbines.

Permits for the following Emissions Unit(s) or groups of Emissions Units are in this document as indicated below:

Group Name: Caterpillar Generator Engines

Emissions Unit ID:	**P003**
Company Equipment ID:	CAT G3520 #1
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P004**
Company Equipment ID:	CAT G3520 #2
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P005**
Company Equipment ID:	CAT G3520 #3
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P006**
Company Equipment ID:	CAT G3520 #4
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P007**
Company Equipment ID:	CAT G3520 #5
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P008**
Company Equipment ID:	CAT G3520 #6

Superseded Permit Number:	
General Permit Category and Type:	Not Applicable

Group Name: Siemens SGT-400 Turbines

Emissions Unit ID:	**P018**
Company Equipment ID:	Siemens SGT-400 #1
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P019**
Company Equipment ID:	Siemens SGT-400 #2
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P020**
Company Equipment ID:	Siemens SGT-400 #3
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P021**
Company Equipment ID:	Siemens SGT-400 #4
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P022**
Company Equipment ID:	Siemens SGT-400 #5
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P023**
Company Equipment ID:	Siemens SGT-400 #6
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable

Group Name: Siemens SGT-800 Turbines

Emissions Unit ID:	**P024**
Company Equipment ID:	Siemens SGT-800 #1
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P025**
Company Equipment ID:	Siemens SGT-800 #2
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable

Group Name: Siemens SGT-A35 Turbines

Emissions Unit ID:	**P015**
Company Equipment ID:	Siemens SGT-A35 #1
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P016**
Company Equipment ID:	Siemens SGT-A35 #2
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P017**
Company Equipment ID:	Siemens SGT-A35 #3
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable

Group Name: Solar Titan T-130 Turbines

Emissions Unit ID:	**P009**
Company Equipment ID:	Solar Titan 130 #1

Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P010**
Company Equipment ID:	Solar Titan 130 #2
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P011**
Company Equipment ID:	Solar Titan 130 #3
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P012**
Company Equipment ID:	Solar Titan 130 #4
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P013**
Company Equipment ID:	Solar Titan 130 #5
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P014**
Company Equipment ID:	Solar Titan 130 #6
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P026**
Company Equipment ID:	Solar Titan 130 #7
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P027**
Company Equipment ID:	Solar Titan 130 #8
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable

Emissions Unit ID:	**P028**
Company Equipment ID:	Solar Titan 130 #9
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P029**
Company Equipment ID:	Solar Titan 130 #10
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable

List of Commonly Used Abbreviations

AP-42 = U.S. EPA's Compilation of Air Pollution Emissions Factors	HVLP = high volume, low pressure	PER = Permit Evaluation Report
ASTM = American Society for Testing and Materials	LAER = lowest achievable emission rate	PM = particulate matter
BACT = Best Available Control Technology	lb(s)/hr = pound(s) per hour	PM_{10} = particulate matter with an aerodynamic diameter less than or equal to 10 microns
BAT = Best Available Technology	LDAR = leak detection and repair	$PM_{2.5}$ = particulate matter with an aerodynamic diameter less than or equal to 2.5 microns
CAA = Clean Air Act	LPG = liquefied petroleum gas/propane	ppb = parts per billion
CAM = compliance assurance monitoring	MACT = maximum achievable control technology	ppm = parts per million
CEMS = continuous emissions monitoring system	MAGLC = maximum acceptable ground level concentration	PSD = Prevention of Significant Deterioration
CFC = chlorofluorocarbon	mg/m3 = milligrams per cubic meter	psi = pounds per square inch
CFR = Code of Federal Regulations	MM = million	psia = pounds per square inch absolute
CH_4 = methane	MMBtu = million British Thermal Units	PTE = potential-to-emit
CI = compression ignition	MSDS = material safety data sheet	PTI = Permit-to-Install
CO = carbon monoxide	MSW = municipal solid waste	PTIO = Permit-to-Install and Operate
CO_2 = carbon dioxide	NAAQS = National Ambient Air Quality Standard	PTO = Permit-to-Operate
COM = continuous opacity monitor	NESHAP = National Emission Standard for Hazardous Air Pollutants	PWR = process weight rate
DAPC = Division of Air Pollution Control	NG = natural gas	RACM = reasonably available control measures
DO/LAA = District Office/Local Air Agency	ng/m3 = nanograms per cubic meter	RACT = reasonably available control technology
dscf = dry standard cubic foot	NH_3 = ammonia	RATA = relative accuracy test audit
EAC = emissions activity category	NMHC = non-methane hydrocarbons	RTO = regenerative thermal oxidizer
eDocs = electronic documents database	NMOC = non-methane organic compound	SB265 = Senate Bill 265
ERAC = Environmental Review Appeals Commission	NO = nitrogen oxide	scfm = standard cubic feet per minute
ESP = electrostatic precipitator	NO_2 = nitrogen dioxide	SI = spark ignition
EU = emissions unit	NO_x = nitrogen oxides	SIP = State Implementation Plan
FEPTIO = Federally Enforceable Permit-to-Install and Operate	NSPS = New Source Performance Standard	SO_2 = sulfur dioxide
FER = Fee Emissions Report	NSR = New Source Review	SSMP = startup, shutdown, and malfunction plan
FR = Federal Register	NTV = Non-Title V	TDS = total dissolved solids
GACT = generally achievable control technology	O&M = operation and maintenance	TLV = threshold limit value
GHG = greenhouse gases	OAC = Ohio Administrative Code	TO = thermal oxidizer
gr/dscf = grains per dry standard cubic foot	OC = organic compound	TPH = ton(s) per hour
H_2S = hydrogen sulfide	Ohio EPA = Ohio Environmental Protection Agency	TPY = ton(s) per year
H_2SO_4 = sulfuric acid	ORC = Ohio Revised Code	TSP = total suspended particulates
HAP = hazardous air pollutant	Pb = lead	VE = visible particulate emissions
HCl = hydrogen chloride	PBR = Permit-By-Rule	VMT = vehicle miles traveled
HF = hydrogen fluoride	PCB = polychlorinated biphenyl	VOC = volatile organic compound
Hg = mercury	PE = particulate emissions	WPP = work practice plan
hp = horsepower	PEMS = predictive emissions monitoring system	µg/m3 = micrograms per cubic meter

A. Standard Terms and Conditions

1. Federally Enforceable Standard Terms and Conditions

a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under state law only:

(1) Standard Term and Condition A.2.a), Severability Clause

(2) Standard Term and Condition A.3.c) through A. 3.e), General Requirements

(3) Standard Term and Condition A.6.c), Compliance Requirements

(4) Standard Term and Condition A.8., Air Pollution Nuisance

(5) Standard Term and Condition A.9., Reporting Requirements

(6) Standard Term and Condition A.10., Applicability

(7) Standard Term and Condition A.11.b) through A.11.e), Construction of New Source(s) and Authorization to Install

(8) Standard Term and Condition A.14., Public Disclosure

(9) Standard Term and Condition A.15., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

(10) Standard Term and Condition A.16., Fees

(11) Standard Term and Condition A.17., Permit Transfers

2. Severability Clause

a) A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

b) All terms and conditions designated in parts B. and C. of this permit are federally enforceable as a practical matter, if they are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA and the state and by citizens (to the extent allowed by section 304 of the Act) under the Act. Terms and conditions in parts B and C of this permit shall not be federally enforceable and shall be enforceable under state law only, only if specifically identified in this permit as such.

3. General Requirements

a) Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act and is grounds for enforcement action or for permit revocation, revocation and re-issuance, or modification.

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

c) This permit may be modified, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.

d) This permit does not convey any property rights of any sort, or any exclusive privilege.

e) The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

4. Monitoring and Related Record Keeping and Reporting Requirements

a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:

(1) The date, place (as defined in the permit), and time of sampling or measurements.

(2) The date(s) analyses were performed.

(3) The company or entity that performed the analyses.

(4) The analytical techniques or methods used.

(5) The results of such analyses.

(6) The operating conditions existing at the time of sampling or measurement.

b) Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

c) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:

(1) Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the Ohio EPA DAPC, Northwest District Office.

(2) Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the Ohio EPA DAPC, Northwest District Office. The written reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31,

and October 31 of each year and shall cover the previous calendar quarters. See A.15. below if no deviations occurred during the quarter.

(3) Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to the DO/LAA every six months, by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semiannual report, which states that no deviations occurred during that period.

(4) This permit is for an emissions unit located at a Title V facility. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

d) The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the Ohio EPA DAPC, Northwest District Office in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction). The verbal and written reports shall be submitted pursuant to OAC rule 3745-15-06.

Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shut down of the emission unit(s) that is (are) served by such control system(s).

6. Compliance Requirements

a) All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the appropriate Ohio EPA District Office or contracted local air agency, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the electronic signature date shall constitute the date that the required application, notification or report is considered to be "submitted". Any document requiring signature may be represented by entry of the personal identification number (PIN) by responsible official as part of the electronic submission process or by the scanned attestation document signed by the Authorized Representative that is attached to the electronically submitted written report.

Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a Responsible Official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.

b) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:

(1) At reasonable times, enter upon the permittee's premises where a source is located, or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.

(2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.

(3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.

(4) As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.

c) The permittee shall submit progress reports to the Ohio EPA DAPC, Northwest District Office concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:

(1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.

(2) An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

7. Best Available Technology

As specified in OAC Rule 3745-31-05, new sources that must employ Best Available Technology (BAT) shall comply with the Applicable Emission Limitations/Control Measures identified as BAT for each subject emissions unit.

8. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

9. Reporting Requirements

The permittee shall submit required reports in the following manner:

a) Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the Ohio EPA DAPC, Northwest District Office.

b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission limitations,

operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Ohio EPA DAPC, Northwest District Office. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

10. Applicability

This permit-to-install is applicable only to the emissions unit(s) identified in the permit-to-install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s) not exempt from the requirement to obtain a permit-to-install.

11. Construction of New Sources(s) and Authorization to Install

a) This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

b) If applicable, authorization to install any new emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit if the owner or operator has not undertaken a continuing program of installation or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation. This deadline may be extended once by twelve months if application is made to the Director within a reasonable time before the termination date and the permittee shows good cause for any such extension.

c) The permittee may notify Ohio EPA of any emissions unit that is permanently shut down (i.e., the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31) by submitting a certification from the authorized official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the authorized official that the emissions unit was permanently shut down. At a minimum, notification of permanent shut down shall be made or confirmed by marking the affected emissions unit(s) as "permanently shut down" in "Air Services" along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update electronically will constitute notifying the Director of the permanent shut down of the affected emissions unit(s).

d) The provisions of this permit shall cease to be enforceable for each affected emissions unit after the date on which an emissions unit is permanently shut down (i.e., emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31). All records relating to any permanently shut down emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law. All reports required by this permit must be submitted for any period an affected emissions unit operated prior to permanent shut down. At a minimum, the permit requirements must be evaluated as part of the reporting requirements identified in this permit covering the last period the emissions unit operated.

Unless otherwise exempted, no emissions unit certified by the responsible official as being permanently shut down may resume operation without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31 and OAC Chapter 3745-77 if the restarted operation is subject to one or more applicable requirements.

e) The permittee shall comply with any residual requirements related to this permit, such as the requirement to submit a deviation report, air fee emission report, or any other reporting required by this permit for the period the operating provisions of this permit were enforceable, or as required by regulation or law. All reports shall be submitted in a form and manner prescribed by the Director. All records relating to this permit must be maintained in accordance with law.

12. Permit-To-Operate Application

The permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77. The permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve months after commencing operation of the emissions units covered by this permit. However, if operation of the proposed new or modified source(s) as authorized by this permit would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d) must be obtained before operating the source in a manner that would violate the existing Title V permit requirements.

13. Construction Compliance Certification

The applicant shall identify the following dates in the "Air Services" facility profile for each new emissions unit identified in this permit.

a) Completion of initial installation date shall be entered upon completion of construction and prior to start-up.

b) Commence operation after installation or latest modification date shall be entered within 90 days after commencing operation of the applicable emissions unit.

14. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

15. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

16. Fees

The permittee shall pay any fees to Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable permit-to-install fees within 30 days after the issuance of any permit-to-install. Failure to provide the applicable permit fee within 30 days may result in the accrual of substantial interest penalties. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.

17. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The new owner must update and submit the ownership information via the "Owner/Contact Change" functionality in "Air Services" once the transfer is legally completed. The change must be submitted through "Air Services" within thirty days of the ownership transfer date.

18. Risk Management Plans

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

19. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

B. Facility-Wide Terms and Conditions

1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

   a) None.

C. Emissions Unit Terms and Conditions

1. Emissions Unit Group - Caterpillar Generator Engines: P003, P004, P005, P006, P007, P008,

EU ID	Operations, Property and/or Equipment Description
P003	Caterpillar G3520 Generator Engine #1
P004	Caterpillar G3520 Generator Engine #2
P005	Caterpillar G3520 Generator Engine #3
P006	Caterpillar G3520 Generator Engine #4
P007	Caterpillar G3520 Generator Engine #5
P008	Caterpillar G3520 Generator Engine #6

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) b)(1)g., d)(7) through d)(10), and e)(3)

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(A)	Visible particulate emissions from the stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.
b.	OAC rule 3745-17-11(B)(5)(b)	Particulate emissions shall not exceed 0.062 pounds per million Btu of actual heat input.
c.	OAC rule 3745-18-06	See b)(2)d.
d.	OAC rule 3745-31-05(A)(3)(a)(ii)	The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the NO_X, CO, VOC, SO_2, PM_{10}, and $PM_{2.5}$ emissions from this air contaminant source because the PTE is less than 10 tons per year as vented to the oxidation catalyst and SCR system.

e.	OAC rule 3745-31-05(F)	NO_X emissions shall not exceed 0.74 pounds per hour, excluding periods of startup and shutdown. CO emissions shall not exceed 0.73 pounds per hour, excluding periods of startup and shutdown. VOC emissions shall not exceed 0.56 pounds per hour, excluding periods of startup and shutdown. NO_X emissions shall not exceed 2.46 pounds per startup or shutdown event. CO emissions shall not exceed 3.45 pounds per startup or shutdown event. VOC emissions shall not exceed 0.51 pound per startup or shutdown event. NO_X emissions shall not exceed 3.32 tons per rolling, 12-month period from startup and shutdown events and normal operations. CO emissions shall not exceed 3.31 tons per rolling, 12-month period from startup and shutdown events and normal operations. VOC emissions shall not exceed 2.45 tons per rolling, 12-month period from startup and shutdown events and normal operations. See b)(2)a. through b)(2)c. below.
f.	OAC rule 3745-110-02(A)(2)(b) and OAC rule 3745-110-03(F)(2)	The permittee shall comply with 40 CFR Part 60, Subpart JJJJ in lieu of OAC Chapter 3745-110 because the emissions limitations and requirements of 40 CFR Part 60, Subpart JJJJ are more stringent than the emissions limitations and requirements of OAC Chapter 3745-110.
g.	ORC 3704.03(F)(3)(c) and (F)(4) [Toxic Air Contaminant Statute]	See d)(7) through d)(10) below.
h.	40 CFR Part 60, Subpart JJJJ [40 CFR 60.4230 – 60.4248] 40 CFR 60.4233(e)	The exhaust emissions from this engine shall not exceed: 1.0 grams of NO_X per horsepower hour or 82 ppmvd at 15% O_2; 2.0 grams of CO per horsepower hour or 270

	[The affected source is a 3,400 hp, non-emergency, natural gas-fired engine with lean burn combustion and vented to an oxidation catalyst and SCR system.]	ppmvd at 15% O_2; and 0.7 grams of VOC (excluding formaldehyde) per horsepower hour or 60 ppmvd at 15% O_2.
i.	40 CFR Part 60, Subpart A [40 CFR 60.1 – 60.19]	Table 3 to 40 CFR Part 60, Subpart JJJJ-"Applicability of General Provisions to Subpart JJJJ" identifies which parts of the General Provisions in 40 CFR Part 60.1 – 60.19 apply.
j.	40 CFR Part 63, Subpart ZZZZ [40 CFR 63. 6580 - 40 CFR 63.6675] [The affected source is a new 4SLB stationary RICE with a site rating of more than 500 bhp located at a major source of HAP emissions.]	See b)(2)e. and b)(2)f. below.
k.	40 CFR Part 63, Subpart A [40 CFR 63.1 – 63.16]	Table 8 to 40 CFR Part 63, Subpart ZZZZ-"Applicability of General Provisions to Subpart ZZZZ" identifies which parts of the General Provisions in 40 CFR Part 63.1 – 63.16 apply.

