Williams, Jerry <jerry.williams@wv.gov>

TG

1 message

Williams, Jerry <jerry.williams@wv.gov> Mon, Jun 30, 2025 at 2:25 PM
To: "Patrick E. Ward" <PEWard@potesta.com>

Patrick,

I wanted to let you know the plan is for the public notices to be published on Wednesday July 9th. Please let me know if you have any questions.

Thank you,
Jerry

Jerry Williams, P.E.
Engineer, Division of Air Quality

WV Department of Environmental Protection
601 57th Street SE, Charleston, WV 25304
Phone 304-414-1214
Web dep.wv.gov **Email** jerry.williams@wv.gov

Williams, Jerry <jerry.williams@wv.gov>

WV Draft Permit R13-3715 for TransGas Development Systems, LLC; Adams Fork Harless Data Center Energy Campus

Mink, Stephanie R <stephanie.r.mink@wv.gov> Wed, Jul 9, 2025 at 7:58 AM
To: "Supplee, Gwendolyn" <supplee.gwendolyn@epa.gov>, "Whapham, Joseph" <Whapham.Joseph@epa.gov>, Adam Victor <adam@tgds.com>, avj@adamsforkenergy.com, "Patrick E. Ward" <PEWard@potesta.com>
Cc: "Crowder, Laura M" <Laura.M.Crowder@wv.gov>, "McCumbers, Carrie" <Carrie.McCumbers@wv.gov>, Joseph R Kessler <joseph.r.kessler@wv.gov>, Nicole D Ernest <nicole.d.ernest@wv.gov>, "Williams, Jerry" <jerry.williams@wv.gov>, "Johnson, Rebecca H" <Rebecca.H.Johnson@wv.gov>

Please find attached the Draft Permit R13-3715, Engineering Evaluation and Public Notice for TransGas Development Systems, LLC's Adams Fork Data Center Energy Campus located in Mingo County.

The public notice will be published in *The Williamson Daily News* on Wednesday, July 9, 2025 and the thirty day comment period will end on Friday, August 8, 2025.

Should you have any questions or comments, please contact the permit writer, Jerry Williams, at 304-926-0499 ext. 41214 or Jerry.Williams@wv.gov.

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Stephanie Mink

Environmental Resources Associate

West Virginia Department of Environmental Protection

Division of Air Quality, Title V & NSR Permitting

601 57th Street SE

Charleston, WV 25304

Phone: 304-926-0499 x41281

3 attachments

059-00134_PERM_13-3715 draft.pdf
389K

R13-3715_AirQualityPermitNotice.pdf
71K

059-00134_EVAL_13-3715 draft.pdf
3361K

AIR QUALITY PERMIT NOTICE

Notice of Intent to Approve

On March 26, 2025, TransGas Development Systems, LLC applied to the WV Department of Environmental Protection, Division of Air Quality (DAQ) for a permit to construct an off grid power generation facility (Adams Fork Data Center Energy Campus) located at 2002 Twisted Gun Road, Wharncliffe, Mingo County WV at latitude 37.59372 and longitude -81.95491. A preliminary evaluation has determined that all State and Federal air quality requirements will be met by the proposed facility. The DAQ is providing notice to the public of its preliminary determination to issue the permit as R13-3715.

The following potential emissions will be authorized by this permit action: Volatile Organic Compounds, 117.93 tons per year (TPY); Nitrogen Oxides, 194.30 TPY; Carbon Monoxide, 205.62 TPY; Sulfur Dioxide, 9.93 TPY; Total Particulate Matter, 215.17 TPY; Particulate Matter less than 10 microns in diameter, 192.26 TPY; Particulate Matter less than 2.5 microns in diameter, 188.03 TPY; Total Hazardous Air Pollutants, 0.87 TPY.

Written comments or requests for a public meeting must be received by the DAQ before 5:00 p.m.on Friday, August 8, 2025. A public meeting may be held if the Director of the DAQ determines that significant public interest has been expressed, in writing, or when the Director deems it appropriate.

The purpose of the DAQ's permitting process is to make a preliminary determination if the proposed construction will meet all state and federal air quality requirements. The purpose of the public review process is to accept public comments on air quality issues relevant to this determination. Only written comments received at the address noted below within the specified time frame, or comments presented orally at a scheduled public meeting, will be considered prior to final action on the permit. All such comments will become part of the public record.

Jerry Williams
WV Department of Environmental Protection
Division of Air Quality
601 57th Street, SE
Charleston, WV 25304
Telephone: 304-926-0499, ext. 41214
Email: jerry.williams@wv.gov

Additional information, including copies of the draft permit, application and all other supporting materials relevant to the permit decision may be obtained by contacting the engineer listed above. The draft permit and engineering evaluation can be downloaded at:

https://dep.wv.gov/daq/permitting/Pages/NSR-Permit-Applications.aspx

west virginia department of environmental protection

Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone (304) 926-0475 • FAX: (304) 926-0479

Harold D. Ward, Cabinet Secretary
dep.wv.gov

ENGINEERING EVALUATION / FACT SHEET

BACKGROUND INFORMATION

Application No.:	R13-3715
Plant ID No.:	059-00134
Applicant:	TransGas Development Systems, LLC
Facility Name:	Adams Fork Data Center Energy Campus
Location	Wharncliffe, Mingo County
NAICS Code:	221112 – Fossil Fuel Electric Power Generation
Application Type:	Construction
Received Date:	March 26, 2025 (Revised application submitted May 14, 2025)
Engineer Assigned:	Jerry Williams
Fee Amount:	$2,000 ($1,000 45 CSR 13 Application Fee, $1,000 NSPS Fee)
Date Received:	April 2, 2025
Complete Date:	June 4, 2025
Due Date:	September 2, 2025
Applicant Ad Date:	April 9, 2025
Newspaper	*Williamson Daily News*
UTM's:	Easting: 415.706 km Northing: 4,161.722 km Zone: 17
Latitude/Longitude:	37.59372 / -81.95491
Description:	Construction and operation of an off-grid power generation facility.

CONFIDENTIAL BUSINESS INFORMATION OVERVIEW

TransGas Development Systems, LLC (TransGas) submitted an air permit application for an off-grid power generation facility to be located near Wharncliffe in Mingo County. This permit application included confidential business information (CBI) submitted under 45 CSR 31, entitled "Confidential Information". Therefore, both a CBI and redacted version of the application were submitted. TransGas provided all CBI under the requirements of 45 CSR 31, which is the Division of Air Quality (DAQ)

regulation that establishes the requirements for claiming information submitted to the DAQ as confidential and the procedures for determinations of confidentiality in accordance with the provisions of W. Va. Code §22-5-10.

The reason for the CBI submittal according to TransGas is that the application contains information that is fully protected under non-disclosure and confidentiality agreements between the applicant and equipment provider concerning development of the process and facility design. Release of this information could cause substantial harm to TransGas' competitive position in the market. For each submission of information any portion of which is claimed to be confidential, a complete set of the information, including the document justifying the claim of confidentiality shall be submitted simultaneously on uncolored paper with the information claimed to be confidential blacked out, and with the words "redacted copy – claim of confidentiality" marked clearly on each such page, so that such a set of information is suitable for public disclosure and provides notice to the public that a claim of confidentiality has been made. DAQ allows for electronic submittals (via email) of redacted permit applications. However, all CBI applications must be submitted via mail or hand delivered. During the Notice of Application period, the DAQ received a public comment concerning the proposed project, which specifically requested the release of information that has been redacted.

As stated in 45 CSR 31, Section 4, during the course of the DAQ's review of whether the information claimed to be confidential is a trade secret in accordance with this rule, the DAQ shall consider the following:

- The claim of confidentiality has not expired by its terms, nor been waived or withdrawn;
- The person asserting the claim of confidentiality has satisfactorily shown that it has taken reasonable measures to protect the confidentiality of the information, and that it intends to continue to take such measures;
- The information claimed confidential is not, and has not been, reasonably obtainable without the person's consent by other persons (other than governmental bodies) by use of legitimate means (other than discovery based on a showing of special need in a judicial or quasi-judicial proceeding);
- No statute specifically requires disclosure of the information; and
- Either the person has satisfactorily shown that disclosure of the information is likely to cause substantial harm to the business's competitive position or the information is voluntarily submitted information, and its disclosure would likely to impair the State's ability to obtain necessary information in the future.

Additionally, 45 CSR 31, Section 6, states that no person shall claim as confidential, information concerning the types and amounts of pollutants discharged. "Types and amounts of air pollutants discharged" is defined in 45 CSR 31 Section 2.4. Furthermore, 45 CSR 31B entitled "Confidential Business Information and Emission Data" is an interpretive rule that provides guidance and clarification concerning the term "types and amounts of air pollutants discharged" defined under 45CSR§31-2.4, the DAQ's legislative rule entitled "Confidential Information," and thus what information may not be claimed confidential in accordance with 45CSR§31-6.

The aforementioned public comment received during the Notice of Application comment period triggered a review of the CBI claims by the DEP's Office of the General Counsel (OGC). A letter dated

April 28, 2025, from the OGC was issued to TransGas that stated that the information claimed as CBI may not qualify for such designation as it falls under the definition of "Types and Amounts of Pollutants Discharged" as excluded under §45-31-6 as defined under §45-31-2.4 (and further defined under 45 CSR 31B). This letter was made available to the public on the WVDEP Application Xtender (AX) website at that time. There was also concern that the claimed CBI may not meet the eligibility requirements under §45-31-4.1(b) and 4.1(c). The letter requested further justification that the information claimed as CBI is not defined as "Types and Amounts of Pollutants Discharged" and also does not conflict with the eligibility requirements of §45-31-4.1(b) and 4.1(c). The letter requested a written response within 15 days.

TransGas provided a response to this request on May 2, 2025. This response was made available to the public on the AX website at that time. TransGas proposed to revise the CBI claim to cover the company names for the engine and control systems designers and manufacturers. This includes the engine model number which would identify the engine company. All other previously claimed CBI would be removed from the request. Upon reviewing this information, the WVDEP issued a letter to TransGas on May 9, 2025, stating that a permit application so submitted would be in compliance with the requirements governing the submission of CBI under 45 CSR 31 and 45 CSR 31B. TransGas provided the revised application to DAQ on May 14, 2025, and the application was made available to the public on the AX website at that time.

This engineering evaluation/fact sheet contains only the information that was provided in the redacted copy of the permit application. Furthermore, the information contained herein is more than adequate to make the appropriate permitting determinations and can be used to determine compliance with all applicable rules and regulations. This includes all necessary monitoring, recordkeeping, reporting, and testing that will be required as part of the proposed draft permit.

DESCRIPTION OF PROCESS

The following process description was taken from Permit Application R13-3715:

The Adams Fork Data Center Energy Campus is a unique off-grid, electric generating facility designed to provide power to adjacent data center operations. The facility encompasses 117 engines (Source ID# 1S – 117S) with 114 engines operating full-time and 3 engines in reserve. Each engine has a proposed control strategy (Emission Point ID# 1E – 117E). The facility will contain 39 powerhouses with each containing 3 generator setups with each generator having a nameplate capacity of 25 MWe. Actual power generation will depend on the operating mode of the engines. Each engine will have a maximum power output of 21 MW, therefore, the theoretically installed power output would be 2,457 MW. The effective and continuously delivered power output will be 1,796 MW.

The engines are configured to be dual-fuel units and have the ability to operate on natural gas or diesel fuel, or can be operated on diesel fuel only, in backup mode. Under normal operation, the engines consume natural gas as their primary fuel with a pilot injection of ultra-low sulfur diesel (ULSD). Under natural gas operation, 2% of the energy comes from the pilot fuel, which can be increased to 100% in emergency operation.

The engines can operate under the following operational profiles:

Normal Operation
To ensure peak operation conditions, the engines will be regularly serviced. With 1-2 weeks of downtime per engine per year, 3 engines are going to be off-line at any time of the year. Under normal operations, the engines will be run at 75% power only. Therefore, the continuously delivered power will be 1,796 MW.

Compensation Mode
In the case of one or more, or in the unrealistic, but foreseen case of up to 29 engines out of service, the rest of the field will compensate, increasing their power output to 100%. For the calculation of the yearly emissions the worst case is assumed, when 29 engines go offline and the remaining 85 are operated at 100%.

Emergency Mode
In case the pipeline is down, or the gas cannot be delivered for any other reason, the engines can switch to diesel fuel mode immediately and are then operated on diesel fuel only. Apart from the different fuel type, the engines are controlled in the same way as in Normal Operation.

Startup Mode
To start an engine and bring power production online, several steps are necessary. In the first phase the emission control system is not operational temperature, therefore the control rate is not optimal. The following is a simplification and a representation of the worst case for emissions emission-wise. The different steps can be reduced to four main sub-modes:

- Speed up
  Bring the engine from standstill to nominal speed (89 rpm). This is done in diesel mode. The emission control system is still offline at this point, as it is not at optimal temperature. Once nominal speed is set and the minimum load for a fuel switch is reached (less than 5 minutes), the system initiates the next sub mode.

- Fuel Switch
  For about two minutes the load is kept constant, and the fuel is changed from 100% diesel to 98% gas & 2% diesel.

- Generator switched on
  On gas operation, the load is further increased until the generator can by energized and synchronized with the rest of the engine fleet. This takes no more than 5 minutes. For the emissions calculation of all these steps the emission control system is looked at as non-operational, even though the exhaust gases will have heated it already and some abatement is taking place, even at a reduced level.