(2) Additional Terms and Conditions

a. The legally and practically enforceable emission limitations in b)(1)e. are established for the purpose of representing potential to emit (PTE) and are based on the operational restrictions contained in c)(1). The legally and practically enforceable emission limitations are voluntary restrictions.

b. “Startup” is defined as beginning with engine fuel ignition and ends when the SCR catalyst bed temperature reaches the minimum temperature necessary for the SCR to control NO_X emissions.

c. “Shutdown” is defined as the process of taking the engine off-line and begins when the SCR catalyst bed temperature falls below the minimum temperatures necessary for the SCR to control NO_X emissions.

d. These emissions units (EUs) are exempt from the SO_2 emissions limitations specified in OAC rule 3745-18-06(D), (F), and (G) pursuant to OAC rule 3745-18-06(A).

e. The 4SLB stationary RICE shall meet one of the following emissions limitations except during periods of startup:

i. Reduce CO emissions by 93 percent or more; or

ii. Limit concentration of formaldehyde in the stationary RICE exhaust to 14 ppmvd or less at 15 percent O_2.

f. During periods of startup, the permittee must minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations in b)(2)b. apply.

c) Operational Restrictions

(1) The following operational restrictions have been included in this permit for the purpose of establishing legally and practically enforceable requirements which represent PTE [See b)(2)a.]:

a. The permittee shall burn only natural gas in this emissions unit.

b. The NO_X, CO, and VOC emissions from this emissions unit shall be vented to an oxidation catalyst and SCR system at all times when the emissions unit is in operation except during startup and shutdown.

c. The permittee shall meet the following operating limitations, except during periods of startup:

i. Maintain the catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load ± 10 percent from the pressure drop across the catalyst that was measured during the initial performance test; and

ii. Maintain the temperature of the stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450°F and less than or equal to 1,350°F.

d. Startup and shutdown events shall each be limited to 40 events per rolling, 12-month period.

(2) See 40 CFR Part 60, Subpart JJJJ (40 CFR 60.4230 – 60.4248).

(3) See 40 CFR Part 63, Subpart ZZZZ (40 CFR 63.6580 – 63.6675).

d) Monitoring and/or Recordkeeping Requirements

(1) For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

(2) The permittee shall install, operate, and maintain the oxidation catalyst and SCR system, including the ammonia injection system, in accordance with the manufacturer's recommendations, instructions, and/or operating manual, with any modifications deemed necessary by the permittee. The permittee shall maintain the SCR catalyst bed temperature below the maximum temperature established by the manufacturer.

(3) The permittee shall maintain documentation of the manufacturer's recommendations, instructions, and/or operating manual for the oxidation catalyst and SCR system, along with documentation of any modifications deemed necessary by the permittee. These documents shall be maintained at the facility and shall be made available to the Ohio EPA, DO/LAA upon request.

(4) The permittee shall maintain the following information for maintenance and repairs performed on the oxidation catalyst and SCR system:

a. the date of the maintenance and/or repair;

b. a description of the maintenance and/or repairs performed; and

c. the name of person(s) who performed the maintenance and/or repair.

(5) The permittee shall properly install, operate, and maintain equipment that continuously monitors the following information for the oxidation catalyst and SCR system at all times when the associated engine is in operation and records of hourly average data for:

a. the pressure drop across the control system;

b. the NO_x concentration at the SCR catalyst bed exhaust; and

c. the temperature of the SCR catalyst bed.

Each monitoring device shall be equipped with a mechanism to detect parameters that exceed recommended thresholds as established per d)(2) and trigger an alarm to operators when the control system is not operating within the recommended conditions.

(6) The permittee shall maintain monthly records of the following information:

a. the hours of operation, excluding startup and shutdown;

b. the number of startup events;

c. the number of shutdown events;

d. the NO_x emissions, in pounds or tons;

e. the CO emissions, in pounds or tons;

f. the VOC emissions, in pounds or tons;

g. the rolling, 12-month summation of the number of startup events;

h. the rolling, 12-month summation of the number of shutdown events;

i. the rolling, 12-month NO_x emissions, in tons;

j. the rolling, 12-month CO emissions, in tons; and

k. the rolling, 12-month VOC emissions, in tons.

Emissions from startup and shutdown events shall be calculated using the emissions data provided by the engine manufacturer and identified in b)(1)e. above. Emissions during all other periods of operation shall be calculated by multiplying the hours of operation, excluding startup and shutdown, by the maximum hourly emissions rate provided by the engine manufacturer and identified in b)(1)e. above or the results of most recent testing as conducted per f)(1).

(7) The PTI application for emissions units P001 through P030 and B001 through B022 was evaluated based on the actual materials and the design parameters of the emissions units'

exhaust systems, as specified by the permittee. The *Toxic Air Contaminant Statute*, ORC 3704.03(F), was applied to these emissions units for each toxic air contaminant listed in OAC rule 3745-114-01 using data from the permit application; and modeling was performed for each toxic air contaminant emitted at over one ton per year (tpy) using an air dispersion model such as AERSCREEN, AERMOD, ISCST3 or other Ohio EPA-approved model. The predicted one-hour maximum ground-level concentration results from the approved air dispersion model, were compared to the maximum acceptable ground-level concentration (MAGLC), calculated as described in Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A," as follows:

a. The exposure limit, expressed as a time-weighted average concentration for a conventional eight-hour workday and a 40-hour workweek, for each toxic compound emitted from the emissions units (as determined from the raw materials processed and/or coatings or other materials applied), has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):

   i. Threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices shall be used, if the chemical is listed; or

   ii. Short-term exposure limit (STEL) or the ceiling value from the American Conference of Governmental Industrial Hygienists (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent eight-hour TLV.

b. The TLV is divided by 10 to adjust the standard from the working population to the general public.

c. This standard is adjusted to account for the duration of the exposure or the operating hours of the emissions units, that is, 24 hours per day and 7 days per week, from that of 8 hours per day and 5 days per week.

d. The resulting calculation shall be used to determine the MAGLC:

$$\frac{TLV}{10} \times \frac{8}{24} \times \frac{5}{7} = 4\frac{TLV}{168} = MAGLC$$

e. The following summarizes the results of dispersion modeling for the significant toxic contaminants or *worst-case* scenario:

   i. Toxic Contaminant: ammonia

   TLV (mg/m^3): 17.41

Maximum Hourly Emission Rate (lb/hr): 0.21 lb/hr (per EU) from P003 – P008, 3.00 lbs/hr (per EU) from P009 – P014 and P026 – P029, 4.87 lbs/hr (per EU) from P015 – P017, 2.48 lbs/hr (per EU) from P018 – P023, and 8.65 lbs/hr (per EU) from P024 – P025.

Predicted One-Hour Maximum Ground-Level Concentration ($\mu g/m^3$): 30.43

MAGLC ($\mu g/m^3$): 414.60

ii. Toxic Contaminant: formaldehyde

TLV (mg/m^3): 0.123

Maximum Hourly Emission Rate (lb/hr): 0.84 lb/hr (per EU) from P003 – P008, 0.27 lb/hr (per EU) from P009 – P014 and P026 – P029, 0.28 lb/hr (per EU) from P015 – P017, 0.30 lb/hr (per EU) from P018 – P023, and 0.39 lb/hr (per EU) from P024 – P025. The emissions from P001 – P002, P030, and B001 – B022 combined are less than 2.8×10^{-3} lb/hr.

Predicted Annual and One-Hour Maximum Ground-Level Concentration ($\mu g/m^3$): 0.129 (annual) and 12.22 (1-hour)

Alternative acceptable concentration ($\mu g/m^3$): 0.8 (annual) and 49 (1-hour max)

iii. Toxic Contaminant: acetaldehyde

TLV (mg/m^3): 33.20

Maximum Hourly Emission Rate (lb/hr): 0.111 lb/hr (per EU) from P003 – P008, 0.004 lb/hr (per EU) from P009 – P014 and P026 – P029, 0.007 lb/hr (per EU) from P015 – P017, 0.004 lb/hr (per EU) from P018 – P023, and 0.014 lb/hr (per EU) from P024 – P025.

Predicted One-Hour Maximum Ground-Level Concentration ($\mu g/m^3$): 1.59

MAGLC ($\mu g/m^3$): 790.36

The permittee has demonstrated that emissions of ammonia, formaldehyde, and acetaldehyde from emissions units P001 through P030 and B001 through B022 are calculated to be less than 80 percent of the MAGLC for ammonia and acetaldehyde and less than 80 percent of the alternative acceptable concentrations for formaldehyde; any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the *Toxic Air Contaminant Statute*, ORC 3704.03(F).

(8) Prior to making any physical changes to or changes in the method of operation of the emissions units that could impact the parameters or values that were used in the predicted one-hour maximum ground-level concentration, the permittee shall re-model any change to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the one-hour maximum ground-level concentration include, but are not limited to, the following:

a. Changes in the composition of the materials used or the use of new materials, that would result in the emissions of a new toxic air contaminant with a lower TLV than the lowest TLV previously modeled.

b. Changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application.

c. Physical changes to the emissions units or exhaust parameters (for example, increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines the *Toxic Air Contaminant Statute,* ORC 3704.03(F), will be satisfied for the above changes, Ohio EPA will not consider a change to be a *modification* under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the *Toxic Air Contaminant Statute, ORC 3704.03(F),* has been documented. If each change meets the definition of a *modification*, the permittee shall apply for and obtain a final PTI prior to the change. The director may consider any significant departure from the operations of the emissions unit described in the permit application as a modification that results in greater emissions than the emissions rate modeled to determine the ground-level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

(9) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the *Toxic Air Contaminant Statute* ORC 3704.03(F):

a. A description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (for example, the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.).

b. The MAGLC for each significant toxic contaminant or worst-case contaminant, calculated per the *Toxic Air Contaminant Statute*, ORC 3704.03(F).

c. A copy of the computer model run(s), that established the predicted one-hour maximum ground-level concentration that demonstrated the emissions units to be in compliance with the *Toxic Air Contaminant Statute,* ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions.

d. The documentation of the initial evaluation of compliance with the *Toxic Air Contaminant Statute,* ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions units or the materials applied.

(10) The permittee shall maintain a record of any change made to a parameter or value entered in the dispersion model used to demonstrate compliance with the *Toxic Air Contaminant Statute*,

ORC 3704.03(F), through the predicted one-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

(11) See 40 CFR Part 60, Subpart JJJJ (40 CFR 60.4230 – 60.4248).

(12) See 40 CFR Part 63, Subpart ZZZZ (40 CFR 63.6580 – 63.6675).

e) Reporting Requirements

(1) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

(2) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

a. All exceedances of the number of startup and shutdown events identified in c)(1)d.; and

b. All exceedances of the rolling, 12-month NO_X, CO, and VOC emissions limitations.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions in Section A of this permit.

(3) The permittee shall submit annual reports that include any changes to any parameter or value entered in the dispersion model used to demonstrate compliance with the *Toxic Air Contaminant Statute*, ORC 3704.03(F), through the predicted one-hour maximum ground-level concentration. The report shall include:

a. The original model input.

b. The updated model input.

c. The reason for each change to any input parameter.

d. A summary of the results of the updated modeling, including the input changes.

e. A statement that the model results indicate that the one-hour maximum ground-level concentration is less than 80 percent of the MAGLC.

If no changes to the emissions, emissions units or the exhaust stacks have been made during the reporting period, then the report shall include a statement to that effect. This report shall be included as part of the Title V annual compliance certification.

(4) See 40 CFR Part 60, Subpart JJJJ (40 CFR 60.4230 – 60.4248).

(5) See 40 CFR Part 63, Subpart ZZZZ (40 CFR 63.6580 – 63.6675).

f) Testing Requirements

(1) The permittee shall conduct, or have conducted, emission testing for this EU in accordance with the following requirements:

a. The emission testing shall be conducted within 60 days after achieving the maximum production rate at which the EU will be operated, but not later than 180 days after initial startup of the EU.

b. The emission testing shall be conducted to demonstrate initial compliance with the hourly NO_X, CO, and VOC emissions limitations established under OAC rule 3745-31-05(F); the NO_X, CO, and VOC emissions standards established under 40 CFR 60.4233(e); and the minimum CO reduction requirement or the formaldehyde concentration limitation established under 40 CFR 63.6600(b).

c. Subsequent performance tests for NO_X, CO, and VOC shall be conducted every 8,760 hours or 3 years, whichever comes first in accordance with 40 CFR 60.4243(b)(2)(ii).

d. Subsequent performance tests for CO reduction or formaldehyde concentration shall be conducted semiannually in accordance with Table 3 to 40 CFR Part 63, Subpart ZZZZ. The frequency of subsequent performance tests may be reduced to annually after compliance has been demonstrated during two consecutive tests. If the results of any subsequent annual performance test indicate the EU is not in compliance with the CO or formaldehyde emission limitations, or the EU deviates from any operating limitations, then semiannual performance tests must be resumed.

e. The following test method(s) shall be employed to demonstrate compliance with the above emissions limitations:

Emissions Limits/Emissions Factors	Test Methods and Procedures
The hourly VOC emissions limitation established under OAC rule 3745-31-05(F)	VOC emissions shall be calculated by summing the VOC emissions, as propane, and formaldehyde emissions. The VOC emissions, as propane, shall be determined using Methods 1 through 4 or 19, and 18 or 25A, as applicable, of 40 CFR Part 60, Appendix A. The formaldehyde emissions shall be determined using Methods 1 through 4 or 19 of 40 CFR Part 60, Appendix A, and Method 320 or 323 of 40 CFR Part 63, Appendix A or ASTM D6348-03, provided in ASTM D6348-03 Annex A5, the percent R must be greater than or equal to 70 and less than or equal to 130.
The hourly NO_X and CO emissions limitations established under OAC rule 3745-31-05(F) and the NO_X, CO, and VOC limits established pursuant to 40 CFR Part 60, Subpart JJJJ	The methods and procedures specified in 40 CFR 60.4244 and Table 2 to 40 CFR Part 60, Subpart JJJJ.
CO reduction requirement or the formaldehyde concentration limitation established pursuant to 40 CFR Part 63, Subpart ZZZZ	The methods and procedures specified in 40 CFR 63.6620 and Table 4 to 40 CFR Part 63, Subpart ZZZZ

Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

f. During the emissions testing, the EU shall be operated under operational conditions approved in advance by the appropriate Ohio DO/LAA. Operational conditions that may need to be approved include, but are not limited to, the production rate, the type of material processed, material make-up (solvent content, etc.) or control equipment operational limitations (burner temperature, precipitator voltage, etc.). In general, testing shall be done under *worst case* conditions expected during the life of the permit. As part of the information provided in the Intent to Test (ITT) notification form described below, the permittee shall provide a description of the EU operational conditions they will meet during the emissions testing and describe why they believe *worst case* operating conditions will be met. Prior to conducting the test(s), the permittee shall confirm with the appropriate Ohio EPA DO/LAA that the proposed operating conditions constitute *worst case*. Failure to test under the approved conditions may result in Ohio EPA not accepting the test results as a demonstration of compliance.

g. Not later than 60 days prior to the proposed test date(s), the permittee shall submit an ITT notification to the appropriate Ohio EPA DO/LAA. The ITT notification shall describe in detail the proposed test methods and procedures, the EU operating parameters, the time(s) and date(s) of the test(s) and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA DO/LAA's refusal to accept the results of the emission test(s).

h. Personnel from the appropriate Ohio EPA DO/LAA shall be permitted to witness the test(s), examine the testing equipment and acquire data and information necessary to ensure that the operation of the EU and the testing procedures provide a valid characterization of the emissions from the EU and/or the performance of the control equipment.

i. A comprehensive written report on the results of the emissions test(s) shall be signed by the person(s) responsible for the tests and submitted to the appropriate Ohio EPA DO/LAA within 60 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA DO/LAA.

(2) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitation

Visible particulate emissions from the stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.

Applicable Compliance Method

If required, compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Reference Method 9 in 40 CFR Part 60, Appendix A.

b. Emissions Limitation

Particulate emissions shall not exceed 0.062 pounds per million Btu of actual heat input.

Applicable Compliance Method

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in OAC rule 3745-17-03(B)(10).

c. Emissions Limitations

NO_X emissions shall not exceed 0.74 pounds per hour, excluding periods of startup and shutdown.

CO emissions shall not exceed 0.73 pounds per hour, excluding periods of startup and shutdown.

VOC emissions shall not exceed 0.56 pounds per hour, excluding periods of startup and shutdown.

Applicable Compliance Method

Compliance with these emissions limitations shall be demonstrated through emissions testing performed in accordance with f)(1) above.

d. Emissions Limitations

NO_X emissions shall not exceed 3.32 tons per rolling, 12-month period from startup and shutdown events and normal operations, combined.

CO emissions shall not exceed 3.31 tons per rolling, 12-month period. from startup and shutdown events and normal operations, combined

VOC emissions shall not exceed 2.45 tons per rolling, 12-month period from startup and shutdown events and normal operations, combined.

Applicable Compliance Method

Compliance with these emissions limitations shall be determined in accordance with the monitoring and/or recordkeeping specified in d) above.

e. Emissions Limitations

NO_X emissions shall not exceed 2.46 pounds per startup or shutdown event.

CO emissions shall not exceed 3.45 pounds per startup or shutdown event.

VOC emissions shall not exceed 0.51 pound per startup or shutdown event.

Applicable Compliance Method

These emissions limitations were established based on the manufacturer's information provided by the permittee. If required, compliance shall be demonstrated through emissions testing performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 or 19, and 7E for NO_X, 10 for CO, 18 or 25A for VOC (excluding formaldehyde), and 40 CFR Part 63, Appendix A, Method 320 or 323 or ASTM D6348-03 for formaldehyde.

f. Emissions Limitations

The exhaust emissions from this engine shall not exceed:
1.0 grams of NO_X per horsepower hour or 82 ppmvd at 15% O_2;
2.0 grams of CO per horsepower hour or 270 ppmvd at 15% O_2; and
0.7 grams of VOC (excluding formaldehyde) per horsepower hour or 60 ppmvd at 15% O_2.

Applicable Compliance Method

Compliance shall be demonstrated through emissions testing performed in accordance with f)(1) above and the requirements specified in 40 CFR 60.4243(b)(2), 40 CFR 60.4244, and Table 2 to 40 CFR Part 60, Subpart JJJJ.

g. Emissions Limitation

The 4SLB stationary RICE shall meet one of the following emissions limitations except during periods of startup: reduce CO emissions by 93 percent or more; or limit concentration of formaldehyde in the stationary RICE exhaust to 14 ppmvd or less at 15 percent O_2.

Applicable Compliance Method

Initial compliance shall be demonstrated through emissions testing performed in accordance with f)(1) above and the requirements specified in 40 CFR 63.6630 and Table 5 to 40 CFR Part 63, Subpart ZZZZ. Continuous compliance shall be demonstrated through emissions testing performed in accordance with f)(1) above and the requirements specified in 40 CFR 63.6640 and Table 6 to 40 CFR Part 63, Subpart ZZZZ.

g) Miscellaneous Requirements

(1) None.

2. Emissions Unit Group - Siemens SGT-400 Turbines: P018, P019, P020, P021, P022, P023

EU ID	Operations, Property and/or Equipment Description
P018	Siemens SGT-400 Generator Turbine #1
P019	Siemens SGT-400 Generator Turbine #2
P020	Siemens SGT-400 Generator Turbine #3
P021	Siemens SGT-400 Generator Turbine #4
P022	Siemens SGT-400 Generator Turbine #5
P023	Siemens SGT-400 Generator Turbine #6

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) b)(1)f., d)(7) through d)(10), and e)(3)

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(A)	Visible particulate emissions from the stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.
b.	OAC rule 3745-17-11(B)(4)	Particulate emissions shall not exceed 0.040 pounds per million Btu of actual heat input.
c.	OAC rule 3745-31-05(F)	NO_X emissions shall not exceed 1.04 pounds per hour, excluding periods of startup and shutdown. CO emissions shall not exceed 1.11 pounds per hour, excluding periods of startup and shutdown.

		VOC emissions shall not exceed 0.83 pound per hour, excluding periods of startup and shutdown. NO_X emissions shall not exceed 4.00 pounds per startup or shutdown event. CO emissions shall not exceed 64.00 pounds per startup event. CO emissions shall not exceed 52.00 pounds per shutdown event. VOC emissions shall not exceed 12.00 pounds per startup or shutdown event. NO_X emissions shall not exceed 4.71 tons per rolling, 12-month period from startup and shutdown events and normal operations. CO emissions shall not exceed 7.17 tons per rolling, 12-month period from startup and shutdown events and normal operations. VOC emissions shall not exceed 4.09 tons per rolling, 12-month period from startup and shutdown events and normal operations. See b)(2)a. through b)(2)c. below.
d.	OAC rule 3745-31-05(A)(3)(a)(ii)	The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the NO_X, CO, VOC, SO_2, PM_{10}, and $PM_{2.5}$ emissions from this air contaminant source because the PTE is less than 10 tons per year as vented to the oxidation catalyst and SCR system.
e.	OAC rule 3745-110-02(A)(2)(b) and OAC rule 3745-110-03(E)(1)(b)(i)	The permittee shall comply with 40 CFR Part 60, Subpart KKKKa in lieu of OAC Chapter 3745-110 because the emissions limitations and requirements of 40 CFR Part 60, Subpart KKKKa are more stringent than the emissions limitations and requirements of OAC Chapter 3745-110.
f.	ORC 3704.03(F)(3)(c) and (F)(4) [Toxic Air Contaminant Statute]	See d)(7) through d)(10) below.
g.	40 CFR Part 60, Subpart KKKKa [40 CFR 60.4300a – 60.4420a] [In accordance with 40 CFR 60.4305a(a), this emissions unit is a stationary	NO_X emissions shall not exceed 15 ppm at 15% O_2 or 24 ng/J of useful output (0.055 lb/MMBtu).

	combustion turbine with a heat input at peak load greater than 10.7 gigajoules (10 MMBtu) per hour that commenced construction after December 13, 2024. This turbine is categorized as a new installation firing natural gas with a utilization rate over 45%.]	SO_2 emissions from the turbine must not exceed 0.90 lb/MWh of gross output, or fuels burned in the turbine must not contain sulfur in concentrations which would result in potential sulfur emissions in excess of 0.060 lb SO_2/MMBtu heat input.
h.	40 CFR Part 60, Subpart TTTTa [40 CFR 60.5508a – 60.5580a]	See b)(2)d. below.
i.	40 CFR Part 60, Subpart A [40 CFR 60.1 – 60.19]	The permittee shall comply with applicable requirements of the General Provisions of the Standards of Performance for New Stationary Sources in 40 CFR Part 60, Subpart A as they apply to the emissions unit regulated under 40 CFR Part 60, Subpart KKKKa.
j.	40 CFR Part 63, Subpart YYYY [40 CFR 63.6080 - 40 CFR 63.6175] [The affected source is a new lean premix gas-fired simple cycle stationary combustion turbine located at a major source of HAP emissions.]	Formaldehyde emissions shall not exceed 91 ppbvd at 15 percent O_2, except during turbine startup. In accordance with 40 CFR 63.6175, startup ends when the turbine has reached stable operation or after 1 hour, whichever is less.
k.	40 CFR Part 63, Subpart A [40 CFR 63.1 – 63.16]	Table 7 to 40 CFR Part 63, Subpart YYYY-"Applicability of General Provisions to Subpart YYYY" identifies which parts of the General Provisions in 40 CFR Part 63.1 – 63.16 apply.

(2) Additional Terms and Conditions

a. The legally and practically enforceable emission limitations in b)(1)c. are established for the purpose of representing potential to emit (PTE) and are based on the operational restrictions contained in c)(1). The legally and practically enforceable emission limitations in b)(1)c. are voluntary restrictions.

b. “Startup” is defined as beginning with turbine fuel ignition and ends when the SCR catalyst bed temperature reaches the minimum temperature necessary for the SCR to control NO_X emissions.

c. “Shutdown” is defined as the process of taking the turbine off-line and begins when the SCR catalyst bed temperature falls below the minimum temperatures necessary for the SCR to control NO_X emissions.

d. This facility will not sell electricity to a utility power distribution system and these emissions units are therefore not subject to 40 CFR Part 60, Subpart TTTTa. If this facility begins selling electricity to a utility power distribution system at any point, then these emissions units will be subject to the provisions of this subpart. The permittee shall apply for and obtain a permit modification prior to selling electricity to a utility power distribution system.

c) Operational Restrictions

(1) The following operational restrictions have been included in this permit for the purpose of establishing legally and practically enforceable requirements which represent PTE [See b)(2)a.]:

a. The permittee shall burn only natural gas in this emissions unit.

b. The NO_X, CO, and VOC emissions from this emissions unit shall be vented to an oxidation catalyst and SCR system at all times when the emissions unit is in operation except during startup and shutdown.

c. The permittee shall maintain the 4-hour rolling average of the catalyst inlet temperature within the range suggested by the catalyst manufacturer. The permittee is not required to use the catalyst inlet temperature data that is recorded during engine startup in the calculations of the 4-hour rolling average catalyst inlet temperature.

d. Startup and shutdown events shall each be limited to 40 events per rolling, 12-month period.

(2) See 40 CFR Part 60, Subpart KKKKa (40 CFR 60.4300a – 60.4420a).

(3) See 40 CFR Part 63, Subpart YYYY (40 CFR 63.6080 – 63.6175).

d) Monitoring and/or Recordkeeping Requirements

(1) For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

(2) The permittee shall install, operate, and maintain the oxidation catalyst and SCR system, including the ammonia injection system, in accordance with the manufacturer's recommendations, instructions, and/or operating manual, with any modifications deemed necessary by the permittee. The permittee shall maintain the SCR catalyst bed temperature below the maximum temperature established by the manufacturer.

(3) The permittee shall maintain documentation of the manufacturer's recommendations, instructions, and/or operating manual for the oxidation catalyst and SCR system, along with documentation of any modifications deemed necessary by the permittee. These documents shall be maintained at the facility and shall be made available to the Ohio EPA, DO/LAA upon request.

(4) The permittee shall maintain the following information for maintenance and repairs performed on the oxidation catalyst and SCR system:

a. the date of the maintenance and/or repair;

b. a description of the maintenance and/or repairs performed; and

c. the name of person(s) who performed the maintenance and/or repair.

(5) The permittee shall properly install, operate, and maintain equipment that continuously monitors the following information for the oxidation catalyst and SCR system at all times when the associated engine is in operation and records of hourly average data for:

a. the pressure drop across the control system;

b. the NO_x concentration at the SCR catalyst bed exhaust; and

c. the temperature of the SCR catalyst bed.

Each monitoring device shall be equipped with a mechanism to detect parameters that exceed recommended thresholds as established per d)(2) and trigger an alarm to operators when the control system is not operating within the recommended conditions.

(6) The permittee shall maintain monthly records of the following information:

a. the hours of operation, excluding startup and shutdown;

b. the number of startup events;

c. the number of shutdown events;

d. the NO_x emissions, in pounds or tons;

e. the CO emissions, in pounds or tons;

f. the VOC emissions, in pounds or tons;

g. the rolling, 12-month summation of the number of startup events;

h. the rolling, 12-month summation of the number of shutdown events;

i. the rolling, 12-month NO_x emissions, in tons;

j. the rolling, 12-month CO emissions, in tons; and

k. the rolling, 12-month VOC emissions, in tons.

Emissions from startup and shutdown events shall be calculated using the emissions data provided by the turbine manufacturer and identified in b)(1)c. above. Emissions during all other periods of operation shall be calculated by multiplying the hours of operation, excluding startup and shutdown, by the maximum hourly emissions rate provided by the turbine manufacturer and identified in b)(1)c. above or the results of most recent testing as conducted per f)(1).

(7) The PTI application for emissions units P001 through P030 and B001 through B022 was evaluated based on the actual materials and the design parameters of the emissions units' exhaust systems, as specified by the permittee. The *Toxic Air Contaminant Statute*, ORC 3704.03(F), was applied to these emissions units for each toxic air contaminant listed in OAC rule 3745-114-01 using data from the permit application; and modeling was performed for each

toxic air contaminant emitted at over one ton per year (tpy) using an air dispersion model such as AERSCREEN, AERMOD, ISCST3 or other Ohio EPA-approved model. The predicted one-hour maximum ground-level concentration results from the approved air dispersion model, were compared to the maximum acceptable ground-level concentration (MAGLC), calculated as described in Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A," as follows:

a. The exposure limit, expressed as a time-weighted average concentration for a conventional eight-hour workday and a 40-hour workweek, for each toxic compound emitted from the emissions units (as determined from the raw materials processed and/or coatings or other materials applied), has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):

   i. Threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices shall be used, if the chemical is listed; or

   ii. Short-term exposure limit (STEL) or the ceiling value from the American Conference of Governmental Industrial Hygienists (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent eight-hour TLV.

b. The TLV is divided by 10 to adjust the standard from the working population to the general public.

c. This standard is adjusted to account for the duration of the exposure or the operating hours of the emissions units, that is, 24 hours per day and 7 days per week, from that of 8 hours per day and 5 days per week.

d. The resulting calculation shall be used to determine the MAGLC:

$$\frac{TLV}{10} \times \frac{8}{24} \times \frac{5}{7} = 4\frac{TLV}{168} = MAGLC$$

e. The following summarizes the results of dispersion modeling for the significant toxic contaminants or *worst-case* scenario:

   i. Toxic Contaminant: ammonia

   TLV (mg/m^3): 17.41

   Maximum Hourly Emission Rate (lb/hr): 0.21 lb/hr (per EU) from P003 – P008, 3.00 lbs/hr (per EU) from P009 – P014 and P026 – P029, 4.87 lbs/hr (per EU) from P015 – P017, 2.48 lbs/hr (per EU) from P018 – P023, and 8.65 lbs/hr (per EU) from P024 – P025.

Predicted One-Hour Maximum Ground-Level Concentration (µg/m^3): 30.43

MAGLC (µg/m^3): 414.60

ii. Toxic Contaminant: formaldehyde

TLV (mg/m^3): 0.123

Maximum Hourly Emission Rate (lb/hr): 0.84 lb/hr (per EU) from P003 – P008, 0.27 lb/hr (per EU) from P009 – P014 and P026 – P029, 0.28 lb/hr (per EU) from P015 – P017, 0.30 lb/hr (per EU) from P018 – P023, and 0.39 lb/hr (per EU) from P024 – P025. The emissions from P001 – P002, P030, and B001 – B022 combined are less than 2.8 x 10^{-3} lb/hr.

Predicted Annual and One-Hour Maximum Ground-Level Concentration (µg/m^3): 0.129 (annual) and 12.22 (1-hour)

Alternative acceptable concentration (µg/m^3): 0.8 (annual) and 49 (1-hour max)

iii. Toxic Contaminant: acetaldehyde

TLV (mg/m^3): 33.20

Maximum Hourly Emission Rate (lb/hr): 0.111 lb/hr (per EU) from P003 – P008, 0.004 lb/hr (per EU) from P009 – P014 and P026 – P029, 0.007 lb/hr (per EU) from P015 – P017, 0.004 lb/hr (per EU) from P018 – P023, and 0.014 lb/hr (per EU) from P024 – P025.

Predicted One-Hour Maximum Ground-Level Concentration (µg/m^3): 1.59

MAGLC (µg/m^3): 790.36

The permittee has demonstrated that emissions of ammonia, formaldehyde, and acetaldehyde from emissions units P001 through P030 and B001 through B022 are calculated to be less than 80 percent of the MAGLC for ammonia and acetaldehyde and less than 80 percent of the alternative acceptable concentrations for formaldehyde; any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the *Toxic Air Contaminant Statute*, ORC 3704.03(F).