- Load up cold control
  Once the generator is online and synchronized, then the engine is powered up to its set point (75% in normal operation mode). For reasons of simplicity and to ensure a conservative view on the problem, during engine load up the control system is looked at as cold and operational at

25% only. This is even though in reality the system was heated up constantly by the exhaust gases and reaching operational condition during the load up.

Shut Down
The shut down procedure consists of three phases:

- Ramp down
  The load is constantly reduced to a minimum load.

- Min Load
  At minimum load the generator is decoupled from the grid and the engine's load and speed setting are zero.

- Spin out
  Due to the zero-load setting the injection systems are turned off and the engine is spun out until full stop. In this entire sequence the emission control system is still operational due to its thermal inertia. Therefore, until the injection is stopped the emissions are treated.

The engines will operate on ULSD and natural gas depending on the operating status. ULSD will be stored in 40 storage tanks (Source ID# 118S – 157S, Emission Point ID# 118E – 157E) on the property. Natural gas will be delivered via pipeline. Tanks for control device liquids will be located at each powerhouse. There will be 39 tanks each of hydrous ammonia, caustic soda, sulfuric acid, sodium chlorite, and sodium hydrosulfide. These tanks are considered de minimis due to minimal emissions. Liquids and supplies for these tanks will be trucked to the site.

There is no steam-power production at the site. Cooling will be provided by mine pool water as needed. Therefore, there are no requirements for cooling towers.

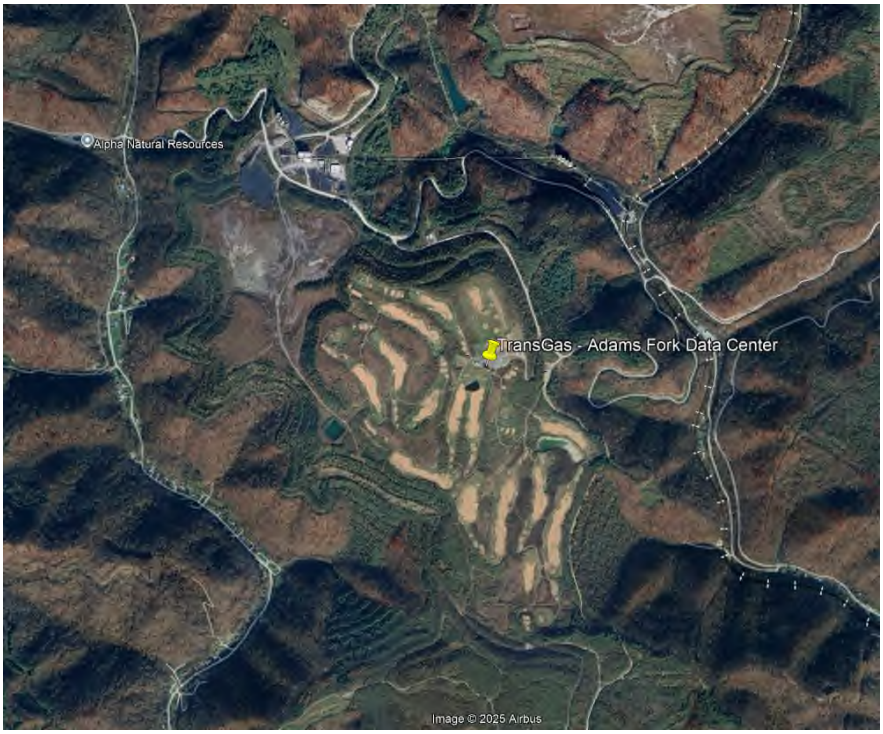
SITE INSPECTION

A site inspection of the proposed location was conducted on May 20, 2025, by the writer and Joe Kessler (NSR Program Manager) of the DAQ. The proposed site is located at the existing Twisted Gun Golf Course, and no construction or equipment installation was visible at the time of the site inspection. There were no visible residences nearby.

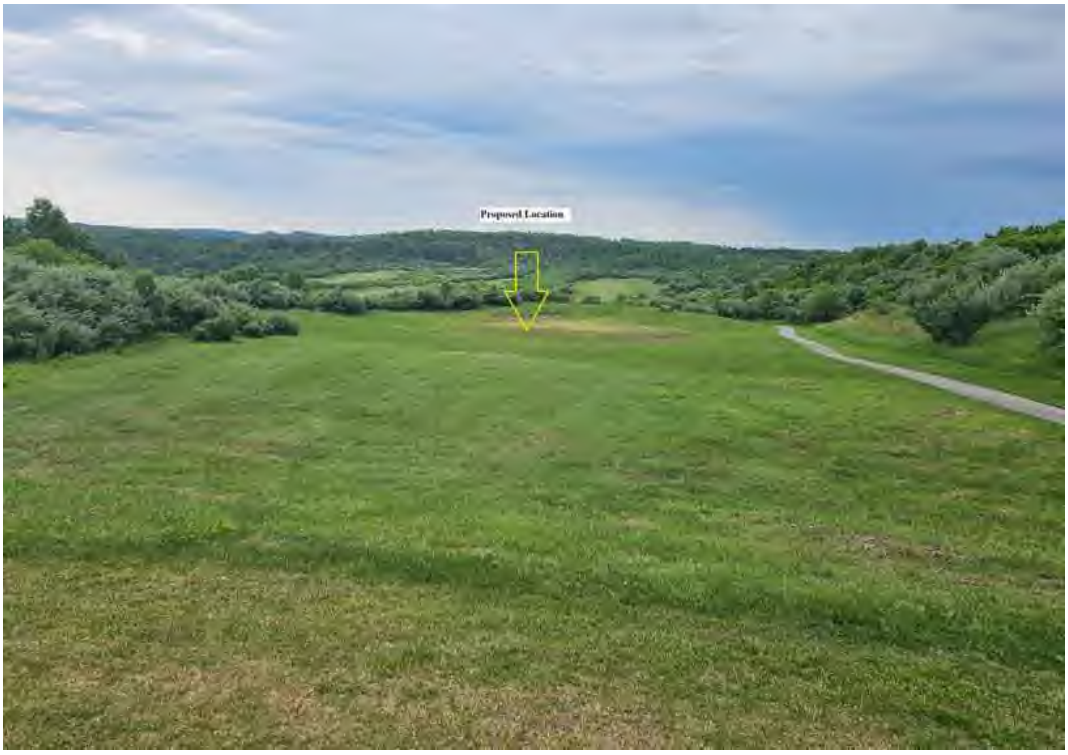
Directions to the site:

The facility will be located on the property currently occupied by the Twisted Gun Golf Course in Wharncliffe. The site can be accessed from WV Route 52 headed toward Gilbert. Turn right onto Gilbert Creek Road, then right onto Right Fork Bens Creek Road to Twisted Gun. Proceed to the end of the Twisted Gun Road to the site.

Aerial view of the proposed site



The site will be located at the existing Twisted Gun Golf Course approximately close to the arrow in the photo found below.



ESTIMATE OF EMISSIONS BY REVIEWING ENGINEER

Emissions associated with this facility consist of the equipment listed in the following table and fugitive emissions.

Emission Unit ID#	Process Equipment	Calculation Methodology
1S – 117S	Engine 1 – Engine 117 28,194 HP (each)	Manufacturer Data (NOx, CO, PM, VOC, SO_2) EPA AP-42 Emission Factors Chapter 3.2 (HAPs)
118S – 157S	40 – Diesel Storage Tanks 170,000 gal (each)	EPA TANKS Emissions Estimation Software, Version 4.0.9d
De Minimis	39 – Hydrous Ammonia Storage Tanks	De Minimis
De Minimis	39 – Caustic Soda Storage Tanks	De Minimis
De Minimis	39 – Sulfuric Acid Storage Tanks	De Minimis
De Minimis	39 – Sodium Chlorite Storage Tanks	De Minimis
De Minimis	39 – Sodium Hydrosulfide Storage Tanks	De Minimis
HR	Paved Haul Roads	EPA AP-42 Emission Factors, Chapter 13.2.1

The potential emissions from the engines were estimated using the ability to fire the units with natural gas or diesel. The engines at the facility are capable of firing either fuel. The operating hours, operational mode and throughput of each type of fuel will be continuously monitored and recorded. TransGas will keep records of the total amount of hours each engine uses natural gas as a fuel and the total amount of hours each engine uses diesel as a fuel. The 12-month rolling sum of emissions will be calculated monthly.

The emission control systems for the engines consist of two main systems. The dry system on the high pressure side of the engine (before the turbocharger) and the wet system on the low pressure side, which is downstream of the turbocharger. The dry systems consist of an oxidation catalyst and an SCR catalyst. The catalytic reduction of CO has a reduction efficiency of over 99%. The same system oxidizes VOC emissions with a reduction efficiency of 99%. The de-NOx unit is a urea based SCR technology, and the reduction efficiency exceeds 90%. The wet system consists of four (4) stages, which reduce NOx further with 90.9% reduction efficiency and SO_2 with 70% reduction efficiency.

The emission abatement system that will be employed on each engine results in the following emissions reductions when operating in the following modes:

Mode	NOx (%)	CO (%)	VOC/HAP (%)	PM (%)	SO_2 (%)
Speed Up	0	0	0	0	95.0
Fuel Changeover	0	0	0	0	99.0
Generator Switched On	0	0	0	0	99.0
Load Up Cold Control	25.0	25.0	25.0	0	99.0
Normal Operation	99.0	99.0	99.0	25.0	99.0
Compensation Mode	99.0	95.0	99.0	25.0	99.0
Ramp Down	99.0	94.0	99.0	25.0	99.0
Min Load	70.0	50.0	70.0	0	70.0
Spin Out	40.0	35.0	40.0	0	40.0
Emergency	98.0	91.0	99.0	25.0	99.0

As discussed in the DESCRIPTION OF PROCESS and also as shown in the above table, the engines will operate in multiple modes. Under normal operations, the engine will remain comfortably below the PSD threshold. However, to ensure that the facility can be operated under worst-case conditions, the following worst-case scenario was examined.

The pipeline is out for eight (8) days, which equates to 192 hours. During this outage, the facility would be operated only on diesel fuel. During the same year, an unplanned event resulted in 31 engines are down and the remaining 86 engines are operated in compensation mode and will continue to deliver full power. This would increase the engines output to 99.4% load. It was estimated that the compensation mode would last for 24 days or 567 hours. Finally, the engines would have to go through 5 startups and shutdowns in place of the scheduled one (1) event. Using this worst case scenario results in the following hourly breakdown by operational mode:

Mode	Hours
Speed Up	0.42
Fuel Changeover	0.17
Generator Switched On	0.42
Load Up Cold Control	0.83
Normal Operation	7996.80
Compensation Mode	567.20
Ramp Down	1.67
Min Load	0.42
Spin Out	0.08
Emergency	192
Total Time	**8,760**

The operating hours used for the worst-case scenario results in the following potential to emit (PTE) for all of the engines:

Pollutant	**Annual Emissions (tons/year)**
Nitrogen Oxides	194.30
Carbon Monoxide	205.62
Volatile Organic Compounds	116.59
Particulate Matter-10/2.5	186.53
Sulfur Dioxide	9.93
Benzene	0.45
Toluene	0.16
Xylenes	0.11
Formaldehyde	0.046
Acrolein	0.0045
Acetaldehyde	0.013
Naphthalene	0.075
Total Hazardous Air Pollutants	0.86

The following table represents the maximum hourly and annual emissions during *normal operations* for one engine:

Pollutant	**Hourly Emissions (lb/hr)**	**Annual Emissions (tons/year)**
Nitrogen Oxides	0.14	0.61
Carbon Monoxide	0.34	1.47
Volatile Organic Compounds	0.23	0.99
Particulate Matter-10/2.5	0.34	1.49
Sulfur Dioxide	0.01	0.03
Benzene	0.00088	0.00352
Toluene	0.00032	0.00128
Xylenes	0.00022	0.00088
Formaldehyde	0.00009	0.00036
Acrolein	0.00001	0.00004
Acetaldehyde	0.00003	0.00012
Naphthalene	0.00015	0.0006
Total Hazardous Air Pollutants	0.0017	0.0068

Storage Tanks
The potential aggregate emissions for the 40 – 170,000 gallon diesel storage tanks include the losses from working and breathing. Due to the very low vapor pressure of diesel fuel (0.007 psia), the emissions associated with the diesel fuel tanks are low. EPA TANKS 4.09d allows users to enter specific information about a storage tank (dimensions, construction, paint condition, etc.), the liquid contents (chemical components and liquid temperature), and the meteorological conditions and location of the tank (nearest city, ambient temperature, etc.) to generate an air emissions report. Report features include estimates of monthly, annual, or partial year emissions for each chemical or mixture of chemicals stored in the tank. The closest meteorological location available in EPA TANKS 4.09d that was used was Charleston. As stated above, due to the very low vapor pressure of diesel fuel, the emissions associated with the diesel fuel tanks are low. The results of the EPA TANKS 4.09d analysis resulted in the following diesel storage tank emissions:

Pollutant	**Hourly Emissions (lb/hr)**	**Annual Emissions (tons/year)**
Volatile Organic Compounds	7.34	0.75

Truck Loading
There will also be potential emissions associated with the truck loading of the 40 – 170,000 gallon diesel storage tanks. These emissions were accounted for and included as working losses in the aforementioned storage tank emissions.

Paved Haul Roads
There are paved haul road activities associated with this facility. The following table indicates the assumptions made in estimating the emissions:

Operating Condition	**Parameter**
Potential Operating Days	365
Estimated Roundtrip Distance per Vehicle	5.00 miles/vehicle
Fluid Delivery Trucks per Year	5,583
Miscellaneous Vehicles per Year	4,380

Using these operating conditions, the potential emissions associated with these haul road operations result in the following:

Pollutant	**Hourly Emissions (lb/hr)**	**Annual Emissions (tons/year)**
Particulate Matter	11.50	28.64
Particulate Matter-10	2.30	5.73
Particulate Matter-2.5	0.60	1.50

Fugitive Emission Leaks
The fugitive equipment leaks (VOC/HAP) associated with fugitive components (valves, pressure relief valves, connections, flanges, etc.) were estimated using EPA's Protocol for Equipment Leak Emission Estimates Table 2-1 (SOCMI average emission factors) and Table 2-5 (SOCMI screening ranges emission factors) and the component counts associated with the proposed facility. Based on this

analysis, the fugitive equipment leaks associated with this facility would be 0.59 tons per year of VOC and less than 0.01 tons per year of HAPs. The permit does require minimization of fugitive emissions and further requires any above-ground piping, valves, pumps, etc. that shows signs of excess wear that have a reasonable potential for fugitive emissions of regulated air pollutants to be repaired or replaced.

The following table represents the emissions associated with this 45CSR13 construction permit:

Emission Source	Annual Emissions (tons/year)					
	NO_x	**CO**	**VOC**	**SO_2**	**PM_{10}**	**Total HAPs**
Engines	194.30	205.62	116.59	9.93	186.53	0.86
Storage Tanks	-	-	0.75	-	-	-
Paved Haul Roads	-	-	-	-	5.73	-
Fugitive Leaks	-	-	0.59	-	-	0.01
Facility PTE	**194.30**	**205.62**	**117.93**	**9.93**	**192.26**	**0.87**

REGULATORY APPLICABILITY

State

45 CSR 2 - Particulate Air Pollution from Combustion of Fuel in Indirect Heat Exchangers ***(not applicable)***

This rule establishes emission limitations for smoke and particulate matter which are discharged from fuel burning units. 45 CSR 2 states that any fuel burning unit that has a heat input under ten (10) million B.T.U.'s per hour is exempt from sections 4 (weight emission standard), 5 (control of fugitive particulate matter), 6 (registration), 8 (testing, monitoring, recordkeeping, reporting) and 9 (startups, shutdowns, malfunctions). However, failure to attain acceptable air quality in parts of some urban areas may require the mandatory control of these sources at a later date. A fuel burning unit is defined in 45 CSR 2 section 2.10 as any furnace, boiler apparatus, device, mechanism, stack or structure used in the process of burning fuel or other combustible material for the primary purpose of producing heat or power by indirect heat transfer. The engines are not fuel burning units because this operation is not their primary purpose. Therefore, these units would not be subject to this rule.

45 CSR 4 - To Prevent and Control the Discharge of Air Pollutants into the Open Air Which Causes or Contributes to an Objectionable Odor or Odors

The purpose of this rule is to prevent and control the discharge of pollutants into the open air which causes or contributes to an objectionable odor or odors. This facility would generally be subject to this rule, however, this type of facility normally does not have issues with odors. However, the DAQ will, using the authority under this rule to respond to complaints involving objectionable odors if confirmed while the facility is operating, and may require mitigation at that time to reduce the odor potential of the source. An objectionable odor must be determined by the DAQ in the course of an inspection or investigation of an actual odor, and is possible to prove quantitatively, pursuant to this rule, that an objectionable odor will be present before a facility is in operation.

45 CSR 10 - To Prevent and Control Air Pollution from the Emissions of Sulfur Oxides ***(not applicable)***

This rule establishes emission limitations for sulfur dioxide which are discharged from fuel burning units. 45 CSR 10 states that any fuel burning unit that has a heat input under ten (10) million B.T.U.'s per hour is exempt from sections 3 (weight emission standard), 6 (registration), 7 (permits), and 8 (testing, monitoring, recordkeeping, reporting). However, failure to attain acceptable air quality in parts of some urban areas may require the mandatory control of these sources at a later date. A fuel burning unit is defined in 45 CSR 10 section 2.8 as any furnace, boiler apparatus, device, mechanism, stack or structure used in the process of burning fuel or other combustible material for the primary purpose of producing heat or power by indirect heat transfer. The engines are not fuel burning units because this operation is not their primary purpose. Therefore, these units would not be subject to this rule.

45 CSR 13 (Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Administrative Updates, Temporary Permits, General Permits, and Procedures for Evaluation)

Pursuant to §45-13-5.1, "[n]o person shall cause, suffer, allow or permit the construction, modification, relocation and operation of any stationary source to be commenced without . . . obtaining a permit to construct."

Based upon the potential emissions for the facility, TransGas is required to obtain a permit under 45CSR13 for this facility.

As required under §45-13-8.3 ("Notice Le vel A"), TransGas placed a Class I legal advertisement in the *Williamson Daily News* on April 9, 2025. Additionally, TransGas paid the appropriate application fee of $2,000 ($1,000 45 CSR 13 permit application fee, $1,000 NSPS fee) on April 2, 2025.

45 CSR 14 - Permits for Construction and Major Modification of Major Stationary Sources of Air Pollutants ***(not applicable)***
45 CSR 19 - Permits for Construction and Major Modification of Major Stationary Sources of Air Pollution which Cause or Contribute to Nonattainment ***(not applicable)***

45CSR14 establishes and adopts a preconstruction permit program for the construction and major modification of major stationary sources in areas of attainment with the National Ambient Air Quality Standards (NAAQS). Mingo County is currently classified as in attainment/unclassifiable with the NAAQS and, therefore, a proposed new "major stationary source" in Mingo County would be subject to the provisions of 45CSR14. The proposed facility is not defined as a source listed under §45-14-2.43(a), therefore, pursuant to 2.4(b), would be defined as a "major stationary source" if any regulated pollutant has a PTE in excess of 250 TPY. The proposed facility, however, does not have a PTE of any regulated pollutant in excess of 250 TPY as shown in the table on the following page, therefore, not defined as a major stationary source and is not subject to the provisions of 45 CSR 14. 45 CSR 19 applies to sources that are located in areas that are classified as non-attainment with the NAAQS. Mingo County is an attainment/unclassified area, therefore, 45 CSR 19 would not apply.

Pollutant	PSD (45CSR14) Threshold (TPY)	NANSR (45CSR19) Threshold (TPY)	Facility PTE (TPY)	45CSR14 or 45CSR19 Review Required?
Carbon Monoxide	250	NA	205.62	No
Nitrogen Oxides	250	NA	194.30	No
Sulfur Dioxide	250	NA	9.93	No
Particulate Matter 2.5	250	NA	186.53	No
Ozone (VOC)	250	NA	117.34	No

45 CSR 16 - Standards of Performance for New Stationary Sources

This rule incorporates the federal Clean Air Act (CAA) standards of performance for new stationary sources (NSPS) set forth in 40 CFR Part 60 by reference. 45 CSR 16 applies to this source by reference of 40 CFR 60 Subpart IIII. These requirements are discussed under that rule below.

45 CSR 17 - To Prevent and Control Particulate Matter Air Pollution from Materials Handling, Preparation, Storage and Other Sources of Fugitive Particulate Matter

The purpose of this rule is to prevent and control particulate matter air pollution from materials handling, preparation, storage and other sources of fugitive particulate matter. TransGas will ensure appropriate precautions are taken to prevent the escape of fugitive particulate matter beyond the boundary lines of the property.

45 CSR 21 - Control of Air Pollution from the Emission of Volatile Organic Compounds ***(not applicable)***

This rule establishes reasonably available control technology to control emissions of volatile organic compounds from sources that manufacture, mix, store, use, or apply materials containing volatile organic compounds that are located in Cabell, Kanawha, Putnam, Wayne and Wood Counties. This facility is located in Mingo County, and therefore, not applicable to this rule.

45 CSR 27 - To Prevent and Control the Emissions of Toxic Air Pollutants ***(not applicable)***

The purpose of this rule is to prevent and control the discharge of toxic air pollutants requiring the application of best available technology (BAT) for chemical processing units. Section 2.4 defines a chemical processing unit as an assembly of reactors, tanks, distillation columns, heat exchangers, vaporizers, compressors, dryers, decanters, and/or other equipment used to treat, store, manufacture, or use toxic air pollutants. For the purpose of this rule, the term chemical processing unit includes surface coating equipment or similar equipment utilizing a toxic air pollutant as a solvent or for other purposes but does not include equipment used in the production and distribution of petroleum products providing that such equipment does not produce or contact materials containing more than 5% benzene by weight. Potential emissions of toxic air pollutants from this facility result from the combustion of natural gas or diesel in the engines. Regulation of emissions of toxic air pollutants from these unit types are not included in this rule, and therefore, not applicable.

45 CSR 30 - Requirements for Operating Permits

The facility is a major source and is subject to 45CSR30 based upon CO, NOx, PM, and VOC emissions each exceeding 100 tons per year. Due to this facility's PTE over 100 tons per year of a criteria pollutant, TransGas is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30. TransGas is required to pay the appropriate annual operating fees and submit an annual Certified Emissions Statement.

45 CSR 31 - Confidential Information

The purpose of this rule is to establish the requirements for claiming information submitted to the Director as confidential and the procedures for determinations of confidentiality in accordance with the provisions of W. Va. Code §22-5-10. The reason for the CBI submittal is that the application contains information that is fully protected under non-disclosure and confidentiality agreements between the applicant and equipment provider concerning development of the process and facility design. This was previously discussed in detail in the CONFIDENTIAL BUSINESS INFORMATION section.

45 CSR31B – Confidential Business Information and Emission Data

The purpose of this rule is to provide guidance and clarification concerning the term "types and amounts of pollutants discharged" defined under 45 CSR §31-2.4, the DAQ's legislative rule (45 CSR 31) and thus what information may not be claimed confidential in accordance with 45 CSR §31-6. An in-depth discussion regarding this was previously discussed in detail in the CONFIDENTIAL BUSINESS INFORMATION section.

45 CSR 33 - Acid Rain Provisions and Permits ***(not applicable)***

This rule establishes and adopts general provisions and the operating permit program requirements for affected sources and affected units under the Acid Rain Program promulgated by the United States Environmental Protection Agency under Title IV of the Clean Air Act, as amended (CAA). The rule and associated reference methods, performance specifications and other test methods which are appended to these standards are adopted by reference. These units are exempt under the New Unit Exemption in §40-72.7. See explanation below in Federal for 40 CFR 72 (Permits Regulation).

45 CSR 34 - Emission Standards for Hazardous Air Pollutants

This rule incorporates the federal Clean Air Act (CAA) national emission standards for hazardous air pollutants (NESHAPs) set forth in 40 CFR Parts 61 and 63 by reference. 45 CSR 34 applies to this source by reference of 40 CFR 63 Subpart ZZZZ. These requirements are discussed under that rule below.

45 CSR 40 - Control of Ozone Season Nitrogen Oxide Emissions ***(not applicable)***

The purpose of this rule is to establish ozone season NOx emission limitation, monitoring, recordkeeping, reporting, excess emissions, and NOx budget demonstration requirements for large industrial boilers and combustion turbines that have a maximum design heat input greater than 250

MMBTU/hr, in accordance with 40 CFR §51.121. Ozone season is defined as May 1 through September 30 in the same calendar year. This facility does not have industrial boilers or combustion turbines, therefore, this rule does not apply.

Federal

40 CFR 51.166 - Prevention of Significant Deterioration of Air Quality ***(not applicable)***

Federal construction permitting programs regulate new and modified sources of attainment pollutants under Prevention of Significant Deterioration (PSD) and new and modified sources of non-attainment pollutants under Non-Attainment New Source Review (NANSR). The provisions of this section are captured in the West Virginia state rules discussed above known as 45 CSR 14 (PSD) and 45 CSR 19 (NANSR). Both of these rules are part of West Virginia's State Implementation Plan (SIP).

Mingo County is designated as attainment/unclassifiable for all criteria pollutants. PSD regulations apply when a new source is constructed in which emissions exceed major source thresholds, an existing minor source undergoes modification in which emission increases exceed PSD major source thresholds, or an existing major source undergoes a modification in which emission increases exceed PSD significant emission rates. PSD major source thresholds are 250 tons per year of a regulated pollutant, except for the 28 regulated facility categories. This facility is not one of listed 28 regulated facility categories. Therefore, the PSD major source threshold is 250 tons per year of a regulated pollutant. The emissions associated with this facility is less than the PSD major source threshold, therefore, this rule does not apply.

40 CFR 60 Subpart Kc - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After October 4, 2023 ***(not applicable)***

Subpart Kc applies to storage vessels of volatile organic liquids with capacities greater than or equal to 20,000 gallons for which construction commenced after October 4, 2023. § 60.110c(b)(8) exempts storage vessels that only store volatile organic liquids with a maximum true vapor pressure less than 0.25 psia (1.7 kPa absolute). Each storage vessel at the facility has a capacity of 170,000 gallons. However, the maximum vapor pressure of the storage vessels is 0.007 psia, which is less than 0.25 psia. Therefore, this rule does not apply.

40 CFR 60 Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

Subpart IIII applies to owners and operators of compression ignition internal combustion engines that commenced construction after July 11, 2005, and were manufactured after April 1, 2006, and not a fire pump engine.

The 28,194 HP engines (1S – 117S) are configured to be dual-fuel units and have the ability to operate on natural gas or diesel fuel, or can be operated on diesel fuel only, in backup mode. Under normal operation, the engines consume natural gas as their primary fuel with a pilot injection of ULSD. Under

natural gas operation, 2% of the energy comes from the pilot fuel, which can be increased to 100% in emergency operation.