(8) Prior to making any physical changes to or changes in the method of operation of the emissions units that could impact the parameters or values that were used in the predicted one-hour maximum ground-level concentration, the permittee shall re-model any change to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the one-hour maximum ground-level concentration include, but are not limited to, the following:

a. Changes in the composition of the materials used or the use of new materials, that would result in the emissions of a new toxic air contaminant with a lower TLV than the lowest TLV previously modeled.

b. Changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application.

c. Physical changes to the emissions units or exhaust parameters (for example, increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines the *Toxic Air Contaminant Statute, ORC 3704.03(F),* will be satisfied for the above changes, Ohio EPA will not consider a change to be a *modification* under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the *Toxic Air Contaminant Statute,* ORC 3704.03(F), has been documented. If each change meets the definition of a *modification*, the permittee shall apply for and obtain a final PTI prior to the change. The director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground-level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

(9) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the *Toxic Air Contaminant Statute* ORC 3704.03(F):

a. A description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (for example, the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.).

b. The MAGLC for each significant toxic contaminant or worst-case contaminant, calculated per the *Toxic Air Contaminant Statute*, ORC 3704.03(F).

c. A copy of the computer model run(s), that established the predicted one-hour maximum ground-level concentration that demonstrated the emissions units to be in compliance with the *Toxic Air Contaminant Statute,* ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions.

d. The documentation of the initial evaluation of compliance with the *Toxic Air Contaminant Statute,* ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions units or the materials applied.

(10) The permittee shall maintain a record of any change made to a parameter or value entered in the dispersion model used to demonstrate compliance with the *Toxic Air Contaminant Statute*, ORC 3704.03(F), through the predicted one-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

(11) See 40 CFR Part 60, Subpart KKKKa (40 CFR 60.4300a – 60.4420a).

(12) See 40 CFR Part 63, Subpart YYYY (40 CFR 63.6080 – 63.6175).

e) Reporting Requirements

(1) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

(2) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

a. All exceedances of the number of startup and shutdown events identified in c)(1)d.; and

b. All exceedances of the rolling, 12-month NO_X, CO, and VOC emissions limitations.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions in Section A of this permit.

(3) The permittee shall submit annual reports that include any changes to any parameter or value entered in the dispersion model used to demonstrate compliance with the *Toxic Air Contaminant Statute*, ORC 3704.03(F), through the predicted one-hour maximum ground-level concentration. The report shall include:

a. The original model input.

b. The updated model input.

c. The reason for each change to any input parameter.

d. A summary of the results of the updated modeling, including the input changes.

e. A statement that the model results indicate that the one-hour maximum ground-level concentration is less than 80 percent of the MAGLC.

If no changes to the emissions, emissions units or the exhaust stacks have been made during the reporting period, then the report shall include a statement to that effect. This report shall be included as part of the Title V annual compliance certification.

(4) See 40 CFR Part 60, Subpart KKKKa (40 CFR 60.4300a – 60.4420a).

(5) See 40 CFR Part 63, Subpart YYYY (40 CFR 63.6080 – 63.6175).

f) Testing Requirements

(1) The permittee shall conduct, or have conducted, emission testing for this EU in accordance with the following requirements:

a. The emission testing shall be conducted within 60 days after achieving the maximum production rate at which the EU will be operated, but not later than 180 days after initial startup of the EU.

b. The emission testing shall be conducted to demonstrate initial compliance with the hourly NO_X, CO, and VOC emissions limitations established under OAC rule 3745-31-05(F); the NO_X emissions limitation established under 40 CFR 60.4320a(a); and the formaldehyde concentration limitation established under 40 CFR 63.6100.

c. Any subsequent performance tests for NO_X shall be conducted in accordance with 40 CFR 60.4333a and 60.4400a(a).

d. Subsequent performance tests for formaldehyde concentration shall be conducted annually as specified in Table 3 to 40 CFR Part 63, Subpart YYYY.

e. The following test method(s) shall be employed to demonstrate compliance with the above emissions limitations:

Emissions Limits/Emissions Factors	Test Methods and Procedures
The hourly VOC emissions limitation established under OAC rule 3745-31-05(F)	VOC emissions shall be calculated by summing the VOC emissions, as propane, and formaldehyde emissions. The VOC emissions, as propane, shall be determined using Methods 1 through 4 or 19, and 18 or 25A, as applicable, of 40 CFR Part 60, Appendix A. The formaldehyde emissions shall be determined using Methods 1 through 4 or 19 of 40 CFR Part 60, Appendix A, and Method 320 or 323 of 40 CFR Part 63, Appendix A or ASTM D6348-12e1, provided that the test plan preparation and implementation provisions of Annexes A1-A8 are followed and the percent R must be greater than or equal to 70 and less than or equal to 130.
The hourly NO_X emissions limitation established under OAC rule 3745-31-05(F) and the NO_X emissions limitation established pursuant to 40 CFR Part 60, Subpart KKKKa	The methods and procedures specified in 40 CFR 60.4400a.
The hourly CO emissions limitations established under OAC rule 3745-31-05(F)	Methods 1 through 4 or 19, and 10 of 40 CFR Part 60, Appendix A
The formaldehyde concentration limitation established pursuant to 40 CFR Part 63, Subpart YYYY	The methods and procedures specified in 40 CFR 63.6120 and Tables 3 and 4 to 40 CFR Part 63, Subpart YYYY

Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

f. During the emissions testing, the EU shall be operated under operational conditions approved in advance by the appropriate Ohio DO/LAA. Operational conditions that may need to be approved include, but are not limited to, the production rate, the type of material processed, material make-up (solvent content, etc.) or control equipment operational limitations (burner temperature, precipitator voltage, etc.). In general, testing shall be done under *worst case* conditions expected during the life of the permit. As part of the information provided in the Intent to Test (ITT) notification form described below, the permittee shall provide a description of the EU operational conditions they will meet during the emissions testing and describe why they believe *worst case* operating conditions will be met. Prior to conducting the test(s), the permittee shall confirm with the appropriate Ohio EPA DO/LAA that the proposed operating conditions constitute *worst case*. Failure to test under the approved conditions may result in Ohio EPA not accepting the test results as a demonstration of compliance.

g. Not later than 60 days prior to the proposed test date(s), the permittee shall submit an ITT notification to the appropriate Ohio EPA DO/LAA. The ITT notification shall describe in detail the proposed test methods and procedures, the EU operating parameters, the time(s) and date(s) of the test(s) and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA DO/LAA's refusal to accept the results of the emission test(s).

h. Personnel from the appropriate Ohio EPA DO/LAA shall be permitted to witness the test(s), examine the testing equipment and acquire data and information necessary to ensure that the operation of the EU and the testing procedures provide a valid characterization of the emissions from the EU and/or the performance of the control equipment.

i. A comprehensive written report on the results of the emissions test(s) shall be signed by the person(s) responsible for the tests and submitted to the appropriate Ohio EPA DO/LAA within 60 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA DO/LAA.

(2) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emissions Limitation</u>

Visible particulate emissions from the stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.

<u>Applicable Compliance Method</u>

If required, compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Reference Method 9 in 40 CFR Part 60, Appendix A.

b. Emissions Limitation

Particulate emissions shall not exceed 0.040 pounds per million Btu of actual heat input.

Applicable Compliance Method

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in OAC rule 3745-17-03(B)(10).

c. Emissions Limitations

NO_X emissions shall not exceed 1.04 pounds per hour, excluding periods of startup and shutdown.

CO emissions shall not exceed 1.11 pounds per hour, excluding periods of startup and shutdown.

VOC emissions shall not exceed 0.83 pounds per hour, excluding periods of startup and shutdown.

Applicable Compliance Method

Compliance with these emissions limitations shall be demonstrated through emissions testing performed in accordance with f)(1) above.

d. Emissions Limitations

NO_X emissions shall not exceed 4.71 tons per rolling, 12-month period from startup and shutdown events and normal operations.

CO emissions shall not exceed 7.17 tons per rolling, 12-month period from startup and shutdown events and normal operations.

VOC emissions shall not exceed 4.09 tons per rolling, 12-month period from startup and shutdown events and normal operations.

Applicable Compliance Method

Compliance with these emissions limitations shall be determined in accordance with the monitoring and/or recordkeeping specified in d) above.

e. Emissions Limitations

NO_X emissions shall not exceed 4.00 pounds per startup or shutdown event.

CO emissions shall not exceed 64.00 pounds per startup event.

CO emissions shall not exceed 52.00 pounds per shutdown event.

VOC emissions shall not exceed 12.00 pounds per startup or shutdown event.

Applicable Compliance Method

These emissions limitations were established based on the manufacturer's information provided by the permittee. If required, compliance shall be demonstrated through emissions testing performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 or 19, and 7E for NO_X, 10 for CO, 18 or 25A for VOC (excluding formaldehyde), and 40 CFR Part 63, Appendix A, Method 320 or 323 or ASTM D6348-12e1 for formaldehyde.

f. Emissions Limitation

NO_X emissions shall not exceed 15 ppm at 15% O_2 or 24 ng/J of useful output (0.055 lb/MMbtu).

Applicable Compliance Method

Compliance shall be demonstrated through emissions testing performed in accordance with f)(1) above and the requirements specified in 40 CFR 60.4400a.

g. Emissions Limitation

SO_2 emissions from the turbine must not exceed 0.90 lb/MWh of gross output, or fuels burned in the turbine must not contain sulfur in concentrations which would result in potential sulfur emissions in excess of 0.060 lb SO_2/MMBtu heat input.

Applicable Compliance Method

The permittee shall perform an initial performance test, as required in 40 CFR 60.8, and annual performance tests (no more than 12 calendar months following the previous performance test). The permittee shall use one of the four methodologies specified in 40 CFR 60.4333a(d) to demonstrate compliance.

h. Emissions Limitation

Formaldehyde emissions shall not exceed 91 ppbvd at 15 percent O_2, except during turbine startup.

Applicable Compliance Method

Compliance shall be demonstrated through emissions testing performed in accordance with f)(1) above and the applicable requirements specified in 40 CFR 63.6110 through 63.6140 and Tables 3 through 5 of 40 CFR Part 63, Subpart YYYY.

g) Miscellaneous Requirements

(1) None.

3. Emissions Unit Group - Siemens SGT-800 Turbines: P024, P025

EU ID	Operations, Property and/or Equipment Description
P024	Siemens SGT-800 Generator Turbine #1
P025	Siemens SGT-800 Generator Turbine #2

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) b)(1)e., d)(7) through d)(10), and e)(3)

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(A)	Visible particulate emissions from the stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.
b.	OAC rule 3745-17-11(B)(4)	Particulate emissions shall not exceed 0.040 pounds per million Btu of actual heat input.
c.	OAC rule 3745-31-05(A)(3) ORC 3704.03(T)	NO_X emissions shall not exceed 3.59 pounds per hour, excluding periods of startup and shutdown. CO emissions shall not exceed 3.28 pounds per hour, excluding periods of startup and shutdown. VOC emissions shall not exceed 3.62 pounds per hour, excluding periods of startup and shutdown. NO_X emissions shall not exceed 4.00 pounds per startup or shutdown event. CO emissions shall not exceed 64.00 pounds per startup event.

		CO emissions shall not exceed 52.00 pounds per shutdown event. VOC emissions shall not exceed 12.00 pounds per startup or shutdown event. NO_X emissions shall not exceed 15.84 tons per rolling, 12-month period from startup and shutdown events and normal operations. CO emissions shall not exceed 16.64 tons per rolling, 12-month period from startup and shutdown events and normal operations. VOC emissions shall not exceed 16.30 tons per rolling, 12-month period from startup and shutdown events and normal operations. SO_2 emissions shall not exceed 2.00 tons per month as a rolling, 12-month average. PM_{10} and $PM_{2.5}$ emissions shall not exceed 1.37 tons per month as a rolling, 12-month average. See b)(2)a. through b)(2)c. below.
d.	OAC rule 3745-110-02(A)(2)(b) and OAC rule 3745-110-03(E)(1)(b)(i)	The permittee shall comply with 40 CFR Part 60, Subpart KKKKa in lieu of OAC Chapter 3745-110 because the emissions limitations and requirements of 40 CFR Part 60, Subpart KKKKa are more stringent than the emissions limitations and requirements of OAC Chapter 3745-110.
e.	ORC 3704.03(F)(3)(c) and (F)(4) [Toxic Air Contaminant Statute]	See d)(7) through d)(10) below.
f.	40 CFR Part 60, Subpart KKKKa [40 CFR 60.4300a – 60.4420a] [In accordance with 40 CFR 60.4305a(a), this emissions unit is a stationary combustion turbine with a heat input at peak load greater than 10.7 gigajoules (10 MMBtu) per hour that commenced construction after December 13, 2024.	NO_X emissions shall not exceed 15 ppm at 15% O_2 or 24 ng/J of useful output (0.055 lb/MMBtu). SO_2 emissions from the turbine must not exceed 0.90 lb/MWh of gross output, or fuels burned in the turbine must not contain sulfur in concentrations which would result in

	This turbine is categorized as a new installation firing natural gas with a utilization rate over 45%.]	potential sulfur emissions in excess of 0.060 lb SO_2/MMBtu heat input.
g.	40 CFR Part 60, Subpart TTTTa [40 CFR 60.5508a – 60.5580a]	See b)(2)d. below.
h.	40 CFR Part 60, Subpart A [40 CFR 60.1 – 60.19]	The permittee shall comply with applicable requirements of the General Provisions of the Standards of Performance for New Stationary Sources in 40 CFR Part 60, Subpart A as they apply to the emissions unit regulated under 40 CFR Part 60, Subpart KKKKa.
i.	40 CFR Part 63, Subpart YYYY [40 CFR 63.6080 - 40 CFR 63.6175] [The affected source is a new lean premix gas-fired simple cycle stationary combustion turbine located at a major source of HAP emissions.]	Formaldehyde emissions shall not exceed 91 ppbvd at 15 percent O_2, except during turbine startup. In accordance with 40 CFR 63.6175, startup ends when the turbine has reached stable operation or after 1 hour, whichever is less.
j.	40 CFR Part 63, Subpart A [40 CFR 63.1 – 63.16]	Table 7 to 40 CFR Part 63, Subpart YYYY-"Applicability of General Provisions to Subpart YYYY" identifies which parts of the General Provisions in 40 CFR Part 63.1 – 63.16 apply.

(2) Additional Terms and Conditions

a. The Best Available Technology (BAT) requirements under ORC rule 3704.03(T) have been determined to be compliance with the rolling 12-month NO_x, CO, VOC, PM_{10}, $PM_{2.5}$, and SO_2 emission limitations established under OAC rule 3745-31-05(A)(3) and the operational restrictions in c)(1).

b. “Startup” is defined as beginning with turbine fuel ignition and ends when the SCR catalyst bed temperature reaches the minimum temperature necessary for the SCR to control NO_X emissions.

c. “Shutdown” is defined as the process of taking the turbine off-line and begins when the SCR catalyst bed temperature falls below the minimum temperatures necessary for the SCR to control NO_X emissions.

d. This facility will not sell electricity to a utility power distribution system and these emissions units are therefore not subject to 40 CFR Part 60, Subpart TTTTa. If this facility begins selling electricity to a utility power distribution system at any point, then these emissions units will be subject to the provisions of this subpart. The permittee

shall apply for and obtain a permit modification prior to selling electricity to a utility power distribution system.

c) Operational Restrictions

(1) The following operational restrictions have been included in this permit for the purpose of establishing BAT requirements which represent PTE [See b)(2)a.]:

a. The permittee shall burn only natural gas in this emissions unit.

b. The NO_X, CO, and VOC emissions from this emissions unit shall be vented to an oxidation catalyst and SCR system at all times when the emissions unit is in operation except during startup and shutdown.

c. The permittee shall maintain the 4-hour rolling average of the catalyst inlet temperature within the range suggested by the catalyst manufacturer. The permittee is not required to use the catalyst inlet temperature data that is recorded during engine startup in the calculations of the 4-hour rolling average catalyst inlet temperature.

d. Startup and shutdown events shall each be limited to 40 events per rolling, 12-month period.