The engines commenced construction after July 11, 2005, are non-emergency engines, were manufactured after April 1, 2006, utilizes diesel fuel, have displacements greater than 30 liters per cylinder, less than 130 rpm, not reducing PM by 60%, do not have diesel particulate filters, and were installed after January 1, 2016. Due to these parameters, the following are the regulatory requirements for each pollutant:

NOx

Emission Limit	3.4 g/KW-hr (2.5 g/HP-hr)
Standards	§60.4204(c)(3)
Monitoring/Testing	§60.4213(e)

PM

Emission Limit	0.15 g/kW-hr (0.11 g/HP-hr)
Standards	§60.4204(c)(4)
Monitoring/Testing	§60.4213(f)

Based upon the proposed hourly emission limits for the engines, the regulatory emission limits will be met.

The following requirements also apply to these pollutants:

Standards	§60.4206, §60.4207(d), §60.4211(d)
Monitoring/Testing	§60.4213(a), (b), (c); §60.4211(d)(1), (d)(3)
Recordkeeping	§60.4214(a)(2), §60.4211(d)(2)
Reporting	§60.4214(a)(1), §60.4211(d)(2)

40 CFR 60 Subpart TTTTa - Standards of Performance for Greenhouse Gas Emissions for Modified Coal-Fired Steam Electric Generating Units and New Construction and Reconstruction Stationary Combustion Turbine Electric Generating Units ***(not applicable)***

Subpart TTTTa applies to stationary combustion turbines that commence construction after May 23, 2023, that also serve a generator or generators capable of selling greater than 25 MW of electricity to a utility power distribution system. There are no combustion turbines at the proposed facility, therefore, Subpart TTTTa is not applicable.

40 CFR 63 Subpart EEEE - National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline) ***(not applicable)***

Subpart EEEE applies to organic liquids storage and distribution at major sources of HAPs. The facility is not a major source of HAPs because its PTE of total HAPs is less than 25 tons per year and its PTE of any single HAP is less than 10 tons per year. Therefore, Subpart EEEE does not apply.

40 CFR 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE)

Subpart ZZZZ applies to stationary combustion RICE at area and major sources of HAPs. As stated in §63.6590(c), stationary RICE that are subject to regulations under 40 CFR 60 (IIII) must meet those requirements, and no further requirements apply for these units under this subpart.

40 CFR 64 - Compliance Assurance Monitoring ***(not applicable)***

Compliance Assurance Monitoring (CAM) applies to pollutant-specific emissions units at a major source under 40 CFR 70. The facility is not a major source under 40 CFR 70; therefore, CAM does not apply.

40 CFR 72 - Permits Regulation ***(not applicable)***

The purpose of this part is to establish certain general provisions and the operating permit program requirements for affected sources and affected units under the Acid Rain Program, pursuant to title IV of the Clean Air Act, 42 U.S.C. 7401, et seq., as amended by Public Law 101-549 (November 15, 1990).

The nameplate capacity of the generators attached to each unit is 25 MWe or less. The units do not burn coal or a coal-derived fuel, and burns fuel with sulfur of 0.05% or less by weight. Therefore, these units are exempt under the New Unit Exemption in Section 72.7 and are exempt from permit requirements, monitoring, and allowance holdings, except for the provisions of §72.7 itself, and §72.2 through 72.6 (definitions, measurements, abbreviations, and acronyms, federal authority, state authority, and applicability) and 72.10 through 72.13 (availability of information, computation of time, administrative appeals, and incorporation by reference).

40 CFR 97 Subpart DDDDD - Federal NOx Budget Trading Program, CAIR NOx and SO_2 Trading Programs, CSAPR NOx and SO_2 Trading Programs, and Texas SO_2 Trading Program ***(not applicable)***

This rule sets forth the general, designated representative, allowance, and monitoring provisions for the Cross-State Air Pollution Rule (CSAPR) SO_2 Group 2 Trading Program, under section 110 of the Clean Air Act and §52.39 of this chapter, as a means of mitigating interstate transport of fine particulates and sulfur dioxide.

This rule applies to fossil-fuel-fired combustion turbines serving at any time, on of after January 1, 2005, a generator with a nameplate capacity of more than 25 MWe producing electricity for sale. These units are RICEs and not combustion turbines. Additionally, the nameplate capacity of the generators attached to each unit is 25 Mwe. Therefore, this regulation does not apply.

ANALYSIS OF NON-CRITERIA REGULATED POLLUTANTS

This section provides information on those regulated pollutants that are not classified as "criteria pollutants". Criteria pollutants are defined as Carbon Monoxide (CO), Lead (Pb), Oxides of Nitrogen (NOx), Ozone, Particulate Matter (PM_{10} and $PM_{2.5}$), and Sulfur Dioxide (SO_2). These pollutants have National Ambient Air Quality Standards (NAAQS) set for each that are designed to protect public health and welfare. Other pollutants of concern, although designated as non-criteria *and without national air quality standards*, are regulated through various state and federal programs designed to limit their emissions and public exposure. These programs include federal source-specific HAP regulations promulgated under 40 CFR 61 and 40 CFR 63 (NESHAPS/MACT), and WV Legislative Rule 45 CSR 27 that regulates certain HAPs as Toxic Air Pollutants (TAPs). Any potential applicability to these programs were addressed in the REGULATORY APPLICABILITY section of this document.

The majority of non-criteria regulated pollutants fall under the definition of HAPs which, with some revision since, were 188 compounds identified under Section 112(b) of the Clean Air Act (CAA) as pollutants or groups of pollutants that EPA knows, or suspects *may* cause cancer or other serious human health effects. These adverse health effects may be associated with a wide range of ambient concentrations and exposure times and are influenced by source-specific characteristics such as emission rates and local meteorological conditions. Health impacts are also dependent on multiple factors that affect variability in humans such as genetics, age, health status (e.g., the presence of pre-existing disease) and lifestyle. As stated previously, *there are no federal or state ambient air quality standards for these specific chemicals*. It is also important to note that the USEPA does not divide the various HAPs into further classifications based on toxicity or if the compound is a suspected carcinogen. The HAP emissions associated with this application are found in the ESTIMATE OF EMISSIONS section of this document. For a complete discussion of the known health effects of each compound refer to the IRIS database located at *www.epa.gov/iris*.

The HAPs emitted from the proposed facility are created during the combustion of natural gas and diesel fuel. The HAP emission values were estimated using EPA AP-42: Compilation of Air Emissions Factors from Stationary Sources. AP-42 contains emission factors and process information for more than 200 air pollution source categories. AP-42 Chapter 3.2 contains HAP emission factors for reciprocating engines.

The table on the following page lists each HAP currently identified by TransGas as potentially being emitted based upon the information available in AP-42 Chapter 3.2, Tables 3.2-1, 3.2-3, and 3.2-4. Additionally, the Chemical Abstracts Service (CAS) registry number, the type of HAP, the PTE of the individual HAP, and any potentially applicable Most Available Control Technology (MACT) is provided.

Pollutant	CAS #	Type	PTE (TPY)	MACT[1]
Acetaldehyde	75-07-0	VOC	0.013	None
Acrolein	107-02-8	VOC	0.0045	None
Benzene	71-43-2	VOC	0.448	None
Formaldehyde	50-00-0	VOC	0.046	None
Naphthalene	91-20-3	VOC	0.075	None
Toluene	108-88-3	VOC	0.163	None
Xylenes	1330-20-7	VOC	0.111	None

[1] Does a MACT apply to this specific HAP for any emission unit at the facility? See REGULATORY APPLICABILITY section for discussion.

AIR QUALITY IMPACT ANALYSIS

Modeling was not required of this source because the facility is not subject to 45CSR14 (Permits for Construction and Major Modification of Major Stationary Sources of Air Pollutants) as discussed in the Regulatory Discussion Section.

SOURCE AGGREGATION

"Building, structure, facility, or installation" is defined as all the pollutant emitting activities which belong to the same industrial grouping, are located on one or more contiguous and adjacent properties, and are under the control of the same person.

TransGas has an option on the site with the current owner, therefore, they do have control of the proposed site. There are no other emission units belonging to the same industrial grouping, under common control, and located on contiguous or adjacent properties with the facility. Therefore, the emissions from the Adams Fork Data Center facility should not be aggregated in determining Title V or PSD status.

MONITORING, RECORDKEEPING, REPORTING, AND TESTING (MRRT) OF OPERATIONS

TransGas will be required to perform the following MRRT:

- **Operational Limitations**
  - Operating limits will be established on the engines. TransGas will be required to monitor the operating hours, operational mode, and the throughput of each type of fuel will be continuously monitored and recorded for each engine. Required to keep records of the total amount of hours each engine uses natural gas as a fuel and the total amount of hours each engine uses diesel as a fuel. The 12-month rolling sum of emissions will be calculated monthly.
- **40 CFR 60 Subpart IIII MRRT**
  - Monitor and utilize diesel fuel that meets a maximum per-gallon sulfur content of 1,000 ppm. [§60.4207(d)]
  - Conduct an initial performance test to demonstrate initial compliance with the emission standards as specified in §60.4213. [§60.4211(d)(1)]
  - Conduct an annual performance test to demonstrate initial compliance with the emission standards as specified in §60.4213. [§60.4211(d)(3)]
  - Keep records of the information in paragraphs (a)(2)(i) through (iv) of this section.
    - (i) All notifications submitted to comply with this subpart and all documentation supporting any notification.
    - (ii) Maintenance conducted on the engine.
    - (iii) If the stationary CI internal combustion is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards.
    - (iv) If the stationary CI internal combustion is not a certified engine, documentation that the engine meets the emission standards. [§60.4214(a)(2)]
  - Establish operating parameters to be monitored continuously to ensure the stationary internal combustion engine continues to meet the emission standards. The owner or operator must petition the Administrator for approval of operating parameters to be monitored continuously. The petition must include the information described in paragraphs (d)(2)(i) through (v) of this section.
    - (i) Identification of the specific parameters you propose to monitor continuously;
    - (ii) A discussion of the relationship between these parameters and NOX and PM emissions, identifying how the emissions of these pollutants change with changes in these parameters, and how limitations on these parameters will serve to limit NOX and PM emissions;
    - (iii) A discussion of how you will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations;
    - (iv) A discussion identifying the methods and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and
    - (v) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters. [§60.4211(d)(2)]

    - Submit an initial notification as required in § 60.7(a)(1). The notification must include the information in paragraphs (a)(1)(i) through (v) of this section. Beginning on February 26, 2025, submit the notification electronically according to paragraph (g) of this section.
        - (i) Name and address of the owner or operator;
        - (ii) The address of the affected source;
        - (iii) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;
        - (iv) Emission control equipment; and
        - (v) Fuel used. [§60.4214(a)(1)]
- **Tank Throughput and Loading**
    - TransGas will be required to monitor the tank throughput and loading operations for each storage tank. The 12-month rolling sum of throughputs/emissions will be calculated monthly.
- **45 CSR 17 Fugitive Sources of Particulate Matter**
    - Sources of fugitive particulate matter at the facility include diesel truck and employee traffic on paved plant roads. Conduct a visual inspection of the paved roads once each operating day to ensure no fugitive emissions are generated. When needed, roads will be swept and/or watered to minimize fugitive dust. Records will be kept of the inspections and any corrective actions.
- Maintain records of testing conducted in accordance with the permit. Said records shall be maintained on-site or in a readily accessible off-site location.
- Maintain the corresponding records specified by the on-going monitoring requirements of and testing requirements of the permit.
- Maintain a record of all PTE HAP calculations for the entire facility.

The records shall be maintained on site or in a readily available off-site location maintained by TransGas for a period of five (5) years.

STATUTORY AUTHORITY OF THE DAQ

The statutory authority of the DAQ is given under the Air Pollution Control Act (APCA) – West Virginia Code §22-5-1, *et. seq.* – which states, under §22-5-1 ("Declaration of policy and purpose"), that:

> It is hereby declared that public policy of this state and the purpose of this article is to achieve and maintain such levels of air quality ***as will*** (underlining and emphasis added) protect human health and safety, and to the greatest degree practicable, prevent injury to plant and animal life and property, foster the comfort and convenience of the people, promote the economic and social development of this state and facilitate the enjoyment of the natural attractions of this state.

Therefore, while the code states that the intent of the rule includes the criteria outlined in the latter part of the above sentence, it is clear by the underlined and bolded section of the above sentence that the scope of the delegated authority does not extend beyond the *impact of air quality* on these criteria. Based on the language under §22-5-1, *et. seq.*, the DAQ, in making determinations on issuance or denial of permits under WV Legislative Rule 45 CSR 13 (45 CSR 13), does not take into consideration

substantive non-air quality issues such as job creation, economic viability of proposed project, strategic energy issues, non-air quality environmental impacts, nuisance issues, etc.

The basis for issuance or denial of an air quality permit is given under 45 CSR 13. Pursuant to §45-13-5.7, the DAQ shall issue a permit unless:

> a determination is made that the proposed construction, modification, registration or relocation will violate applicable emission standards, will interfere with attainment or maintenance of an applicable ambient air quality standard, cause or contribute to a violation of an applicable air quality increment, or be inconsistent with the intent and purpose of this rule or W. Va. Code § 22-5-1, et seq., in which case the Secretary shall issue an order denying such construction, modification, relocation and operation. The Secretary shall, to the extent possible, give priority to the issuance of any such permit so as to avoid undue delay and hardship.

It is clear under 45 CSR 13 that denial of a permit must be based on one of the above explicitly stated criteria or, as noted, is inconsistent with 45 CSR 13 or §22-5-1, *et. seq*. As is stated above, it is the DAQ's position that the intent of both the APCA and 45 CSR 13 is to circumscribe the authority of the DAQ to air quality issues as outlined in the APCA and in West Virginia's State Implementation Plan (SIP).