(2) See 40 CFR Part 60, Subpart KKKKa (40 CFR 60.4300a – 60.4420a).

(3) See 40 CFR Part 63, Subpart YYYY (40 CFR 63.6080 – 63.6175).

d) Monitoring and/or Recordkeeping Requirements

(1) For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

(2) The permittee shall install, operate, and maintain the oxidation catalyst and SCR system, including the ammonia injection system, in accordance with the manufacturer's recommendations, instructions, and/or operating manual, with any modifications deemed necessary by the permittee. The permittee shall maintain the SCR catalyst bed temperature below the maximum temperature established by the manufacturer.

(3) The permittee shall maintain documentation of the manufacturer's recommendations, instructions, and/or operating manual for the oxidation catalyst and SCR system, along with documentation of any modifications deemed necessary by the permittee. These documents shall be maintained at the facility and shall be made available to the Ohio EPA, DO/LAA upon request.

(4) The permittee shall maintain the following information for maintenance and repairs performed on the oxidation catalyst and SCR system:

a. the date of the maintenance and/or repair;

b. a description of the maintenance and/or repairs performed; and

c. the name of person(s) who performed the maintenance and/or repair.

(5) The permittee shall properly install, operate, and maintain equipment that continuously monitors the following information for the oxidation catalyst and SCR system at all times when the associated engine is in operation and records of hourly average data for:

a. the pressure drop across the control system;

b. the NO_x concentration at the SCR catalyst bed exhaust; and

c. the temperature of the SCR catalyst bed.

Each monitoring device shall be equipped with a mechanism to detect parameters that exceed recommended thresholds as established per d)(2) and trigger an alarm to operators when the control system is not operating within the recommended conditions.

(6) The permittee shall maintain monthly records of the following information:

a. the hours of operation, excluding startup and shutdown;

b. the number of startup events;

c. the number of shutdown events;

d. the NO_x emissions, in pounds or tons;

e. the CO emissions, in pounds or tons;

f. the VOC emissions, in pounds or tons;

g. the SO_2 emissions, in pounds or tons;

h. the PM_{10} and $PM_{2.5}$ emissions, in pounds or tons;

i. the rolling, 12-month summation of the number of startup events;

j. the rolling, 12-month summation of the number of shutdown events;

k. the rolling, 12-month NO_x emissions, in tons;

l. the rolling, 12-month CO emissions, in tons;

m. the rolling, 12-month VOC emissions, in tons; and

n. the monthly SO_2 emissions as a 12-month, rolling average, in tons.

o. the monthly PM_{10} and $PM_{2.5}$ emissions as a 12-month, rolling average, in tons.

Emissions from startup and shutdown events shall be calculated using the emissions data provided by the turbine manufacturer and identified in b)(1)c. above. Emissions during all other periods of operation shall be calculated by multiplying the hours of operation, excluding startup and shutdown, by the maximum hourly emissions rate provided by the turbine manufacturer and identified in b)(1)c. above or the results of most recent testing as conducted per f)(1).

(7) The PTI application for emissions units P001 through P030 and B001 through B022 was evaluated based on the actual materials and the design parameters of the emissions units' exhaust systems, as specified by the permittee. The *Toxic Air Contaminant Statute*, ORC

3704.03(F), was applied to these emissions units for each toxic air contaminant listed in OAC rule 3745-114-01 using data from the permit application; and modeling was performed for each toxic air contaminant emitted at over one ton per year (tpy) using an air dispersion model such as AERSCREEN, AERMOD, ISCST3 or other Ohio EPA-approved model. The predicted one-hour maximum ground-level concentration results from the approved air dispersion model, were compared to the maximum acceptable ground-level concentration (MAGLC), calculated as described in Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A," as follows:

a. The exposure limit, expressed as a time-weighted average concentration for a conventional eight-hour workday and a 40-hour workweek, for each toxic compound emitted from the emissions units (as determined from the raw materials processed and/or coatings or other materials applied), has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):

   i. Threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices shall be used, if the chemical is listed; or

   ii. Short-term exposure limit (STEL) or the ceiling value from the American Conference of Governmental Industrial Hygienists (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent eight-hour TLV.

b. The TLV is divided by 10 to adjust the standard from the working population to the general public.

c. This standard is adjusted to account for the duration of the exposure or the operating hours of the emissions units, that is, 24 hours per day and 7 days per week, from that of 8 hours per day and 5 days per week.

d. The resulting calculation shall be used to determine the MAGLC:

$$\frac{TLV}{10} \times \frac{8}{24} \times \frac{5}{7} = 4\frac{TLV}{168} = MAGLC$$

e. The following summarizes the results of dispersion modeling for the significant toxic contaminants or *worst-case* scenario:

   i. Toxic Contaminant: ammonia

   TLV (mg/m^3): 17.41

   Maximum Hourly Emission Rate (lb/hr): 0.21 lb/hr (per EU) from P003 – P008, 3.00 lbs/hr (per EU) from P009 – P014 and P026 – P029, 4.87 lbs/hr (per EU) from

P015 – P017, 2.48 lbs/hr (per EU) from P018 – P023, and 8.65 lbs/hr (per EU) from P024 – P025.

Predicted One-Hour Maximum Ground-Level Concentration (µg/m^3): 30.43

MAGLC (µg/m^3): 414.60

ii. Toxic Contaminant: formaldehyde

TLV (mg/m^3): 0.123

Maximum Hourly Emission Rate (lb/hr): 0.84 lb/hr (per EU) from P003 – P008, 0.27 lb/hr (per EU) from P009 – P014 and P026 – P029, 0.28 lb/hr (per EU) from P015 – P017, 0.30 lb/hr (per EU) from P018 – P023, and 0.39 lb/hr (per EU) from P024 – P025. The emissions from P001 – P002, P030, and B001 – B022 combined are less than 2.8 x 10^{-3} lb/hr.

Predicted Annual and One-Hour Maximum Ground-Level Concentration (µg/m^3): 0.129 (annual) and 12.22 (1-hour)

Alternative acceptable concentration (µg/m^3): 0.8 (annual) and 49 (1-hour max)

iii. Toxic Contaminant: acetaldehyde

TLV (mg/m^3): 33.20

Maximum Hourly Emission Rate (lb/hr): 0.111 lb/hr (per EU) from P003 – P008, 0.004 lb/hr (per EU) from P009 – P014 and P026 – P029, 0.007 lb/hr (per EU) from P015 – P017, 0.004 lb/hr (per EU) from P018 – P023, and 0.014 lb/hr (per EU) from P024 – P025.

Predicted One-Hour Maximum Ground-Level Concentration (µg/m^3): 1.59

MAGLC (µg/m^3): 790.36

The permittee has demonstrated that emissions of ammonia, formaldehyde, and acetaldehyde from emissions units P001 through P030 and B001 through B022 are calculated to be less than 80 percent of the MAGLC for ammonia and acetaldehyde and less than 80 percent of the alternative acceptable concentrations for formaldehyde; any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the *Toxic Air Contaminant Statute*, ORC 3704.03(F).

(8) Prior to making any physical changes to or changes in the method of operation of the emissions units that could impact the parameters or values that were used in the predicted one-hour maximum ground-level concentration, the permittee shall re-model any change to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the one-hour maximum ground-level concentration include, but are not limited to, the following:

a. Changes in the composition of the materials used or the use of new materials, that would result in the emissions of a new toxic air contaminant with a lower TLV than the lowest TLV previously modeled.

b. Changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application.

c. Physical changes to the emissions units or exhaust parameters (for example, increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines the *Toxic Air Contaminant Statute, ORC 3704.03(F),* will be satisfied for the above changes, Ohio EPA will not consider a change to be a *modification* under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the *Toxic Air Contaminant Statute,* ORC 3704.03(F), has been documented. If each change meets the definition of a *modification*, the permittee shall apply for and obtain a final PTI prior to the change. The director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground-level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

(9) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the *Toxic Air Contaminant Statute* ORC 3704.03(F):

a. A description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (for example, the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.).

b. The MAGLC for each significant toxic contaminant or worst-case contaminant, calculated per the *Toxic Air Contaminant Statute*, ORC 3704.03(F).

c. A copy of the computer model run(s), that established the predicted one-hour maximum ground-level concentration that demonstrated the emissions units to be in compliance with the *Toxic Air Contaminant Statute,* ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions.

d. The documentation of the initial evaluation of compliance with the *Toxic Air Contaminant Statute,* ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions units or the materials applied.

(10) The permittee shall maintain a record of any change made to a parameter or value entered in the dispersion model used to demonstrate compliance with the *Toxic Air Contaminant Statute*, ORC 3704.03(F), through the predicted one-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

(11) See 40 CFR Part 60, Subpart KKKKa (40 CFR 60.4300a – 60.4420a).

(12) See 40 CFR Part 63, Subpart YYYY (40 CFR 63.6080 – 63.6175).

e) Reporting Requirements

(1) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

(2) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

a. All exceedances of the number of startup and shutdown events identified in c)(1)d.; and

b. All exceedances of the rolling, 12-month NO_X, CO, SO_2, PM_{10}, $PM_{2.5}$, and VOC emissions limitations.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions in Section A of this permit.

(3) The permittee shall submit annual reports that include any changes to any parameter or value entered in the dispersion model used to demonstrate compliance with the *Toxic Air Contaminant Statute*, ORC 3704.03(F), through the predicted one-hour maximum ground-level concentration. The report shall include:

a. The original model input.

b. The updated model input.

c. The reason for each change to any input parameter.

d. A summary of the results of the updated modeling, including the input changes.

e. A statement that the model results indicate that the one-hour maximum ground-level concentration is less than 80 percent of the MAGLC.

If no changes to the emissions, emissions units or the exhaust stacks have been made during the reporting period, then the report shall include a statement to that effect. This report shall be included as part of the Title V annual compliance certification.

(4) See 40 CFR Part 60, Subpart KKKKa (40 CFR 60.4300a – 60.4420a).

(5) See 40 CFR Part 63, Subpart YYYY (40 CFR 63.6080 – 63.6175).

f) Testing Requirements

(1) The permittee shall conduct, or have conducted, emission testing for this EU in accordance with the following requirements:

a. The emission testing shall be conducted within 60 days after achieving the maximum production rate at which the EU will be operated, but not later than 180 days after initial startup of the EU.

b. The emission testing shall be conducted to demonstrate initial compliance with the hourly NO_X, CO, and VOC emissions limitations established under OAC rule 3745-31-05(A)(3); the NO_X emissions limitation established under 40 CFR 60.4320a(a); and the formaldehyde concentration limitation established under 40 CFR 63.6100.

c. Any subsequent performance tests for NO_X shall be conducted in accordance with 40 CFR 60.4333a and 60.4400a(a).

d. Subsequent performance tests for formaldehyde concentration shall be conducted annually as specified in Table 3 to 40 CFR Part 63, Subpart YYYY.

e. The following test method(s) shall be employed to demonstrate compliance with the above emissions limitations:

Emissions Limits/Emissions Factors	**Test Methods and Procedures**
The hourly VOC emissions limitation established under OAC rule 3745-31-05(A)(3)	VOC emissions shall be calculated by summing the VOC emissions, as propane, and formaldehyde emissions. The VOC emissions, as propane, shall be determined using Methods 1 through 4 or 19, and 18 or 25A, as applicable, of 40 CFR Part 60, Appendix A. The formaldehyde emissions shall be determined using Methods 1 through 4 or 19 of 40 CFR Part 60, Appendix A, and Method 320 or 323 of 40 CFR Part 63, Appendix A or ASTM D6348-12e1, provided that the test plan preparation and implementation provisions of Annexes A1-A8 are followed and the percent R must be greater than or equal to 70 and less than or equal to 130.
The hourly NO_X emissions limitation established under OAC rule 3745-31-05(A)(3) and the NO_X emissions limitation established pursuant to 40 CFR Part 60, Subpart KKKKa	The methods and procedures specified in 40 CFR 60.4400a.
The hourly CO emissions limitations established under OAC rule 3745-31-05(A)(3)	Methods 1 through 4 or 19, and 10 of 40 CFR Part 60, Appendix A
The formaldehyde concentration limitation established pursuant to 40 CFR Part 63, Subpart YYYY	The methods and procedures specified in 40 CFR 63.6120 and Tables 3 and 4 to 40 CFR Part 63, Subpart YYYY

Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

f. During the emissions testing, the EU shall be operated under operational conditions approved in advance by the appropriate Ohio DO/LAA. Operational conditions that may need to be approved include, but are not limited to, the production rate, the type of material processed, material make-up (solvent content, etc.) or control equipment operational limitations (burner temperature, precipitator voltage, etc.). In general, testing shall be done under *worst case* conditions expected during the life of the permit. As part of the information provided in the Intent to Test (ITT) notification form described below, the permittee shall provide a description of the EU operational conditions they will meet during the emissions testing and describe why they believe *worst case* operating conditions will be met. Prior to conducting the test(s), the permittee shall confirm with the appropriate Ohio EPA DO/LAA that the proposed operating conditions constitute *worst case*. Failure to test under the approved conditions may result in Ohio EPA not accepting the test results as a demonstration of compliance.

g. Not later than 60 days prior to the proposed test date(s), the permittee shall submit an ITT notification to the appropriate Ohio EPA DO/LAA. The ITT notification shall describe in detail the proposed test methods and procedures, the EU operating parameters, the time(s) and date(s) of the test(s) and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA DO/LAA's refusal to accept the results of the emission test(s).

h. Personnel from the appropriate Ohio EPA DO/LAA shall be permitted to witness the test(s), examine the testing equipment and acquire data and information necessary to ensure that the operation of the EU and the testing procedures provide a valid characterization of the emissions from the EU and/or the performance of the control equipment.

i. A comprehensive written report on the results of the emissions test(s) shall be signed by the person(s) responsible for the tests and submitted to the appropriate Ohio EPA DO/LAA within 60 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA DO/LAA.

(2) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emissions Limitation</u>

Visible particulate emissions from the stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.

<u>Applicable Compliance Method</u>

If required, compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Reference Method 9 in 40 CFR Part 60, Appendix A.

b. Emissions Limitation

Particulate emissions shall not exceed 0.040 pounds per million Btu of actual heat input.

Applicable Compliance Method

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in OAC rule 3745-17-03(B)(10).

c. Emissions Limitations

NO_X emissions shall not exceed 3.59 pounds per hour, excluding periods of startup and shutdown.

CO emissions shall not exceed 3.28 pounds per hour, excluding periods of startup and shutdown.

VOC emissions shall not exceed 3.62 pounds per hour, excluding periods of startup and shutdown.

Applicable Compliance Method

Compliance with these emissions limitations shall be demonstrated through emissions testing performed in accordance with f)(1) above.

d. Emissions Limitations

NO_X emissions shall not exceed 15.84 tons per rolling, 12-month period from startup and shutdown events and normal operations.

CO emissions shall not exceed 16.64 tons per rolling, 12-month period from startup and shutdown events and normal operations.

VOC emissions shall not exceed 16.30 tons per rolling, 12-month period from startup and shutdown events and normal operations.

SO_2 emissions shall not exceed 2.00 tons per month based upon a 12-month, rolling average.

PM_{10} and $PM_{2.5}$ emissions shall not exceed 1.37 tons per month based upon a 12-month, rolling average.

Applicable Compliance Method

Compliance with these emissions limitations shall be determined in accordance with the monitoring and/or recordkeeping specified in d) above.

e. Emissions Limitations

NO_X emissions shall not exceed 4.00 pounds per startup or shutdown event.

CO emissions shall not exceed 64.00 pounds per startup event.

CO emissions shall not exceed 52.00 pounds per shutdown event.

VOC emissions shall not exceed 12.00 pounds per startup or shutdown event.