The air quality issues evaluated relating to TransGas' proposed construction are outlined in this document. All applicable and potentially applicable rules were evaluated in the REGULATORY DISCUSSION section. The items covered under that section represent the extent of the substantive air quality issues over which the DAQ has authority to evaluate under 45 CSR 13 and the APCA as relating to this permit application.

RECOMMENDATION TO DIRECTOR

The information provided in permit application R13-3715 indicates that compliance with all applicable state and federal air quality regulations will be achieved. Therefore, I recommend to the Director that the DAQ go to public notice with a preliminary determination to issue Permit Number R13-3715 to TransGas for the proposed construction of the Adams Fork Data Center Energy Campus located in Wharncliffe, Mingo County, WV.

Jerry Williams

Digitally signed by: Jerry Williams
DN: CN = Jerry Williams email = jerry.williams@wv.gov C = US
Date: 2025.06.27 10:29:57 -04'00'

Jerry Williams, P.E.
Engineer

West Virginia Department of Environmental Protection

Harold D. Ward
Cabinet Secretary

Construction Permit

R13-3715

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§22-5-1 et seq.) and 45 C.S.R. 13 – Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits and Procedures for Evaluation. The permittee identified at the above-referenced facility is authorized to construct the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Issued to:

TransGas Development Systems, LLC
Adams Fork Data Center Energy Campus
059-00134

_____

Laura M. Crowder
Director, Division of Air Quality

Issued: Draft

Facility Location:	2002 Twisted Gun Road, Wharncliffe, Mingo County, West Virginia
Mailing Address:	630 First Avenue, Suite 30C, New York, NY 10016-3799
Facility Description:	Off-grid Power Generation Facility
NAICS Codes:	221112 – Fossil Fuel Electric Power Generation
UTM Coordinates:	415.706 km Easting • 4,161.7222 km Northing • Zone 17
Latitude/Longitude:	37.59372 / -81.95491
Permit Type:	Construction
Description of Change:	Construction and operation of an off-grid power generation facility.

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §§22-5-14.

As a result of the granting of this permit, the source is subject to 45CSR30. The Title V (45CSR30) application will be due within twelve (12) months after the date of the commencement of the operation or activity (activities) authorized by this permit, unless granted a deferral or exemption by the Director from such filing deadline pursuant to a request from the permittee.

Table of Contents

1.0. Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
1S – 117S	1E – 117E	Engine 1 – Engine 117	2026	28,194 HP (each)	1C – 117C
118S – 157S	118E – 157E	ULSD Tanks (TK1 – TK40)	2026	170,000 gal (each)	None
DM	DM	Hydrous Ammonia Tanks 1-39	2026	4,600 gal (each)	None
DM	DM	Caustic Soda Tanks 1-39	2026	4,600 gal (each)	None
DM	DM	Sulfuric Acid Tanks 1-39	2026	4,600 gal (each)	None
DM	DM	Sodium Chlorite Tanks 1-39	2026	4,600 gal (each)	None
DM	DM	Sodium Hydrosulfide Tanks 1-39	2026	4,600 gal (each)	None
UNLOAD	UNLOAD-E	Diesel Truck Unloading	2026	3,907,000 gal (normal operation)	None

2.0. General Conditions

2.1. Definitions

2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.

2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.

2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.

2.2. Acronyms

CAAA	Clean Air Act Amendments	**NO_X**	Nitrogen Oxides
CBI	Confidential Business Information	**NSPS**	New Source Performance Standards
CEM	Continuous Emission Monitor	**PM**	Particulate Matter
CES	Certified Emission Statement	**$PM_{2.5}$**	Particulate Matter less than 2.5 µm in diameter
C.F.R. *or* CFR	Code of Federal Regulations	**PM_{10}**	Particulate Matter less than 10µm in diameter
CO	Carbon Monoxide	**Ppb**	Pounds per Batch
C.S.R. *or* CSR	Codes of State Rules	**Pph**	Pounds per Hour
DAQ	Division of Air Quality	**Ppm**	Parts per Million
DEP	Department of Environmental Protection	**Ppm_V or ppmv**	Parts per Million by Volume
dscm	Dry Standard Cubic Meter	**PSD**	Prevention of Significant Deterioration
FOIA	Freedom of Information Act	**Psi**	Pounds per Square Inch
HAP	Hazardous Air Pollutant	**SIC**	Standard Industrial Classification
HON	Hazardous Organic NESHAP	**SIP**	State Implementation Plan
HP	Horsepower	**SO_2**	Sulfur Dioxide
lbs/hr	Pounds per Hour	**TAP**	Toxic Air Pollutant
LDAR	Leak Detection and Repair	**TPY**	Tons per Year
M	Thousand	**TRS**	Total Reduced Sulfur
MACT	Maximum Achievable Control Technology	**TSP**	Total Suspended Particulate
MDHI	Maximum Design Heat Input	**USEPA**	United States Environmental Protection Agency
MM	Million	**UTM**	Universal Transverse Mercator
MMBtu/hr *or* mmbtu/hr	Million British Thermal Units per Hour	**VEE**	Visual Emissions Evaluation
MMCF/hr *or* mmcf/hr	Million Cubic Feet per Hour	**VOC**	Volatile Organic Compounds
NA	Not Applicable	**VOL**	Volatile Organic Liquids
NAAQS	National Ambient Air Quality Standards		
NESHAPS	National Emissions Standards for Hazardous Air Pollutants		

2.3. Authority

This permit is issued in accordance with West Virginia air pollution control law W.Va. Code §§ 22-5-1. et seq. and the following Legislative Rules promulgated thereunder:

2.3.1. 45CSR13 – *Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits and Procedures for Evaluation*;

2.4. Term and Renewal

2.4.1. This Permit shall remain valid, continuous and in effect unless it is revised, suspended, revoked or otherwise changed under an applicable provision of 45CSR13 or any other applicable legislative rule;

2.5. Duty to Comply

2.5.1. The permitted facility shall be constructed and operated in accordance with the plans and specifications filed in Permit Application R13-3715 and any modifications, administrative updates, or amendments thereto. The Secretary may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to;
[45CSR§§13-5.10 and -10.3.]

2.5.2. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA;

2.5.3. Violations of any of the conditions contained in this permit, or incorporated herein by reference, may subject the permittee to civil and/or criminal penalties for each violation and further action or remedies as provided by West Virginia Code 22-5-6 and 22-5-7;

2.5.4. Approval of this permit does not relieve the permittee herein of the responsibility to apply for and obtain all other permits, licenses, and/or approvals from other agencies; i.e., local, state, and federal, which may have jurisdiction over the construction and/or operation of the source(s) and/or facility herein permitted.

2.6. Duty to Provide Information

The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for administratively updating, modifying, revoking, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.

2.7. Duty to Supplement and Correct Information

Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.

2.8. Administrative Update

The permittee may request an administrative update to this permit as defined in and according to the procedures specified in 45CSR13.
[45CSR§13-4.]

2.9. Permit Modification

The permittee may request a minor modification to this permit as defined in and according to the procedures specified in 45CSR13.
[45CSR§13-5.4.]

2.10 Major Permit Modification

The permittee may request a major modification as defined in and according to the procedures specified in 45CSR14 or 45CSR19, as appropriate.
[45CSR§13-5.1]

2.11. Inspection and Entry

The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:

a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;

d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

2.12. *[Reserved]*

2.13. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a permittee in an enforcement action that it should have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety,

or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.

2.14. Suspension of Activities

In the event the permittee should deem it necessary to suspend, for a period in excess of sixty (60) consecutive calendar days, the operations authorized by this permit, the permittee shall notify the Secretary, in writing, within two (2) calendar weeks of the passing of the sixtieth (60) day of the suspension period.

2.15. Property Rights

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

2.16. Severability

The provisions of this permit are severable and should any provision(s) be declared by a court of competent jurisdiction to be invalid or unenforceable, all other provisions shall remain in full force and effect.

2.17. Transferability

This permit is transferable in accordance with the requirements outlined in Section 10.1 of 45CSR13. **[45CSR§13-10.1.]**

2.18. Notification Requirements

The permittee shall notify the Secretary, in writing, no later than thirty (30) calendar days after the actual startup of the operations authorized under this permit.

2.19. Credible Evidence

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defense otherwise available to the permittee including, but not limited to, any challenge to the credible evidence rule in the context of any future proceeding.

3.0. Facility-Wide Requirements

3.1. Limitations and Standards

3.1.1. **Open burning.** The open burning of refuse by any person, firm, corporation, association or public agency is prohibited except as noted in 45CSR§6-3.1.
[45CSR§6-3.1.]

3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause, suffer, allow or permit any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.
[45CSR§6-3.2.]

3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management, and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them.
[40CFR§61.145(b) and 45CSR§34]

3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.
[45CSR§4-3.1] ***[State Enforceable Only]***

3.1.5. **Permanent shutdown.** A source which has not operated at least 500 hours in one 12-month period within the previous five (5) year time period may be considered permanently shutdown, unless such source can provide to the Secretary, with reasonable specificity, information to the contrary. All permits may be modified or revoked and/or reapplication or application for new permits may be required for any source determined to be permanently shutdown.
[45CSR§13-10.5.]

3.1.6. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11.
[45CSR§11-5.2.]

3.2. Monitoring Requirements

3.2.1. **Emission Limit Averaging Time.** Unless otherwise specified, compliance with all annual limits shall be based on a rolling twelve month total. A rolling twelve month total shall be the sum of the measured parameter of the previous twelve calendar months. Compliance with all hourly emission limits shall be based on the applicable NAAQS averaging times or, where applicable, as given in any approved performance test method.

3.3. Testing Requirements

3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63 in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit may be revised in accordance with 45CSR§13-4. or 45CSR§13-5.4 as applicable.

b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit may be revised in accordance with 45CSR§13-4. or 45CSR§13-5.4 as applicable.

c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.

d. The permittee shall submit a report of the results of the stack test within sixty (60) days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1.; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:

1. The permit or rule evaluated, with the citation number and language;
2. The result of the test for each permit or rule condition; and,
3. A statement of compliance or noncompliance with each permit or rule condition.

[WV Code § 22-5-4(a)(14-15) and 45CSR13]

3.4. Recordkeeping Requirements

3.4.1. **Retention of records.** The permittee shall maintain records of all information (including monitoring data, support information, reports, and notifications) required by this permit recorded in a form suitable and readily available for expeditious inspection and review. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation. The files shall be maintained for at least five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two (2) years of data shall be maintained on site. The remaining three (3) years of data may be maintained off site, but must remain accessible within a reasonable time. Where appropriate, the permittee may maintain records electronically (on a computer, on computer floppy disks, CDs, DVDs, or magnetic tape disks), on microfilm, or on microfiche.

3.4.2. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.
[45CSR§4. *State Enforceable Only.*]

3.5. Reporting Requirements

3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

3.5.2. **Confidential information.** A permittee may request confidential treatment for the submission of reporting required by this permit pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.

3.5.3. **Correspondence.** All notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, or mailed first class or by private carrier with postage prepaid to the address(es), or submitted in electronic format by email as set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

DAQ:
Director
WVDEP
Division of Air Quality
601 57th Street
Charleston, WV 25304-2345

US EPA:
Section Chief, USEPA, Region III
Enforcement and Compliance Assurance Division
Air Section (3ED21)
Four Penn Center
1600 John F Kennedy Blvd
Philadelphia, PA 19103-2852

DAQ Compliance and Enforcement[1]:
DEPAirQualityReports@wv.gov

[1]For all self-monitoring reports (MACT, GACT, NSPS, etc.), stack tests and protocols, Notice of Compliance Status Reports, Initial Notifications, etc.

3.5.4. **Operating Fee**

3.5.4.1. In accordance with 45CSR30 – Operating Permit Program, the permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality. A receipt for the appropriate fee shall be maintained on the premises for which the receipt has been issued, and shall be made immediately available for inspection by the Secretary or his/her duly authorized representative.

3.5.4.2. In accordance with 45CSR30 – Operating Permit Program, enclosed with this permit is a Certified Emissions Statement (CES) Invoice, from the date of initial startup through the following June 30. Said invoice and the appropriate fee shall be submitted to this office no later than 30 days prior to the date of initial startup. For any startup date other than July 1, the permittee shall pay a fee or prorated fee in accordance with Section 4.5 of 45CSR22. A copy of this schedule may be found attached to the Certified Emissions Statement (CES) Invoice.

3.5.5. **Emission inventory.** At such time(s) as the Secretary may designate, the permittee herein shall prepare and submit an emission inventory for the previous year, addressing the emissions from the facility and/or process(es) authorized herein, in accordance with the emission inventory submittal requirements of the Division of Air Quality. After the initial submittal, the Secretary may, based upon the type and quantity of the pollutants emitted, establish a frequency other than on an annual basis.

4.0. Source-Specific Requirements

4.1. Limitations and Standards

4.1.1. The facility shall consist of only the pollutant-emitting equipment and processes identified under Section 1.0 of this permit. In accordance with the information filed under Permit Application R13-3715, the equipment shall be installed, maintained and operated so as to minimize any fugitive escape of pollutants and the equipment/processes shall use the specified air pollution control devices.

4.1.2. **Maximum Horsepower.** The maximum horsepower of each engine (1S – 117S) shall be 28,194 hp.

4.1.3. **Operation Modes.** The engines (1S – 117S) have the ability to operate in the following operational modes. Each operation mode shall abide by the descriptions included in Permit Application R13-3715.