Applicable Compliance Method

These emissions limitations were established based on the manufacturer's information provided by the permittee. If required, compliance shall be demonstrated through emissions testing performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 or 19, and 7E for NO_X, 10 for CO, 18 or 25A for VOC (excluding formaldehyde), and 40 CFR Part 63, Appendix A, Method 320 or 323 or ASTM D6348-12e1 for formaldehyde.

f. Emissions Limitation

NO_X emissions shall not exceed 15 ppm at 15% O_2 or 24 ng/J of useful output (0.055 lb/MMbtu).

Applicable Compliance Method

Compliance shall be demonstrated through emissions testing performed in accordance with f)(1) above and the requirements specified in 40 CFR 60.4400a.

g. Emissions Limitation

SO_2 emissions from the turbine must not exceed 0.90 lb/MWh of gross output, or fuels burned in the turbine must not contain sulfur in concentrations which would result in potential sulfur emissions in excess of 0.060 lb SO_2/MMBtu heat input.

Applicable Compliance Method

The permittee shall perform an initial performance test, as required in 40 CFR 60.8, and annual performance tests (no more than 12 calendar months following the previous performance test). The permittee shall use one of the four methodologies specified in 40 CFR 60.4333a(d) to demonstrate compliance.

h. Emissions Limitation

Formaldehyde emissions shall not exceed 91 ppbvd at 15 percent O_2, except during turbine startup.

Applicable Compliance Method

Compliance shall be demonstrated through emissions testing performed in accordance with f)(1) above and the applicable requirements specified in 40 CFR 63.6110 through 63.6140 and Tables 3 through 5 of 40 CFR Part 63, Subpart YYYY.

g) Miscellaneous Requirements

(1) None.

4. Emissions Unit Group - Siemens SGT-A35 Turbines: P015, P016, P017

EU ID	Operations, Property and/or Equipment Description
P015	Siemens SGT-A35 Generator Turbine #1
P016	Siemens SGT-A35 Generator Turbine #2
P017	Siemens SGT-A35 Generator Turbine #3

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) b)(1)g., d)(7) through d)(10), and e)(3)

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(A)	Visible particulate emissions from the stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.
b.	OAC rule 3745-17-11(B)(4)	Particulate emissions shall not exceed 0.040 pounds per million Btu of actual heat input.
c.	OAC rule 3745-31-05(F)	VOC emissions shall not exceed 1.58 pounds per hour, excluding periods of startup and shutdown. VOC emissions shall not exceed 12.00 pounds per startup or shutdown event. VOC emissions shall not exceed 7.37 tons per rolling, 12-month period from startup and shutdown events and normal operations. See b)(2)a., b)(2)c., and b)(2)d. below.

d.	OAC rule 3745-31-05(A)(3) ORC 3704.3(T)	NO_X emissions shall not exceed 2.33 pounds per hour, excluding periods of startup and shutdown. CO emissions shall not exceed 2.83 pounds per hour, excluding periods of startup and shutdown. NO_X emissions shall not exceed 4.00 pounds per startup or shutdown event. CO emissions shall not exceed 64.00 pounds per startup event. CO emissions shall not exceed 52.00 pounds per shutdown event. NO_X emissions shall not exceed 10.32 tons per rolling, 12-month period from startup and shutdown events and normal operations. CO emissions shall not exceed 14.69 tons per rolling, 12-month period from startup and shutdown events and normal operations. SO_2 emissions shall not exceed 1.00 ton per month as a rolling, 12-month average. See b)(2)b. through b)(2)d. below.
e.	OAC rule 3745-31-05(A)(3)(a)(ii)	The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC, PM_{10}, and $PM_{2.5}$ emissions from this air contaminant source because the PTE is less than 10 tons per year as vented to the oxidation catalyst system.
f.	OAC rule 3745-110-02(A)(2)(b) and OAC rule 3745-110-03(E)(1)(b)(i)	The permittee shall comply with 40 CFR Part 60, Subpart KKKKa in lieu of OAC Chapter 3745-110 because the emissions limitations and requirements of 40 CFR Part 60, Subpart KKKKa are more stringent than the emissions limitations and requirements of OAC Chapter 3745-110.
g.	ORC 3704.03(F)(3)(c) and (F)(4) [Toxic Air Contaminant Statute]	See d)(7) through d)(10) below.

h.	40 CFR Part 60, Subpart KKKKa [40 CFR 60.4300a – 60.4420a] [In accordance with 40 CFR 60.4305a(a), this emissions unit is a stationary combustion turbine with a heat input at peak load greater than 10.7 gigajoules (10 MMBtu) per hour that commenced construction after December 13, 2024. This turbine is categorized as a new installation firing natural gas with a utilization rate over 45%.]	NO_X emissions shall not exceed 15 ppm at 15% O_2 or 24 ng/J of useful output (0.055 lb/MMBtu). SO_2 emissions from the turbine must not exceed 0.90 lb/MWh of gross output, or fuels burned in the turbine must not contain sulfur in concentrations which would result in potential sulfur emissions in excess of 0.060 lb SO_2/MMBtu heat input.
i.	40 CFR Part 60, Subpart TTTTa [40 CFR 60.5508a – 60.5580a]	See b)(2)d. below.
j.	40 CFR Part 60, Subpart A [40 CFR 60.1 – 60.19]	The permittee shall comply with applicable requirements of the General Provisions of the Standards of Performance for New Stationary Sources in 40 CFR Part 60, Subpart A as they apply to the emissions unit regulated under 40 CFR Part 60, Subpart KKKKa.
k.	40 CFR Part 63, Subpart YYYY [40 CFR 63.6080 - 40 CFR 63.6175] [The affected source is a new lean premix gas-fired simple cycle stationary combustion turbine located at a major source of HAP emissions.]	Formaldehyde emissions shall not exceed 91 ppbvd at 15 percent O_2, except during turbine startup. In accordance with 40 CFR 63.6175, startup ends when the turbine has reached stable operation or after 1 hour, whichever is less.
l.	40 CFR Part 63, Subpart A [40 CFR 63.1 – 63.16]	Table 7 to 40 CFR Part 63, Subpart YYYY-"Applicability of General Provisions to Subpart YYYY" identifies which parts of the General Provisions in 40 CFR Part 63.1 – 63.16 apply.

(2) Additional Terms and Conditions

a. The legally and practically enforceable emission limitations for VOC in b)(1)c. are established for the purpose of representing potential to emit (PTE) and are based on the operational restrictions contained in c)(1). The legally and practically enforceable emission limitations in b)(1)c. are voluntary restrictions.

b. The Best Available Technology (BAT) requirements under ORC rule 3704.03(T) have been determined to be compliance with the rolling 12-month NO_x, CO, and SO_2 emission

limitations established under OAC rule 3745-31-05(A)(3) and the operational restrictions in c)(1).

c. "Startup" is defined as beginning with turbine fuel ignition and ends when the SCR catalyst bed temperature reaches the minimum temperature necessary for the SCR to control NO_X emissions.

d. "Shutdown" is defined as the process of taking the turbine off-line and begins when the SCR catalyst bed temperature falls below the minimum temperatures necessary for the SCR to control NO_X emissions.

e. This facility will not sell electricity to a utility power distribution system and these emissions units are therefore not subject to 40 CFR Part 60, Subpart TTTTa. If this facility begins selling electricity to a utility power distribution system at any point, then these emissions units will be subject to the provisions of this subpart. The permittee shall apply for and obtain a permit modification prior to selling electricity to a utility power distribution system.

c) Operational Restrictions

(1) The following operational restrictions have been included in this permit for the purpose of establishing BAT and legally and practically enforceable requirements which represent PTE [See b)(2)a. and b)(2)b.]:

a. The permittee shall burn only natural gas in this emissions unit.

b. The NO_X, CO, and VOC emissions from this emissions unit shall be vented to an oxidation catalyst and SCR system at all times when the emissions unit is in operation except during startup and shutdown.

c. The permittee shall maintain the 4-hour rolling average of the catalyst inlet temperature within the range suggested by the catalyst manufacturer. The permittee is not required to use the catalyst inlet temperature data that is recorded during engine startup in the calculations of the 4-hour rolling average catalyst inlet temperature.

d. Startup and shutdown events shall each be limited to 40 events per rolling, 12-month period.

(2) See 40 CFR Part 60, Subpart KKKKa (40 CFR 60.4300a – 60.4420a).

(3) See 40 CFR Part 63, Subpart YYYY (40 CFR 63.6080 – 63.6175).

d) Monitoring and/or Recordkeeping Requirements

(1) For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

(2) The permittee shall install, operate, and maintain the oxidation catalyst and SCR system, including the ammonia injection system, in accordance with the manufacturer's recommendations, instructions, and/or operating manual, with any modifications deemed necessary by the permittee. The permittee shall maintain the SCR catalyst bed temperature below the maximum temperature established by the manufacturer.

(3) The permittee shall maintain documentation of the manufacturer's recommendations, instructions, and/or operating manual for the oxidation catalyst and SCR system, along with documentation of any modifications deemed necessary by the permittee. These documents shall be maintained at the facility and shall be made available to the Ohio EPA, DO/LAA upon request.

(4) The permittee shall maintain the following information for maintenance and repairs performed on the oxidation catalyst and SCR system:

a. the date of the maintenance and/or repair;

b. a description of the maintenance and/or repairs performed; and

c. the name of person(s) who performed the maintenance and/or repair.

(5) The permittee shall properly install, operate, and maintain equipment that continuously monitors the following information for the oxidation catalyst and SCR system at all times when the associated engine is in operation and records of hourly average data for:

a. the pressure drop across the control system;

b. the NO_x concentration at the SCR catalyst bed exhaust; and

c. the temperature of the SCR catalyst bed.

Each monitoring device shall be equipped with a mechanism to detect parameters that exceed recommended thresholds as established per d)(2) and trigger an alarm to operators when the control system is not operating within the recommended conditions.

(6) The permittee shall maintain monthly records of the following information:

a. the hours of operation, excluding startup and shutdown;

b. the number of startup events;

c. the number of shutdown events;

d. the NO_x emissions, in pounds or tons;

e. the CO emissions, in pounds or tons;

f. the VOC emissions, in pounds or tons;

g. the SO_2 emissions, in pounds or tons;

h. the rolling, 12-month summation of the number of startup events;

i. the rolling, 12-month summation of the number of shutdown events;

j. the rolling, 12-month NO_x emissions, in tons;

k. the rolling, 12-month CO emissions, in tons; and

l. the rolling, 12-month VOC emissions, in tons; and

m. the monthly SO_2 emissions as a 12-month, rolling average, in tons.

Emissions from startup and shutdown events shall be calculated using the emissions data provided by the turbine manufacturer and identified in b)(1)c. above. Emissions during all other periods of operation shall be calculated by multiplying the hours of operation, excluding startup and shutdown, by the maximum hourly emissions rate provided by the turbine manufacturer and identified in b)(1)c. above or the results of most recent testing as conducted per f)(1).

(7) The PTI application for emissions units P001 through P030 and B001 through B022 was evaluated based on the actual materials and the design parameters of the emissions units' exhaust systems, as specified by the permittee. The *Toxic Air Contaminant Statute*, ORC 3704.03(F), was applied to these emissions units for each toxic air contaminant listed in OAC rule 3745-114-01 using data from the permit application; and modeling was performed for each toxic air contaminant emitted at over one ton per year (tpy) using an air dispersion model such as AERSCREEN, AERMOD, ISCST3 or other Ohio EPA-approved model. The predicted one-hour maximum ground-level concentration results from the approved air dispersion model, were compared to the maximum acceptable ground-level concentration (MAGLC), calculated as described in Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A," as follows:

a. The exposure limit, expressed as a time-weighted average concentration for a conventional eight-hour workday and a 40-hour workweek, for each toxic compound emitted from the emissions units (as determined from the raw materials processed and/or coatings or other materials applied), has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):

i. Threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices shall be used, if the chemical is listed; or

ii. Short-term exposure limit (STEL) or the ceiling value from the American Conference of Governmental Industrial Hygienists (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent eight-hour TLV.

b. The TLV is divided by 10 to adjust the standard from the working population to the general public.

c. This standard is adjusted to account for the duration of the exposure or the operating hours of the emissions units, that is, 24 hours per day and 7 days per week, from that of 8 hours per day and 5 days per week.

d. The resulting calculation shall be used to determine the MAGLC:

$$\frac{TLV}{10} \times \frac{8}{24} \times \frac{5}{7} = 4\frac{TLV}{168} = MAGLC$$

e. The following summarizes the results of dispersion modeling for the significant toxic contaminants or *worst-case* scenario:

i. Toxic Contaminant: ammonia

TLV (mg/m^3): 17.41

Maximum Hourly Emission Rate (lb/hr): 0.21 lb/hr (per EU) from P003 – P008, 3.00 lbs/hr (per EU) from P009 – P014 and P026 – P029, 4.87 lbs/hr (per EU) from P015 – P017, 2.48 lbs/hr (per EU) from P018 – P023, and 8.65 lbs/hr (per EU) from P024 – P025.

Predicted One-Hour Maximum Ground-Level Concentration ($\mu g/m^3$): 30.43

MAGLC ($\mu g/m^3$): 414.60

ii. Toxic Contaminant: formaldehyde

TLV (mg/m^3): 0.123

Maximum Hourly Emission Rate (lb/hr): 0.84 lb/hr (per EU) from P003 – P008, 0.27 lb/hr (per EU) from P009 – P014 and P026 – P029, 0.28 lb/hr (per EU) from P015 – P017, 0.30 lb/hr (per EU) from P018 – P023, and 0.39 lb/hr (per EU) from P024 – P025. The emissions from P001 – P002, P030, and B001 – B022 combined are less than 2.8×10^{-3} lb/hr.

Predicted Annual and One-Hour Maximum Ground-Level Concentration ($\mu g/m^3$): 0.129 (annual) and 12.22 (1-hour)

Alternative acceptable concentration ($\mu g/m^3$): 0.8 (annual) and 49 (1-hour max)

iii. Toxic Contaminant: acetaldehyde

TLV (mg/m^3): 33.20

Maximum Hourly Emission Rate (lb/hr): 0.111 lb/hr (per EU) from P003 – P008, 0.004 lb/hr (per EU) from P009 – P014 and P026 – P029, 0.007 lb/hr (per EU) from P015 – P017, 0.004 lb/hr (per EU) from P018 – P023, and 0.014 lb/hr (per EU) from P024 – P025.

Predicted One-Hour Maximum Ground-Level Concentration ($\mu g/m^3$): 1.59

MAGLC ($\mu g/m^3$): 790.36

The permittee has demonstrated that emissions of ammonia, formaldehyde, and acetaldehyde from emissions units P001 through P030 and B001 through B022 are calculated to be less than 80 percent of the MAGLC for ammonia and acetaldehyde and less than 80 percent of the alternative acceptable concentrations for formaldehyde; any new raw material or processing

agent shall not be applied without evaluating each component toxic air contaminant in accordance with the *Toxic Air Contaminant Statute*, ORC 3704.03(F).

(8) Prior to making any physical changes to or changes in the method of operation of the emissions units that could impact the parameters or values that were used in the predicted one-hour maximum ground-level concentration, the permittee shall re-model any change to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the one-hour maximum ground-level concentration include, but are not limited to, the following:

a. Changes in the composition of the materials used or the use of new materials, that would result in the emissions of a new toxic air contaminant with a lower TLV than the lowest TLV previously modeled.

b. Changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application.

c. Physical changes to the emissions units or exhaust parameters (for example, increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines the *Toxic Air Contaminant Statute, ORC 3704.03(F),* will be satisfied for the above changes, Ohio EPA will not consider a change to be a *modification* under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the *Toxic Air Contaminant Statute,* ORC 3704.03(F), has been documented. If each change meets the definition of a *modification*, the permittee shall apply for and obtain a final PTI prior to the change. The director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground-level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

(9) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the *Toxic Air Contaminant Statute* ORC 3704.03(F):

a. A description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (for example, the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.).

b. The MAGLC for each significant toxic contaminant or worst-case contaminant, calculated per the *Toxic Air Contaminant Statute*, ORC 3704.03(F).

c. A copy of the computer model run(s), that established the predicted one-hour maximum ground-level concentration that demonstrated the emissions units to be in

compliance with the *Toxic Air Contaminant Statute,* ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions.

d. The documentation of the initial evaluation of compliance with the *Toxic Air Contaminant Statute,* ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions units or the materials applied.

(10) The permittee shall maintain a record of any change made to a parameter or value entered in the dispersion model used to demonstrate compliance with the *Toxic Air Contaminant Statute*, ORC 3704.03(F), through the predicted one-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

(11) See 40 CFR Part 60, Subpart KKKKa (40 CFR 60.4300a – 60.4420a).

(12) See 40 CFR Part 63, Subpart YYYY (40 CFR 63.6080 – 63.6175).

e) Reporting Requirements

(1) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

(2) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

a. All exceedances of the number of startup and shutdown events identified in c)(1)d.; and

b. All exceedances of the rolling, 12-month NO_X, CO, SO_2, and VOC emissions limitations.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions in Section A of this permit.

(3) The permittee shall submit annual reports that include any changes to any parameter or value entered in the dispersion model used to demonstrate compliance with the *Toxic Air Contaminant Statute*, ORC 3704.03(F), through the predicted one-hour maximum ground-level concentration. The report shall include:

a. The original model input.

b. The updated model input.

c. The reason for each change to any input parameter.

d. A summary of the results of the updated modeling, including the input changes.

e. A statement that the model results indicate that the one-hour maximum ground-level concentration is less than 80 percent of the MAGLC.

If no changes to the emissions, emissions units or the exhaust stacks have been made during the reporting period, then the report shall include a statement to that effect. This report shall be included as part of the Title V annual compliance certification.

(4) See 40 CFR Part 60, Subpart KKKKa (40 CFR 60.4300a – 60.4420a).

(5) See 40 CFR Part 63, Subpart YYYY (40 CFR 63.6080 – 63.6175).

f) Testing Requirements

(1) The permittee shall conduct, or have conducted, emission testing for this EU in accordance with the following requirements:

a. The emission testing shall be conducted within 60 days after achieving the maximum production rate at which the EU will be operated, but not later than 180 days after initial startup of the EU.

b. The emission testing shall be conducted to demonstrate initial compliance with the hourly VOC emissions limitations established under OAC rule 3745-31-05(F) and the hourly NO_x and CO emissions limitations established under OAC rule 3745-31-05(A)(3); the NO_X emissions limitation established under 40 CFR 60.4320(a); and the formaldehyde concentration limitation established under 40 CFR 63.6100.

c. Any subsequent performance tests for NO_X shall be conducted in accordance with 40 CFR 60.4333a and 60.4400a(a).

d. Subsequent performance tests for formaldehyde concentration shall be conducted annually as specified in Table 3 to 40 CFR Part 63, Subpart YYYY.

e. The following test method(s) shall be employed to demonstrate compliance with the above emissions limitations:

Emissions Limits/Emissions Factors	**Test Methods and Procedures**
The hourly VOC emissions limitation established under OAC rule 3745-31-05(F)	VOC emissions shall be calculated by summing the VOC emissions, as propane, and formaldehyde emissions. The VOC emissions, as propane, shall be determined using Methods 1 through 4 or 19, and 18 or 25A, as applicable, of 40 CFR Part 60, Appendix A. The formaldehyde emissions shall be determined using Methods 1 through 4 or 19 of 40 CFR Part 60, Appendix A, and Method 320 or 323 of 40 CFR Part 63, Appendix A or ASTM D6348-12e1, provided that the test plan preparation and implementation provisions of Annexes A1-A8 are followed and the percent R must be greater than or equal to 70 and less than or equal to 130.

The hourly NO_X emissions limitation established under OAC rule 3745-31-05(A)(3) and the NO_X emissions limitation established pursuant to 40 CFR Part 60, Subpart KKKKa	The methods and procedures specified in 40 CFR 60.4400a.
The hourly CO emissions limitations established under OAC rule 3745-31-05(A)(3)	Methods 1 through 4 or 19, and 10 of 40 CFR Part 60, Appendix A
The formaldehyde concentration limitation established pursuant to 40 CFR Part 63, Subpart YYYY	The methods and procedures specified in 40 CFR 63.6120 and Tables 3 and 4 to 40 CFR Part 63, Subpart YYYY

Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

f. During the emissions testing, the EU shall be operated under operational conditions approved in advance by the appropriate Ohio DO/LAA. Operational conditions that may need to be approved include, but are not limited to, the production rate, the type of material processed, material make-up (solvent content, etc.) or control equipment operational limitations (burner temperature, precipitator voltage, etc.). In general, testing shall be done under *worst case* conditions expected during the life of the permit. As part of the information provided in the Intent to Test (ITT) notification form described below, the permittee shall provide a description of the EU operational conditions they will meet during the emissions testing and describe why they believe *worst case* operating conditions will be met. Prior to conducting the test(s), the permittee shall confirm with the appropriate Ohio EPA DO/LAA that the proposed operating conditions constitute *worst case*. Failure to test under the approved conditions may result in Ohio EPA not accepting the test results as a demonstration of compliance.

g. Not later than 60 days prior to the proposed test date(s), the permittee shall submit an ITT notification to the appropriate Ohio EPA DO/LAA. The ITT notification shall describe in detail the proposed test methods and procedures, the EU operating parameters, the time(s) and date(s) of the test(s) and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA DO/LAA's refusal to accept the results of the emission test(s).

h. Personnel from the appropriate Ohio EPA DO/LAA shall be permitted to witness the test(s), examine the testing equipment and acquire data and information necessary to ensure that the operation of the EU and the testing procedures provide a valid characterization of the emissions from the EU and/or the performance of the control equipment.

i. A comprehensive written report on the results of the emissions test(s) shall be signed by the person(s) responsible for the tests and submitted to the appropriate Ohio EPA

DO/LAA within 60 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA DO/LAA.

(2) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitation

Visible particulate emissions from the stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.

Applicable Compliance Method

If required, compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Reference Method 9 in 40 CFR Part 60, Appendix A.

b. Emissions Limitation

Particulate emissions shall not exceed 0.040 pounds per million Btu of actual heat input.

Applicable Compliance Method

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in OAC rule 3745-17-03(B)(10).

c. Emissions Limitations

NO_X emissions shall not exceed 2.33 pounds per hour, excluding periods of startup and shutdown.

CO emissions shall not exceed 2.83 pounds per hour, excluding periods of startup and shutdown.

VOC emissions shall not exceed 1.58 pounds per hour, excluding periods of startup and shutdown.

Applicable Compliance Method

Compliance with these emissions limitations shall be demonstrated through emissions testing performed in accordance with f)(1) above.

d. Emissions Limitations

NO_X emissions shall not exceed 10.32 tons per rolling, 12-month period from startup and shutdown events and normal operations.

CO emissions shall not exceed 14.69 tons per rolling, 12-month period from startup and shutdown events and normal operations.

VOC emissions shall not exceed 7.37 tons per rolling, 12-month period from startup and shutdown events and normal operations.

SO_2 emissions shall not exceed 1.00 tons per month based upon a 12-month, rolling average.

Applicable Compliance Method

Compliance with these emissions limitations shall be determined in accordance with the monitoring and/or recordkeeping specified in d) above.

e. Emissions Limitations

NO_X emissions shall not exceed 4.00 pounds per startup or shutdown event.

CO emissions shall not exceed 64.00 pounds per startup event.

CO emissions shall not exceed 52.00 pounds per shutdown event.

VOC emissions shall not exceed 12.00 pounds per startup or shutdown event.

Applicable Compliance Method

These emissions limitations were established based on the manufacturer's information provided by the permittee. If required, compliance shall be demonstrated through emissions testing performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 or 19, and 7E for NO_X, 10 for CO, 18 or 25A for VOC (excluding formaldehyde), and 40 CFR Part 63, Appendix A, Method 320 or 323 or ASTM D6348-12e1 for formaldehyde.

f. Emissions Limitation

NO_X emissions shall not exceed 15 ppm at 15% O_2 or 24 ng/J of useful output (0.055 lb/MMbtu).

Applicable Compliance Method

Compliance shall be demonstrated through emissions testing performed in accordance with f)(1) above and the requirements specified in 40 CFR 60.4400a.

g. Emissions Limitation

SO_2 emissions from the turbine must not exceed 0.90 lb/MWh of gross output, or fuels burned in the turbine must not contain sulfur in concentrations which would result in potential sulfur emissions in excess of 0.060 lb SO_2/MMBtu heat input.

Applicable Compliance Method

The permittee shall perform an initial performance test, as required in 40 CFR 60.8, and annual performance tests (no more than 12 calendar months following the previous performance test). The permittee shall use one of the four methodologies specified in 40 CFR 60.4333a(d) to demonstrate compliance.

h. Emissions Limitation

Formaldehyde emissions shall not exceed 91 ppbvd at 15 percent O_2, except during turbine startup.

Applicable Compliance Method

Compliance shall be demonstrated through emissions testing performed in accordance with f)(1) above and the applicable requirements specified in 40 CFR 63.6110 through 63.6140 and Tables 3 through 5 of 40 CFR Part 63, Subpart YYYY.

g) Miscellaneous Requirements

(1) None.

5. Emissions Unit Group - Solar Titan T-130 Turbines: P009, P010, P011, P012, P013, P014, P026, P027, P028, P029

EU ID	Operations, Property and/or Equipment Description
P009	Solar Titan 130 Generator Turbine #1
P010	Solar Titan 130 Generator Turbine #2
P011	Solar Titan 130 Generator Turbine #3
P012	Solar Titan 130 Generator Turbine #4
P013	Solar Titan 130 Generator Turbine #5
P014	Solar Titan 130 Generator Turbine #6
P026	Solar Titan 130 Generator Turbine #7
P027	Solar Titan 130 Generator Turbine #8
P028	Solar Titan 130 Generator Turbine #9
P029	Solar Titan 130 Generator Turbine #10

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) b)(1)f., d)(7) through d)(10), and e)(3)

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(A)	Visible particulate emissions from the stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.
b.	OAC rule 3745-17-11(B)(4)	Particulate emissions shall not exceed 0.040 pounds per million Btu of actual heat input.
c.	OAC rule 3745-31-05(F)	NO_X emissions shall not exceed 1.24 pounds per hour, excluding periods of startup and shutdown. CO emissions shall not exceed 1.32 pounds per hour, excluding periods of startup and shutdown. VOC emissions shall not exceed 0.94 pounds per hour, excluding periods of startup and shutdown. NO_X emissions shall not exceed 4.00 pounds per startup or shutdown event. CO emissions shall not exceed 64.00 pounds per startup event. CO emissions shall not exceed 52.00 pounds per shutdown event. VOC emissions shall not exceed 12.00 pounds per startup or shutdown event. NO_X emissions shall not exceed 5.58 tons per rolling, 12-month period from startup and shutdown events and normal operations. CO emissions shall not exceed 8.10 tons per rolling, 12-month period from startup and shutdown events and normal operations. VOC emissions shall not exceed 4.57 tons per rolling, 12-month period from startup and shutdown events and normal operations. See b)(2)a. through b)(2)c. below.

d.	OAC rule 3745-31-05(A)(3)(a)(ii)	The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the NO_x, CO, VOC, SO_2, PM_{10}, and $PM_{2.5}$ emissions from this air contaminant source because the PTE is less than 10 tons per year as vented to the oxidation catalyst and SCR system.
e.	OAC rule 3745-110-02(A)(2)(b) and OAC rule 3745-110-03(E)(1)(b)(i)	The permittee shall comply with 40 CFR Part 60, Subpart KKKKa in lieu of OAC Chapter 3745-110 because the emissions limitations and requirements of 40 CFR Part 60, Subpart KKKKa are more stringent than the emissions limitations and requirements of OAC Chapter 3745-110.
f.	ORC 3704.03(F)(3)(c) and (F)(4) [Toxic Air Contaminant Statute]	See d)(7) through d)(10) below.
g.	40 CFR Part 60, Subpart KKKKa [40 CFR 60.4300a – 60.4420a] [In accordance with 40 CFR 60.4305a(a), this emissions unit is a stationary combustion turbine with a heat input at peak load greater than 10.7 gigajoules (10 MMBtu) per hour that commenced construction after December 13, 2024. This turbine is categorized as a new installation firing natural gas with a utilization rate over 45%.]	NO_X emissions shall not exceed 15 ppm at 15% O_2 or 24 ng/J of useful output (0.055 lb/MMBtu). SO_2 emissions from the turbine must not exceed 0.90 lb/MWh of gross output, or fuels burned in the turbine must not contain sulfur in concentrations which would result in potential sulfur emissions in excess of 0.060 lb SO_2/MMBtu heat input.
h.	40 CFR Part 60, Subpart TTTTa [40 CFR 60.5508a – 60.5580a]	See b)(2)d. below.
i.	40 CFR Part 60, Subpart A [40 CFR 60.1 – 60.19]	The permittee shall comply with applicable requirements of the General Provisions of the Standards of Performance for New Stationary Sources in 40 CFR Part 60, Subpart A as they apply to the emissions unit regulated under 40 CFR Part 60, Subpart KKKKa.
j.	40 CFR Part 63, Subpart YYYY [40 CFR 63.6080 - 40 CFR 63.6175] [The affected source is a new lean premix gas-fired simple cycle stationary combustion turbine located at a major source of HAP emissions.]	Formaldehyde emissions shall not exceed 91 ppbvd at 15 percent O_2, except during turbine startup. In accordance with 40 CFR 63.6175, startup ends when the turbine has reached stable operation or after 1 hour, whichever is less.

k.	40 CFR Part 63, Subpart A [40 CFR 63.1 – 63.16]	Table 7 to 40 CFR Part 63, Subpart YYYY-"Applicability of General Provisions to Subpart YYYY" identifies which parts of the General Provisions in 40 CFR Part 63.1 – 63.16 apply.

(2) Additional Terms and Conditions

a. The legally and practically enforceable emission limitations in b)(1)c. are established for the purpose of representing potential to emit (PTE) and are based on the operational restrictions contained in c)(1). The legally and practically enforceable emission limitations in b)(1)c. are voluntary restrictions.

b. "Startup" is defined as beginning with turbine fuel ignition and ends when the SCR catalyst bed temperature reaches the minimum temperature necessary for the SCR to control NO_X emissions.

c. "Shutdown" is defined as the process of taking the turbine off-line and begins when the SCR catalyst bed temperature falls below the minimum temperatures necessary for the SCR to control NO_X emissions.

d. This facility will not sell electricity to a utility power distribution system and these emissions units are therefore not subject to 40 CFR Part 60, Subpart TTTTa. If this facility begins selling electricity to a utility power distribution system at any point, then these emissions units will be subject to the provisions of this subpart. The permittee shall apply for and obtain a permit modification prior to selling electricity to a utility power distribution system.

c) Operational Restrictions

(1) The following operational restrictions have been included in this permit for the purpose of establishing legally and practically enforceable requirements which represent PTE [See b)(2)a.]:

a. The permittee shall burn only natural gas in this emissions unit.

b. The NO_X, CO, and VOC emissions from this emissions unit shall be vented to an oxidation catalyst and SCR system at all times when the emissions unit is in operation except during startup and shutdown.

c. The permittee shall maintain the 4-hour rolling average of the catalyst inlet temperature within the range suggested by the catalyst manufacturer. The permittee is not required to use the catalyst inlet temperature data that is recorded during engine startup in the calculations of the 4-hour rolling average catalyst inlet temperature.

d. Startup and shutdown events shall each be limited to 40 events per rolling, 12-month period.

(2) See 40 CFR Part 60, Subpart KKKKa (40 CFR 60.4300a – 60.4420a).

(3) See 40 CFR Part 63, Subpart YYYY (40 CFR 63.6080 – 63.6175).

d) Monitoring and/or Recordkeeping Requirements

(1) For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

(2) The permittee shall install, operate, and maintain the oxidation catalyst and SCR system, including the ammonia injection system, in accordance with the manufacturer's recommendations, instructions, and/or operating manual, with any modifications deemed necessary by the permittee. The permittee shall maintain the SCR catalyst bed temperature below the maximum temperature established by the manufacturer.