Operation Mode
Normal
Compensation
Emergency
Startup (Speed Up, Fuel Switch, Generator Switched On, Load Up Cold Control)
Shutdown (Ramp Down, Min Load, Spin Out)

4.1.4. The maximum hourly emissions during each operating mode shall not exceed the following for each engine (1S – 117S):

a. Normal

Pollutant	Maximum Hourly Emissions (lb/hr)
Nitrogen Oxides	0.14
Carbon Monoxide	0.34
Volatile Organic Compounds	0.23
Particulate Matter-10/2.5[1]	0.34
Sulfur Dioxide	0.01
Total Hazardous Air Pollutants	0.004

[1] Includes both filterable and condensable particulate matter.

b. Compensation

Pollutant	Maximum Hourly Emissions (lb/hr)
Nitrogen Oxides	0.46
Carbon Monoxide	1.41
Volatile Organic Compounds	0.27
Particulate Matter-10/2.5[1]	0.53
Sulfur Dioxide	0.01
Total Hazardous Air Pollutants	0.005

[1] Includes both filterable and condensable particulate matter.

c. Emergency

Pollutant	Maximum Hourly Emissions (lb/hr)
Nitrogen Oxides	10.35
Carbon Monoxide	0.58
Volatile Organic Compounds	0.29
Particulate Matter-10/2.5[1]	1.29
Sulfur Dioxide	0.11
Total Hazardous Air Pollutants	0.005

[1] Includes both filterable and condensable particulate matter.

d. Startup – Speed Up

Pollutant	Maximum Hourly Emissions (lb/hr)
Nitrogen Oxides	89.54
Carbon Monoxide	2.50
Volatile Organic Compounds	19.49
Particulate Matter-10/2.5[1]	0.34
Sulfur Dioxide	0.10
Total Hazardous Air Pollutants	0.32

[1] Includes both filterable and condensable particulate matter.

e. Startup – Fuel Switch

Pollutant	Maximum Hourly Emissions (lb/hr)
Nitrogen Oxides	4.81
Carbon Monoxide	8.65
Volatile Organic Compounds	13.07
Particulate Matter-10/2.5[1]	0.53
Sulfur Dioxide	0.01
Total Hazardous Air Pollutants	0.22

[1] Includes both filterable and condensable particulate matter.

g. Startup – Generator Switched On

Pollutant	Maximum Hourly Emissions (lb/hr)
Nitrogen Oxides	8.15
Carbon Monoxide	9.25
Volatile Organic Compounds	12.48
Particulate Matter-10/2.5[1]	0.46
Sulfur Dioxide	0.01
Total Hazardous Air Pollutants	0.21

[1] Includes both filterable and condensable particulate matter.

h. Startup – Load Up Cold Control

Pollutant	Maximum Hourly Emissions (lb/hr)
Nitrogen Oxides	6.94
Carbon Monoxide	7.16
Volatile Organic Compounds	9.14
Particulate Matter-10/2.5[1]	0.43
Sulfur Dioxide	0.01
Total Hazardous Air Pollutants	0.15

[1] Includes both filterable and condensable particulate matter.

i. Shutdown – Ramp Down

Pollutant	Maximum Hourly Emissions (lb/hr)
Nitrogen Oxides	0.10
Carbon Monoxide	0.83
Volatile Organic Compounds	0.15
Particulate Matter-10/2.5[1]	0.32
Sulfur Dioxide	0.01
Total Hazardous Air Pollutants	0.003

[1] Includes both filterable and condensable particulate matter.

j. Shutdown – Min Load

Pollutant	Maximum Hourly Emissions (lb/hr)
Nitrogen Oxides	2.44
Carbon Monoxide	4.62
Volatile Organic Compounds	3.75
Particulate Matter-10/2.5[1]	0.46
Sulfur Dioxide	0.07
Total Hazardous Air Pollutants	0.06

[1] Includes both filterable and condensable particulate matter.

k. Shutdown – Spin Out

Pollutant	Maximum Hourly Emissions (lb/hr)
Nitrogen Oxides	2.89
Carbon Monoxide	5.62
Volatile Organic Compounds	7.84
Particulate Matter-10/2.5[1]	0.53
Sulfur Dioxide	0.07
Total Hazardous Air Pollutants	0.13

[1] Includes both filterable and condensable particulate matter.

4.1.5. The maximum aggregate total annual emissions[1] from the engines (1S – 117S) shall not exceed the following:

Pollutant	Maximum Annual Emissions (tons/year)[1]
Nitrogen Oxides	194.30
Carbon Monoxide	205.62
Volatile Organic Compounds	116.59
Particulate Matter-10/2.5[2]	186.53
Sulfur Dioxide	9.93
Total Hazardous Air Pollutants	0.86

[1] Includes all operation modes in permit condition 4.1.4.
[2] Includes both filterable and condensable particulate matter.

Compliance with the annual emission limits shall be determined by multiplying each operational mode hourly emissions in permit condition 4.1.4 by the hours operated in each operation mode.

4.1.6. The permittee shall meet the air pollution control technology requirements for each engine (1S – 117S). The emission control systems for the engines consist of two main systems. The dry system on the high pressure side of the engine (before the turbocharger) and the wet system on the low pressure side, which is downstream of the turbocharger. The dry systems consist of an oxidation catalyst and an SCR catalyst. The catalytic reduction of CO has a reduction efficiency of over 99%. The same system oxidizes VOC emissions with a reduction efficiency of 99%. The de-NOx unit is a urea based SCR technology, and the reduction efficiency exceeds 90%. The wet system consists of four (4) stages, which reduce NOx further with 90.9% reduction efficiency and SO2 with 70% reduction efficiency. The emission abatement system (dry and wet) that will be employed on each engine shall meet the following emissions reductions when operating in the following modes:

Mode	NOx (%)	CO (%)	VOC (%)	PM (%)	SO_2 (%)
Speed Up	0	0	0	0	95.0
Fuel Changeover	0	0	0	0	99.0
Generator Switched On	0	0	0	0	99.0
Load Up Cold Control	25.0	25.0	25.0	0	99.0
Normal Operation	99.0	99.0	99.0	25.0	99.0
Compensation Mode	99.0	95.0	99.0	25.0	99.0
Ramp Down	99.0	94.0	99.0	25.0	99.0
Min Load	70.0	50.0	70.0	0	70.0
Spin Out	40.0	35.0	40.0	0	40.0
Emergency	98.0	91.0	99.0	25.0	99.0

4.1.7. During startup and shutdown operations, the permittee shall minimize emissions by:

a. Operating and maintaining the engines (1S – 117S) and associated air pollution control devices (1C – 117C) in accordance with good combustion and air pollution control practices, safe operating practices, and protection of the facility. Good combustion and air pollution control practices shall mean proper operation and maintenance of the engine control systems and air pollution control equipment in accordance with manufacturer specifications. Additionally, it shall mean such practices that promote sufficient residence time of fuel in the combustion zone, thorough mixing of air and fuel, and proper combustion temperatures.

b. Implementing operations and maintenance practices comprised of maintaining a high level of steady state operation time and minimizing (as much as practicable) the frequency of startup and shutdown events.

4.1.8. **Fuel Throughput Parameters.** The engines (1S – 117S) are capable of firing natural gas with co-firing diesel or diesel fuel only. The following maximum hourly fuel consumptions apply to the engines:

Mode	Maximum NG Hourly Throughput (scf/hr per engine)	Maximum Diesel Hourly Throughput (gal/hr per engine)[1]
Speed Up	0	143.46
Fuel Changeover	13,994	1.43
Generator Switched On	27,459	2.35
Load Up Cold Control	33,993	2.61
Normal Operation	98,924	3.91
Compensation Mode	138,112	3.91
Ramp Down	52,882	3.13
Min Load	27,459	2.35
Spin Out	13,994	1.43
Emergency	0	798.13

[1] Sulfur content of ultra-low sulfur diesel (ULSD) fuel shall be less than 15 ppm.

4.1.9. **Annual Operational Limitation.**

a. The operating hours of each engine (1S – 117S), the throughput of each type of fuel (natural gas/diesel), and operation mode (permit condition 4.1.3) will be continuously monitored and recorded. The permittee will keep records of the fuel consumption (natural gas/diesel), and operating hours (natural gas/diesel) for each engine. The 12-month rolling sum of emissions will be calculated monthly.

b. Natural gas and diesel fuel meters shall be installed on each engine (1S – 117S).

c. Operational hour meters shall be installed on each engine (1S – 117S).

4.1.10. In order to minimize NOx emissions, within 180 days of startup, the permittee shall determine the optimal injection rate of aqueous ammonia into the SCR. The permittee shall then operate the SCR at the determined optimal injection rate.

4.1.11. The permittee shall meet the following emission standards:

a. For engines (1S – 117S) installed on or after January 1, 2016, limit the emissions of NOX in the stationary CI internal combustion engine exhaust to the following:

i. 3.4 g/KW-hr (2.5 g/HP-hr) when maximum engine speed is less than 130 rpm;
ii. Reduce particulate matter (PM) emissions by 60 percent or more, or limit the emissions of PM in the stationary CI internal combustion engine exhaust to 0.15 g/KW-hr (0.11 g/HP-hr).

[40CFR§60.4204(c)]

4.1.12. The permittee must operate and maintain stationary CI ICE that achieve the emission standards as required in §§ 60.4204 and 60.4205 over the entire life of the engines (1S – 117S).
[40CFR§60.4206]

4.1.13. The permittee shall meet the following fuel requirements:

a. Beginning June 1, 2012, owners and operators of stationary CI ICE subject to this subpart with a displacement of greater than or equal to 30 liters per cylinder must use diesel fuel that meets a maximum per-gallon sulfur content of 1,000 parts per million (ppm).
[40CFR§60.4207(d)]

4.1.14. The engines (1S – 117S) shall use the air pollution control devices (1C – 117C) specified in Section 1.0 and permit condition 4.1.6 and identified in Permit Application R13-3715 at all times when in operation except during periods of startup and shutdown when operating temperatures do not allow for proper use of the air pollution control devices.

4.1.15. The maximum annual throughput of diesel fuel to the storage tanks shall not exceed the following:

Storage Tank ID	Nominal Capacity (gal)	Product Stored	Maximum Annual Throughput (gal/yr)
TK1 – TK40	170,000 (each)	Diesel Fuel	3,907,000 (all tanks) Normal Operation

4.1.16. The storage tanks (TK1 – TK40) shall be designed and operated as specified in the paragraphs (a) through (c).

a. The cover and all openings on the cover (e.g., access hatches, sampling ports, pressure relief valves and gauge wells) shall form a continuous impermeable barrier over the entire surface area of the liquid in the storage vessel.

b. Each cover opening shall be secured in a closed, sealed position (e.g., covered by a gasketed lid or cap) whenever material is in the unit on which the cover is installed except during those times when it is necessary to use an opening as follows:

(i) To add material to, or remove material from the unit (this includes openings necessary to equalize or balance the internal pressure of the unit following changes in the level of the material in the unit);

(ii) To inspect or sample the material in the unit; or

(iii) To inspect, maintain, repair, or replace equipment located inside the unit.

c. The storage tanks (TK1 – TK40) thief hatch shall be weighted and properly seated. **[45CSR§13-5.10]**

4.1.17. The permittee shall comply with all applicable provisions of 45 CSR 17 to minimize fugitive particulate matter emissions on the haul roads.

4.1.18. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.
[45CSR§13-5.10]

4.1.19. The permittee shall install, maintain, and operate all above-ground piping, valves, pumps, etc. that service lines in the transport of potential sources of regulated air pollutants to minimize any fugitive escape of regulated air pollutants (leak). Any above-ground piping, valves, pumps, etc. that shows signs of excess wear that have a reasonable potential for fugitive emissions of regulated air pollutants shall be repaired or replaced.
[45CSR§13-5.10]

4.2. Monitoring Requirements

4.2.1. To determine compliance with permit conditions 4.1.2, 4.1.3, 4.1.4, 4.1.5, 4.1.6, and 4.1.9, the permittee shall monitor the operation type (listed in permit condition 4.1.4), number of startup/shutdown events, and hours of operation in each operating mode (natural gas/diesel) on a daily basis.

4.2.2. To demonstrate compliance with permit condition 4.1.8, the permittee shall monitor fuel consumption (natural gas/diesel) on a daily basis.

4.2.3. To demonstrate compliance with permit conditions 4.1.10 and 4.1.14, the permittee shall monitor the operating times for the air pollution control devices on at least an hourly basis.

4.2.4. The permittee will install air pollution control devices on the engines (1S – 117S) to show compliance with permit condition 4.1.6.b. The air pollution control devices shall be continuously

monitored to verify proper operation. The permittee shall operate the air pollution control devices in accordance with manufacturer specifications. **[45CSR§13-5.10]**

4.2.5. To demonstrate compliance with permit condition 4.1.15, the permittee shall monitor diesel fuel unloading on a daily basis.

4.2.6. To demonstrate compliance with permit condition 4.1.17, the permittee shall conduct a visible inspection of the paved roads once each operating day to ensure no fugitive particulate matter emissions from diesel truck and employee traffic are generated. If necessary, roads will be swept and/or watered to minimize fugitive particulate matter.

4.2.7. The permittee shall, at the time of initial startup, maintain on-site and have readily available to be made available to the Director or his/her representative upon request, a copy of the all current vendor guarantees relevant to the air emissions associated with the facility. This includes information relating to the performance of both emission units and control devices.