(3) The permittee shall maintain documentation of the manufacturer's recommendations, instructions, and/or operating manual for the oxidation catalyst and SCR system, along with documentation of any modifications deemed necessary by the permittee. These documents shall be maintained at the facility and shall be made available to the Ohio EPA, DO/LAA upon request.

(4) The permittee shall maintain the following information for maintenance and repairs performed on the oxidation catalyst and SCR system:

a. the date of the maintenance and/or repair;

b. a description of the maintenance and/or repairs performed; and

c. the name of person(s) who performed the maintenance and/or repair.

(5) The permittee shall properly install, operate, and maintain equipment that continuously monitors the following information for the oxidation catalyst and SCR system at all times when the associated engine is in operation and records of hourly average data for:

a. the pressure drop across the control system;

b. the NO_x concentration at the SCR catalyst bed exhaust; and

c. the temperature of the SCR catalyst bed.

Each monitoring device shall be equipped with a mechanism to detect parameters that exceed recommended thresholds as established per d)(2) and trigger an alarm to operators when the control system is not operating within the recommended conditions.

(6) The permittee shall maintain monthly records of the following information:

a. the hours of operation, excluding startup and shutdown;

b. the number of startup events;

c. the number of shutdown events;

d. the NO_x emissions, in pounds or tons;

e. the CO emissions, in pounds or tons;

f. the VOC emissions, in pounds or tons;

g. the rolling, 12-month summation of the number of startup events;

h. the rolling, 12-month summation of the number of shutdown events;

i. the rolling, 12-month NO_x emissions, in tons;

j. the rolling, 12-month CO emissions, in tons; and

k. the rolling, 12-month VOC emissions, in tons.

Emissions from startup and shutdown events shall be calculated using the emissions data provided by the turbine manufacturer and identified in b)(1)c. above. Emissions during all other periods of operation shall be calculated by multiplying the hours of operation, excluding startup and shutdown, by the maximum hourly emissions rate provided by the turbine manufacturer and identified in b)(1)c. above or the results of most recent testing as conducted per f)(1).

(7) The PTI application for emissions units P001 through P030 and B001 through B022 was evaluated based on the actual materials and the design parameters of the emissions units' exhaust systems, as specified by the permittee. The *Toxic Air Contaminant Statute*, ORC 3704.03(F), was applied to these emissions units for each toxic air contaminant listed in OAC rule 3745-114-01 using data from the permit application; and modeling was performed for each toxic air contaminant emitted at over one ton per year (tpy) using an air dispersion model such as AERSCREEN, AERMOD, ISCST3 or other Ohio EPA-approved model. The predicted one-hour maximum ground-level concentration results from the approved air dispersion model, were compared to the maximum acceptable ground-level concentration (MAGLC), calculated as described in Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A," as follows:

a. The exposure limit, expressed as a time-weighted average concentration for a conventional eight-hour workday and a 40-hour workweek, for each toxic compound emitted from the emissions units (as determined from the raw materials processed and/or coatings or other materials applied), has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):

i. Threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices shall be used, if the chemical is listed; or

ii. Short-term exposure limit (STEL) or the ceiling value from the American Conference of Governmental Industrial Hygienists (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent eight-hour TLV.

b. The TLV is divided by 10 to adjust the standard from the working population to the general public.

c. This standard is adjusted to account for the duration of the exposure or the operating hours of the emissions units, that is, 24 hours per day and 7 days per week, from that of 8 hours per day and 5 days per week.

d. The resulting calculation shall be used to determine the MAGLC:

$$\frac{TLV}{10} \times \frac{8}{24} \times \frac{5}{7} = 4\frac{TLV}{168} = MAGLC$$

e. The following summarizes the results of dispersion modeling for the significant toxic contaminants or *worst-case* scenario:

i. Toxic Contaminant: ammonia

TLV (mg/m^3): 17.41

Maximum Hourly Emission Rate (lb/hr): 0.21 lb/hr (per EU) from P003 – P008, 3.00 lbs/hr (per EU) from P009 – P014 and P026 – P029, 4.87 lbs/hr (per EU) from P015 – P017, 2.48 lbs/hr (per EU) from P018 – P023, and 8.65 lbs/hr (per EU) from P024 – P025.

Predicted One-Hour Maximum Ground-Level Concentration ($\mu g/m^3$): 30.43

MAGLC ($\mu g/m^3$): 414.60

ii. Toxic Contaminant: formaldehyde

TLV (mg/m^3): 0.123

Maximum Hourly Emission Rate (lb/hr): 0.84 lb/hr (per EU) from P003 – P008, 0.27 lb/hr (per EU) from P009 – P014 and P026 – P029, 0.28 lb/hr (per EU) from P015 – P017, 0.30 lb/hr (per EU) from P018 – P023, and 0.39 lb/hr (per EU) from P024 – P025. The emissions from P001 – P002, P030, and B001 – B022 combined are less than 2.8×10^{-3} lb/hr.

Predicted Annual and One-Hour Maximum Ground-Level Concentration ($\mu g/m^3$): 0.129 (annual) and 12.22 (1-hour)

Alternative acceptable concentration ($\mu g/m^3$): 0.8 (annual) and 49 (1-hour max)

iii. Toxic Contaminant: acetaldehyde

TLV (mg/m^3): 33.20

Maximum Hourly Emission Rate (lb/hr): 0.111 lb/hr (per EU) from P003 – P008, 0.004 lb/hr (per EU) from P009 – P014 and P026 – P029, 0.007 lb/hr (per EU) from P015 – P017, 0.004 lb/hr (per EU) from P018 – P023, and 0.014 lb/hr (per EU) from P024 – P025.

Predicted One-Hour Maximum Ground-Level Concentration ($\mu g/m^3$): 1.59

MAGLC (µg/m^3): 790.36

The permittee has demonstrated that emissions of ammonia, formaldehyde, and acetaldehyde from emissions units P001 through P030 and B001 through B022 are calculated to be less than 80 percent of the MAGLC for ammonia and acetaldehyde and less than 80 percent of the alternative acceptable concentrations for formaldehyde; any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the *Toxic Air Contaminant Statute*, ORC 3704.03(F).

(8) Prior to making any physical changes to or changes in the method of operation of the emissions units that could impact the parameters or values that were used in the predicted one-hour maximum ground-level concentration, the permittee shall re-model any change to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the one-hour maximum ground-level concentration include, but are not limited to, the following:

a. Changes in the composition of the materials used or the use of new materials, that would result in the emissions of a new toxic air contaminant with a lower TLV than the lowest TLV previously modeled.

b. Changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application.

c. Physical changes to the emissions units or exhaust parameters (for example, increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines the *Toxic Air Contaminant Statute, ORC 3704.03(F),* will be satisfied for the above changes, Ohio EPA will not consider a change to be a *modification* under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the *Toxic Air Contaminant Statute,* ORC 3704.03(F), has been documented. If each change meets the definition of a *modification*, the permittee shall apply for and obtain a final PTI prior to the change. The director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground-level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

(9) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the *Toxic Air Contaminant Statute* ORC 3704.03(F):

a. A description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (for example, the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.).

b. The MAGLC for each significant toxic contaminant or worst-case contaminant, calculated per the *Toxic Air Contaminant Statute*, ORC 3704.03(F).

c. A copy of the computer model run(s), that established the predicted one-hour maximum ground-level concentration that demonstrated the emissions units to be in compliance with the *Toxic Air Contaminant Statute,* ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions.

d. The documentation of the initial evaluation of compliance with the *Toxic Air Contaminant Statute,* ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions units or the materials applied.

(10) The permittee shall maintain a record of any change made to a parameter or value entered in the dispersion model used to demonstrate compliance with the *Toxic Air Contaminant Statute*, ORC 3704.03(F), through the predicted one-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

(11) See 40 CFR Part 60, Subpart KKKKa (40 CFR 60.4300a – 60.4420a).

(12) See 40 CFR Part 63, Subpart YYYY (40 CFR 63.6080 – 63.6175).

e) Reporting Requirements

(1) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

(2) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

a. All exceedances of the number of startup and shutdown events identified in c)(1)d.; and

b. All exceedances of the rolling, 12-month NO_X, CO, and VOC emissions limitations.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions in Section A of this permit.

(3) The permittee shall submit annual reports that include any changes to any parameter or value entered in the dispersion model used to demonstrate compliance with the *Toxic Air Contaminant Statute*, ORC 3704.03(F), through the predicted one-hour maximum ground-level concentration. The report shall include:

a. The original model input.

b. The updated model input.

c. The reason for each change to any input parameter.

d. A summary of the results of the updated modeling, including the input changes.

e. A statement that the model results indicate that the one-hour maximum ground-level concentration is less than 80 percent of the MAGLC.

If no changes to the emissions, emissions units or the exhaust stacks have been made during the reporting period, then the report shall include a statement to that effect. This report shall be included as part of the Title V annual compliance certification.

(4) See 40 CFR Part 60, Subpart KKKKa (40 CFR 60.4300a – 60.4420a).

(5) See 40 CFR Part 63, Subpart YYYY (40 CFR 63.6080 – 63.6175).

f) Testing Requirements

(1) The permittee shall conduct, or have conducted, emission testing for this EU in accordance with the following requirements:

a. The emission testing shall be conducted within 60 days after achieving the maximum production rate at which the EU will be operated, but not later than 180 days after initial startup of the EU.

b. The emission testing shall be conducted to demonstrate initial compliance with the hourly NO_X, CO, and VOC emissions limitations established under OAC rule 3745-31-05(F); the NO_X emissions limitation established under 40 CFR 60.4320(a); and the formaldehyde concentration limitation established under 40 CFR 63.6100.

c. Any subsequent performance tests for NO_X shall be conducted in accordance with 40 CFR 60.4333a and 60.4400a(a).

d. Subsequent performance tests for formaldehyde concentration shall be conducted annually as specified in Table 3 to 40 CFR Part 63, Subpart YYYY.

e. The following test method(s) shall be employed to demonstrate compliance with the above emissions limitations:

Emissions Limits/Emissions Factors	Test Methods and Procedures
The hourly VOC emissions limitation established under OAC rule 3745-31-05(F)	VOC emissions shall be calculated by summing the VOC emissions, as propane, and formaldehyde emissions. The VOC emissions, as propane, shall be determined using Methods 1 through 4 or 19, and 18 or 25A, as applicable, of 40 CFR Part 60, Appendix A. The formaldehyde emissions shall be determined using Methods 1 through 4 or 19 of 40 CFR Part 60, Appendix A, and Method 320 or 323 of 40 CFR Part 63, Appendix A or ASTM D6348-12e1, provided that the test plan preparation and implementation provisions of Annexes A1-A8 are followed and the percent R must be greater than or equal to 70 and less than or equal to 130.
The hourly NO_X emissions limitation established under OAC rule 3745-31-05(F) and the NO_X emissions limitation established pursuant to 40 CFR Part 60, Subpart KKKKa	The methods and procedures specified in 40 CFR 60.4400a.
The hourly CO emissions limitations established under OAC rule 3745-31-05(F)	Methods 1 through 4 or 19, and 10 of 40 CFR Part 60, Appendix A
The formaldehyde concentration limitation established pursuant to 40 CFR Part 63, Subpart YYYY	The methods and procedures specified in 40 CFR 63.6120 and Tables 3 and 4 to 40 CFR Part 63, Subpart YYYY

Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

f. During the emissions testing, the EU shall be operated under operational conditions approved in advance by the appropriate Ohio DO/LAA. Operational conditions that may need to be approved include, but are not limited to, the production rate, the type of material processed, material make-up (solvent content, etc.) or control equipment operational limitations (burner temperature, precipitator voltage, etc.). In general, testing shall be done under *worst case* conditions expected during the life of the permit. As part of the information provided in the Intent to Test (ITT) notification form described below, the permittee shall provide a description of the EU operational conditions they will meet during the emissions testing and describe why they believe *worst case* operating conditions will be met. Prior to conducting the test(s), the permittee shall confirm with the appropriate Ohio EPA DO/LAA that the proposed operating conditions constitute *worst case*. Failure to test under the approved

conditions may result in Ohio EPA not accepting the test results as a demonstration of compliance.

g. Not later than 60 days prior to the proposed test date(s), the permittee shall submit an ITT notification to the appropriate Ohio EPA DO/LAA. The ITT notification shall describe in detail the proposed test methods and procedures, the EU operating parameters, the time(s) and date(s) of the test(s) and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA DO/LAA's refusal to accept the results of the emission test(s).

h. Personnel from the appropriate Ohio EPA DO/LAA shall be permitted to witness the test(s), examine the testing equipment and acquire data and information necessary to ensure that the operation of the EU and the testing procedures provide a valid characterization of the emissions from the EU and/or the performance of the control equipment.

i. A comprehensive written report on the results of the emissions test(s) shall be signed by the person(s) responsible for the tests and submitted to the appropriate Ohio EPA DO/LAA within 60 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA DO/LAA.

(2) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitation

Visible particulate emissions from the stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.

Applicable Compliance Method

If required, compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Reference Method 9 in 40 CFR Part 60, Appendix A.

b. Emissions Limitation

Particulate emissions shall not exceed 0.040 pounds per million Btu of actual heat input.

Applicable Compliance Method

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in OAC rule 3745-17-03(B)(10).

c. Emissions Limitations

NO_X emissions shall not exceed 1.24 pounds per hour, excluding periods of startup and shutdown.

CO emissions shall not exceed 1.32 pounds per hour, excluding periods of startup and shutdown.

VOC emissions shall not exceed 0.94 pounds per hour, excluding periods of startup and shutdown.

Applicable Compliance Method

Compliance with these emissions limitations shall be demonstrated through emissions testing performed in accordance with f)(1) above.

d. Emissions Limitations

NO_X emissions shall not exceed 5.58 tons per rolling, 12-month period from startup and shutdown events and normal operations.

CO emissions shall not exceed 8.10 tons per rolling, 12-month period from startup and shutdown events and normal operations.

VOC emissions shall not exceed 4.57 tons per rolling, 12-month period from startup and shutdown events and normal operations.

Applicable Compliance Method

Compliance with these emissions limitations shall be determined in accordance with the monitoring and/or recordkeeping specified in d) above.

e. Emissions Limitations

NO_X emissions shall not exceed 4.00 pounds per startup or shutdown event.

CO emissions shall not exceed 64.00 pounds per startup event.

CO emissions shall not exceed 52.00 pounds per shutdown event.

VOC emissions shall not exceed 12.00 pounds per startup or shutdown event.

Applicable Compliance Method

These emissions limitations were established based on the manufacturer's information provided by the permittee. If required, compliance shall be demonstrated through emissions testing performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 or 19, and 7E for NO_X, 10 for CO, 18 or 25A for VOC (excluding formaldehyde), and 40 CFR Part 63, Appendix A, Method 320 or 323 or ASTM D6348-12e1 for formaldehyde.

f. Emissions Limitation

NO_X emissions shall not exceed 15 ppm at 15% O_2 or 24 ng/J of useful output (0.055 lb/MMbtu).

Applicable Compliance Method

Compliance shall be demonstrated through emissions testing performed in accordance with f)(1) above and the requirements specified in 40 CFR 60.4400a.

g. Emissions Limitation

SO_2 emissions from the turbine must not exceed 0.90 lb/MWh of gross output, or fuels burned in the turbine must not contain sulfur in concentrations which would result in potential sulfur emissions in excess of 0.060 lb SO_2/MMBtu heat input.

Applicable Compliance Method

The permittee shall perform an initial performance test, as required in 40 CFR 60.8, and annual performance tests (no more than 12 calendar months following the previous performance test). The permittee shall use one of the four methodologies specified in 40 CFR 60.4333a(d) to demonstrate compliance.

h. Emissions Limitation

Formaldehyde emissions shall not exceed 91 ppbvd at 15 percent O_2, except during turbine startup.

Applicable Compliance Method

Compliance shall be demonstrated through emissions testing performed in accordance with f)(1) above and the applicable requirements specified in 40 CFR 63.6110 through 63.6140 and Tables 3 through 5 of 40 CFR Part 63, Subpart YYYY.

g) Miscellaneous Requirements

(1) None.