4.2.8. The permittee shall meet all applicable requirements, including those not specified above, as given under 45 CSR 4, 45 CSR 13, 45 CSR 16, 45 CSR 17, 45 CSR 30, 45 CSR 34, 40 CFR 60, Subpart IIII, and 40 CFR 63 Subpart ZZZZ. Any final revisions made to the above rules will, where applicable, supercede those specifically cited in this permit.

4.2.9. **Record of Monitoring.** The permittee shall keep records of monitoring information that include the following:

a. The date, place as defined in this permit, and time of sampling or measurements;
b. The date(s) analyses were performed;
c. The company or entity that performed the analyses;
d. The analytical techniques or methods used;
e. The results of the analyses; and
f. The operating conditions existing at the time of sampling or measurement.

4.3. Testing Requirements

4.3.1. See Facility-Wide Testing Requirements Section 3.3.

4.3.2. The permittee shall meet the following testing requirements for the engines (1S – 117S):

a. Conduct an initial performance test to demonstrate initial compliance with the emission standards as specified in § 60.4213.

b. Establish operating parameters to be monitored continuously to ensure the stationary internal combustion engine continues to meet the emission standards. The owner or operator must petition the Administrator for approval of operating parameters to be monitored continuously. The petition must include the information described in paragraphs (d)(2)(i) through (v) of this section.

i. Identification of the specific parameters you propose to monitor continuously;

ii. A discussion of the relationship between these parameters and NOX and PM emissions, identifying how the emissions of these pollutants change with changes in these parameters, and how limitations on these parameters will serve to limit NOX and PM emissions;

iii. A discussion of how you will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations;

iv. A discussion identifying the methods and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and

v. A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.

c. For non-emergency engines with a displacement of greater than or equal to 30 liters per cylinder, conduct annual performance tests to demonstrate continuous compliance with the emission standards as specified in § 60.4213.

[40CFR§4211(d)]

4.4. Recordkeeping Requirements

4.4.1. To determine compliance with permit conditions 4.1.5, 4.1.8, and 4.1.9, the permittee shall keep records of the operating hours of each engine, the throughput of each type of fuel (natural gas/diesel), and operation type (as outlined in permit condition 4.1.4) on a daily basis. The permittee shall multiply the hourly operation type emissions in permit condition 4.1.4 by the number of hours operated in that operational mode. The permittee shall calculate the emissions monthly and on a twelve-month rolling total. A twelve-month rolling total shall mean the sum of operating hours at any given time during the previous twelve consecutive calendar months.

4.4.2. To determine compliance with permit condition 4.2.7, the permittee shall keep records of the daily road particulate matter fugitive inspections and any corrective actions taken.

4.4.3. To determine compliance with permit conditions 4.1.15 and 4.2.6, the permittee shall keep records of the diesel unloading on a daily basis. Compliance with the throughput limit shall be determined on a 12 month rolling total basis.

4.4.4. To demonstrate compliance with permit condition 4.1.19, the permittee shall keep records of the fugitive emissions components repairs and replacements.

4.4.5. The permittee shall keep the following engine (1S – 117S) records:

a. All notifications submitted to comply with this subpart and all documentation supporting any notification.

b. Maintenance conducted on the engine.

c. If the stationary CI internal combustion is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards.

d. If the stationary CI internal combustion is not a certified engine, documentation that the engine meets the emission standards.

[40CFR§4214(a)(2)]

4.5. Reporting Requirements

4.5.1. See Facility-Wide Reporting Requirements Section 3.5.

4.5.2. The permittee shall submit notifications of the date construction commences, the actual date of initial startup as required under §60.7. The notification must include the information below. Beginning on February 26, 2025, submit the notification electronically according to paragraph (g) of this section.

a. Name and address of the owner or operator;

b. The address of the affected source;

c. Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;

d. Emission control equipment; and

e. Fuel used.
[40CFR§4214(a)(1)]

CERTIFICATION OF DATA ACCURACY

I, the undersigned, hereby certify that, based on information and belief formed after reasonable inquiry, all information contained in the attached _____, representing the period beginning _____ and ending _____, and any supporting documents appended hereto, is true, accurate, and complete.

Signature[1] (please use blue ink) _____ Responsible Official or Authorized Representative _____ Date

Name & Title (please print or type) _____ Name _____ Title

Telephone No. _____ Fax No. _____

[1] This form shall be signed by a "Responsible Official." "Responsible Official" means one of the following:

a. For a corporation: The president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:

(i) the facilities employ more than 250 persons or have a gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars), or

(ii) the delegation of authority to such representative is approved in advance by the Director;

b. For a partnership or sole proprietorship: a general partner or the proprietor, respectively;

c. For a municipality, State, Federal, or other public entity: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of U.S. EPA); or

d. The designated representative delegated with such authority and approved in advance by the Director.

Williams, Jerry <jerry.williams@wv.gov>

WV Draft Permit R13-3714 for TransGas Development Systems, LLC; Adams Fork Harless Data Center Energy Campus

3 messages

Mink, Stephanie R <stephanie.r.mink@wv.gov> Wed, Jul 9, 2025 at 7:58 AM
To: "Supplee, Gwendolyn" <supplee.gwendolyn@epa.gov>, "Whapham, Joseph" <Whapham.Joseph@epa.gov>, Adam Victor <adam@tgds.com>, avj@adamsforkenergy.com, "Patrick E. Ward" <PEWard@potesta.com>
Cc: "Crowder, Laura M" <Laura.M.Crowder@wv.gov>, "McCumbers, Carrie" <Carrie.McCumbers@wv.gov>, Joseph R Kessler <joseph.r.kessler@wv.gov>, Nicole D Ernest <nicole.d.ernest@wv.gov>, "Williams, Jerry" <jerry.williams@wv.gov>, "Johnson, Rebecca H" <Rebecca.H.Johnson@wv.gov>

Please find attached the Draft Permit R13-3714, Engineering Evaluation and Public Notice for TransGas Development Systems, LLC's Adams Fork Harless Data Center Energy Campus located in Mingo County.

The public notice will be published in *The Williamson Daily News* on Wednesday, July 9, 2025 and the thirty day comment period will end on Friday, August 8, 2025.

Should you have any questions or comments, please contact the permit writer, Jerry Williams, at 304-926-0499 ext. 41214 or Jerry.Williams@wv.gov.

--

Stephanie Mink

Environmental Resources Associate

West Virginia Department of Environmental Protection

Division of Air Quality, Title V & NSR Permitting

601 57th Street SE

Charleston, WV 25304

Phone: 304-926-0499 x41281

3 attachments

059-00133_PERM_13-3714 draft.pdf
390K

059-00133_EVAL_13-3714 draft.pdf
5157K

R13-3714_AirQualityPermitNotice.pdf
71K

Whapham, Joseph <Whapham.Joseph@epa.gov> Tue, Jul 22, 2025 at 9:01 AM
To: "Williams, Jerry" <jerry.williams@wv.gov>
Cc: "McCumbers, Carrie" <Carrie.McCumbers@wv.gov>, Joseph R Kessler <joseph.r.kessler@wv.gov>, "Supplee, Gwendolyn" <Supplee.Gwendolyn@epa.gov>

Hi Jerry,

As we talked about when going over the Fundamental Data permit, we have a few suggestions with the TransGas permits (R13-3714 & R13-3715). Do you have availability next Thursday (7/31) or Friday (8/1) for a call? My schedule is clear for both days so I can make any time work.

Thank you,

Adam

J. Adam Whapham

Environmental Engineer

Region 3, Air Permits Branch

US EPA Mid-Atlantic Region

Phone 215-814-2160

Email whapham.joseph@epa.gov

From: Mink, Stephanie R <stephanie.r.mink@wv.gov>
Sent: Wednesday, July 9, 2025 7:59 AM
To: Supplee, Gwendolyn <Supplee.Gwendolyn@epa.gov>; Whapham, Joseph <Whapham.Joseph@epa.gov>; Adam Victor <adam@tgds.com>; avj@adamsforkenergy.com; Patrick E. Ward <PEWard@potesta.com>
Cc: Crowder, Laura M <Laura.M.Crowder@wv.gov>; McCumbers, Carrie <Carrie.McCumbers@wv.gov>; Joseph R Kessler <joseph.r.kessler@wv.gov>; Nicole D Ernest <nicole.d.ernest@wv.gov>; Williams, Jerry <jerry.williams@wv.gov>; Johnson, Rebecca H <Rebecca.H.Johnson@wv.gov>
Subject: WV Draft Permit R13-3714 for TransGas Development Systems, LLC; Adams Fork Harless Data Center Energy Campus

[Quoted text hidden]

Williams, Jerry <jerry.williams@wv.gov> Tue, Jul 22, 2025 at 10:06 AM
To: "Whapham, Joseph" <Whapham.Joseph@epa.gov>

Adam,

Both days work for me. How about any time between 10 am and 2 pm on either day?

Thank you,
Jerry
[Quoted text hidden]

--

Jerry Williams, P.E.
Engineer, Division of Air Quality

WV Department of Environmental Protection
601 57th Street SE, Charleston, WV 25304
Phone 304-414-1214
Web dep.wv.gov **Email** jerry.williams@wv.gov

AIR QUALITY PERMIT NOTICE

Notice of Intent to Approve

On March 26, 2025, TransGas Development Systems, LLC applied to the WV Department of Environmental Protection, Division of Air Quality (DAQ) for a permit to construct an off-grid power generation facility (Adams Fork Harless Data Center Energy Campus) located at 22 Mine Road, near Holden, Mingo County WV at latitude 37.75302 and longitude -82.11905. A preliminary evaluation has determined that all State and Federal air quality requirements will be met by the proposed facility. The DAQ is providing notice to the public of its preliminary determination to issue the permit as R13-3714.

The following potential emissions will be authorized by this permit action: Volatile Organic Compounds, 117.66 tons per year (TPY); Nitrogen Oxides, 194.30 TPY; Carbon Monoxide, 205.62 TPY; Sulfur Dioxide, 9.93 TPY; Total Particulate Matter, 193.69 TPY; Particulate Matter less than 10 microns in diameter, 187.96 TPY; Particulate Matter less than 2.5 microns in diameter, 186.91 TPY; Total Hazardous Air Pollutants, 0.87 TPY.

Written comments or requests for a public meeting must be received by the DAQ before 5:00 p.m. on Friday, August 8, 2025. A public meeting may be held if the Director of the DAQ determines that significant public interest has been expressed, in writing, or when the Director deems it appropriate.

The purpose of the DAQ's permitting process is to make a preliminary determination if the proposed construction will meet all state and federal air quality requirements. The purpose of the public review process is to accept public comments on air quality issues relevant to this determination. Only written comments received at the address noted below within the specified time frame, or comments presented orally at a scheduled public meeting, will be considered prior to final action on the permit. All such comments will become part of the public record.

Jerry Williams, P.E.
WV Department of Environmental Protection
Division of Air Quality
601 57th Street, SE
Charleston, WV 25304
Telephone: 304-926-0499, ext. 41214
Email: jerry.williams@wv.gov

Additional information, including copies of the draft permit, application and all other supporting materials relevant to the permit decision may be obtained by contacting the engineer listed above. The draft permit and engineering evaluation can be downloaded at:

https://dep.wv.gov/daq/permitting/Pages/NSR-Permit-Applications.aspx

west virginia department of environmental protection

Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone (304) 926-0475 • FAX: (304) 926-0479

Harold D. Ward, Cabinet Secretary
dep.wv.gov

ENGINEERING EVALUATION / FACT SHEET

BACKGROUND INFORMATION

Application No.:	R13-3714
Plant ID No.:	059-00133
Applicant:	TransGas Development Systems, LLC
Facility Name:	Adams Fork Harless Data Center Energy Campus
Location	Holden, Mingo County
NAICS Code:	221112 – Fossil Fuel Electric Power Generation
Application Type:	Construction
Received Date:	March 26, 2025 (Revised application submitted May 14, 2025)
Engineer Assigned:	Jerry Williams
Fee Amount:	$2,000 ($1,000 45 CSR 13 Application Fee, $1,000 NSPS Fee)
Date Received:	April 2, 2025
Complete Date:	June 4, 2025
Due Date:	September 2, 2025
Applicant Ad Date:	April 9, 2025
Newspaper	*Williamson Daily News*
UTM's:	Easting: 401.420 km Northing: 4,179.002 km Zone: 17
Latitude/Longitude:	37.75302 / -82.11905
Description:	Construction and operation of an off-grid power generation facility.

CONFIDENTIAL BUSINESS INFORMATION OVERVIEW

TransGas Development Systems, LLC (TransGas) submitted an air permit application for an off-grid power generation facility to be located near Holden in Mingo County. This permit application included confidential business information (CBI) submitted under 45 CSR 31, entitled "Confidential Information". Therefore, both a CBI and redacted version of the application were submitted. TransGas provided all CBI under the requirements of 45 CSR 31, which is the Division of Air Quality (DAQ)

regulation that establishes the requirements for claiming information submitted to the DAQ as confidential and the procedures for determinations of confidentiality in accordance with the provisions of W. Va. Code §22-5-10.

The reason for the CBI submittal according to TransGas is that the application contains information that is fully protected under non-disclosure and confidentiality agreements between the applicant and equipment provider concerning development of the process and facility design. Release of this information could cause substantial harm to TransGas' competitive position in the market. For each submission of information any portion of which is claimed to be confidential, a complete set of the information, including the document justifying the claim of confidentiality shall be submitted simultaneously on uncolored paper with the information claimed to be confidential blacked out, and with the words "redacted copy – claim of confidentiality" marked clearly on each such page, so that such a set of information is suitable for public disclosure and provides notice to the public that a claim of confidentiality has been made. DAQ allows for electronic submittals (via email) of redacted permit applications. However, all CBI applications must be submitted via mail or hand delivered. During the Notice of Application period, the DAQ received a public comment concerning the proposed project, which specifically requested the release of information that has been redacted.

As stated in 45 CSR 31, Section 4, during the course of the DAQ's review of whether the information claimed to be confidential is a trade secret in accordance with this rule, the DAQ shall consider the following:

- The claim of confidentiality has not expired by its terms, nor been waived or withdrawn;
- The person asserting the claim of confidentiality has satisfactorily shown that it has taken reasonable measures to protect the confidentiality of the information, and that it intends to continue to take such measures;
- The information claimed confidential is not, and has not been, reasonably obtainable without the person's consent by other persons (other than governmental bodies) by use of legitimate means (other than discovery based on a showing of special need in a judicial or quasi-judicial proceeding);
- No statute specifically requires disclosure of the information; and
- Either the person has satisfactorily shown that disclosure of the information is likely to cause substantial harm to the business's competitive position or the information is voluntarily submitted information, and its disclosure would likely to impair the State's ability to obtain necessary information in the future.

Additionally, 45 CSR 31, Section 6, states that no person shall claim as confidential, information concerning the types and amounts of pollutants discharged. "Types and amounts of air pollutants discharged" is defined in 45 CSR 31 Section 2.4. Furthermore, 45 CSR 31B entitled "Confidential Business Information and Emission Data" is an interpretive rule that provides guidance and clarification concerning the term "types and amounts of air pollutants discharged" defined under 45CSR§31-2.4, the DAQ's legislative rule entitled "Confidential Information," and thus what information may not be claimed confidential in accordance with 45CSR§31-6.

The aforementioned public comment received during the Notice of Application comment period triggered a review of the CBI claims by the DEP's Office of the General Counsel (OGC). A letter dated

April 28, 2025, from the OGC was issued to TransGas that stated that the information claimed as CBI may not qualify for such designation as it falls under the definition of "Types and Amounts of Pollutants Discharged" as excluded under §45-31-6 as defined under §45-31-2.4 (and further defined under 45 CSR 31B). This letter was made available to the public on the WVDEP Application Xtender (AX) website at that time. There was also concern that the claimed CBI may not meet the eligibility requirements under §45-31-4.1(b) and 4.1(c). The letter requested further justification that the information claimed as CBI is not defined as "Types and Amounts of Pollutants Discharged" and also does not conflict with the eligibility requirements of §45-31-4.1(b) and 4.1(c). The letter requested a written response within 15 days.

TransGas provided a response to this request on May 2, 2025. This response was made available to the public on the AX website at that time. TransGas proposed to revise the CBI claim to cover the company names for the engine and control systems designers and manufacturers. This includes the engine model number which would identify the engine company. All other previously claimed CBI would be removed from the request. Upon reviewing this information, the WVDEP issued a letter to TransGas on May 9, 2025, stating that a permit application so submitted would be in compliance with the requirements governing the submission of CBI under 45 CSR 31 and 45 CSR 31B. TransGas provided the revised application to DAQ on May 14, 2025, and the application was made available to the public on the AX website at that time.

This engineering evaluation/fact sheet contains only the information that was provided in the redacted copy of the permit application. Furthermore, the information contained herein is more than adequate to make the appropriate permitting determinations and can be used to determine compliance with all applicable rules and regulations. This includes all necessary monitoring, recordkeeping, reporting, and testing that will be required as part of the proposed draft permit.

DESCRIPTION OF PROCESS

The following process description was taken from Permit Application R13-3714:

The Adams Fork Harless Data Center Energy Campus is a unique off-grid, electric generating facility designed to provide power to adjacent data center operations. The facility encompasses 117 engines (Source ID# 1S – 117S) with 114 engines operating full-time and 3 engines in reserve. Each engine has a proposed control strategy (Emission Point ID# 1E – 117E). The facility will contain 39 powerhouses with each containing 3 generator setups with each generator having a nameplate capacity of 25 MWe. Actual power generation will depend on the operating mode of the engines. Each engine will have a maximum power output of 21 MW, therefore, the theoretically installed power output would be 2,457 MW. The effective and continuously delivered power output will be 1,796 MW.

The engines are configured to be dual-fuel units and have the ability to operate on natural gas or diesel fuel, or can be operated on diesel fuel only, in backup mode. Under normal operation, the engines consume natural gas as their primary fuel with a pilot injection of ultra-low sulfur diesel (ULSD). Under natural gas operation, 2% of the energy comes from the pilot fuel, which can be increased to 100% in emergency operation.

The engines can operate under the following operational profiles:

Normal Operation
To ensure peak operation conditions, the engines will be regularly serviced. With 1-2 weeks of downtime per engine per year, 3 engines are going to be off-line at any time of the year. Under normal operations, the engines will be run at 75% power only. Therefore, the continuously delivered power will be 1,796 MW.

Compensation Mode
In the case of one or more, or in the unrealistic, but foreseen case of up to 29 engines out of service, the rest of the field will compensate, increasing their power output to 100%. For the calculation of the yearly emissions the worst case is assumed, when 29 engines go offline and the remaining 85 are operated at 100%.

Emergency Mode
In case the pipeline is down, or the gas cannot be delivered for any other reason, the engines can switch to diesel fuel mode immediately and are then operated on diesel fuel only. Apart from the different fuel type, the engines are controlled in the same way as in Normal Operation.

Startup Mode
To start an engine and bring power production online, several steps are necessary. In the first phase the emission control system is not operational temperature, therefore the control rate is not optimal. The following is a simplification and a representation of the worst case for emissions emission-wise. The different steps can be reduced to four main sub-modes:

- Speed up
  Bring the engine from standstill to nominal speed (89 rpm). This is done in diesel mode. The emission control system is still offline at this point, as it is not at optimal temperature. Once nominal speed is set and the minimum load for a fuel switch is reached (less than 5 minutes), the system initiates the next sub mode.

- Fuel Switch
  For about two minutes the load is kept constant, and the fuel is changed from 100% diesel to 98% gas & 2% diesel.

- Generator switched on
  On gas operation, the load is further increased until the generator can by energized and synchronized with the rest of the engine fleet. This takes no more than 5 minutes. For the emissions calculation of all these steps the emission control system is looked at as non-operational, even though the exhaust gases will have heated it already and some abatement is taking place, even at a reduced level.

- Load up cold control
  Once the generator is online and synchronized, then the engine is powered up to its set point (75% in normal operation mode). For reasons of simplicity and to ensure a conservative view on the problem, during engine load up the control system is looked at as cold and operational at

25% only. This is even though in reality the system was heated up constantly by the exhaust gases and reaching operational condition during the load up.

Shut Down
The shut down procedure consists of three phases:

- Ramp down
  The load is constantly reduced to a minimum load.

- Min Load
  At minimum load the generator is decoupled from the grid and the engine's load and speed setting are zero.

- Spin out
  Due to the zero-load setting the injection systems are turned off and the engine is spun out until full stop. In this entire sequence the emission control system is still operational due to its thermal inertia. Therefore, until the injection is stopped the emissions are treated.

The engines will operate on ULSD and natural gas depending on the operating status. ULSD will be stored in 40 storage tanks (Source ID# 118S – 157S, Emission Point ID# 118E – 157E) on the property. Natural gas will be delivered via pipeline. Tanks for control device liquids will be located at each powerhouse. There will be 39 tanks each of hydrous ammonia, caustic soda, sulfuric acid, sodium chlorite, and sodium hydrosulfide. These tanks are considered de minimis due to minimal emissions. Liquids and supplies for these tanks will be trucked to the site.

There is no steam-power production at the site. Cooling will be provided by mine pool water as needed. Therefore, there are no requirements for cooling towers.

SITE INSPECTION

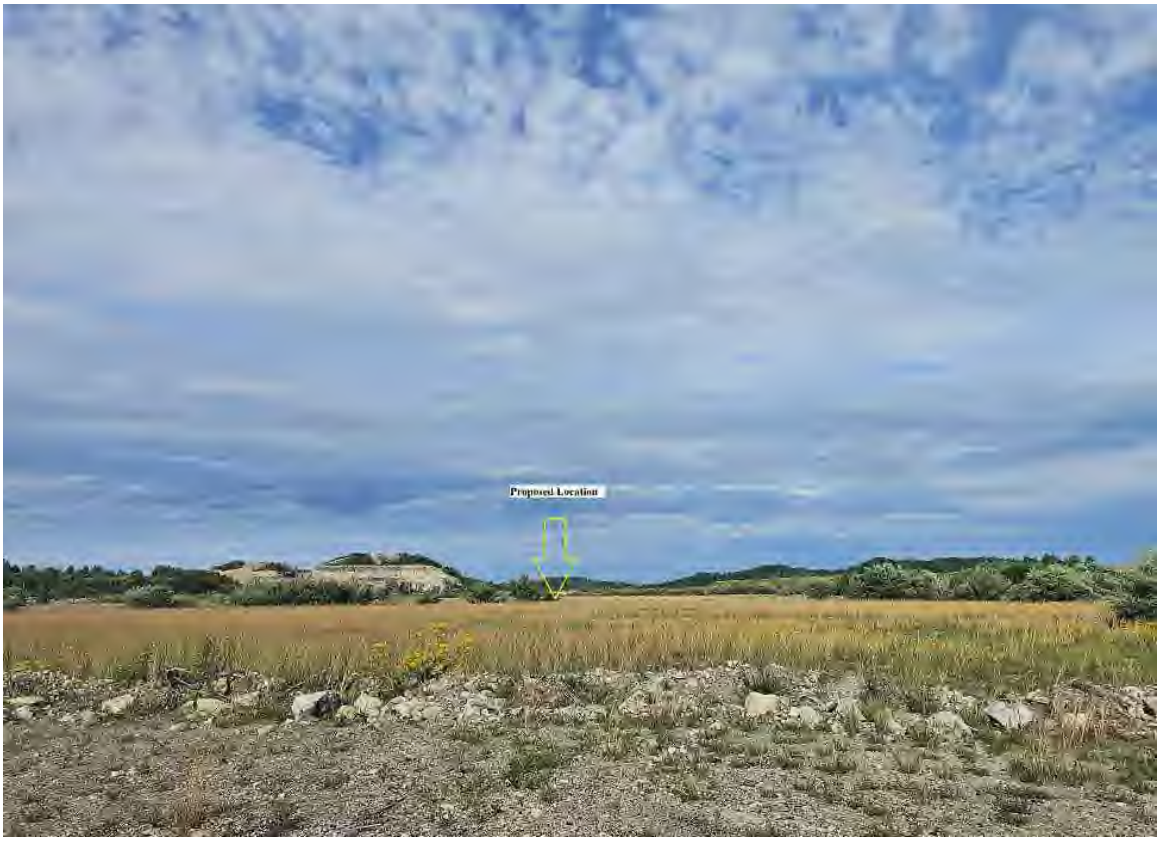
A site inspection of the proposed location was conducted on May 20, 2025, by the writer and Joe Kessler (NSR Program Manager) of the DAQ. This is a greenfield site, and no construction or equipment installation was visible at the time of the site inspection. The proposed site is located in an industrial park with no residences nearby. There is a business (Coal Mac) located adjacent to the proposed location.

Directions to the site:

The facility will be located on the property at the Harless Industrial Park near Holden. This site can be accessed from U.S. Route 119 going south from Holden. Turn left onto 22 Mine Road. The proposed location is adjacent to Mohawk Industries.

Aerial view of the proposed site:

The site will be located in an industrial park and situated approximately close to the arrow in the photo found below.



ESTIMATE OF EMISSIONS BY REVIEWING ENGINEER

Emissions associated with this facility consist of the equipment listed in the following table and fugitive emissions.

Emission Unit ID#	Process Equipment	Calculation Methodology
1S – 117S	Engine 1 – Engine 117 28,194 HP (each)	Manufacturer Data (NOx, CO, PM, VOC, SO_2) EPA AP-42 Emission Factors Chapter 3.2 (HAPs)
118S – 157S	40 – Diesel Storage Tanks 170,000 gal (each)	EPA TANKS Emissions Estimation Software, Version 4.0.9d
De Minimis	39 – Hydrous Ammonia Storage Tanks	De Minimis
De Minimis	39 – Caustic Soda Storage Tanks	De Minimis
De Minimis	39 – Sulfuric Acid Storage Tanks	De Minimis
De Minimis	39 – Sodium Chlorite Storage Tanks	De Minimis
De Minimis	39 – Sodium Hydrosulfide Storage Tanks	De Minimis
HR	Paved Haul Roads	EPA AP-42 Emission Factors, Chapter 13.2.1

The potential emissions from the engines were estimated using the ability to fire the units with natural gas or diesel. The engines at the facility are capable of firing either fuel. The operating hours, operational mode and throughput of each type of fuel will be continuously monitored and recorded. TransGas will keep records of the total amount of hours each engine uses natural gas as a fuel and the total amount of hours each engine uses diesel as a fuel. The 12-month rolling sum of emissions will be calculated monthly.

The emission control systems for the engines consist of two main systems. The dry system on the high pressure side of the engine (before the turbocharger) and the wet system on the low pressure side, which is downstream of the turbocharger. The dry systems consist of an oxidation catalyst and an SCR catalyst. The catalytic reduction of CO has a reduction efficiency of over 99%. The same system oxidizes VOC emissions with a reduction efficiency of 99%. The de-NOx unit is a urea based SCR technology, and the reduction efficiency exceeds 90%. The wet system consists of four (4) stages, which reduce NOx further with 90.9% reduction efficiency and SO_2 with 70% reduction efficiency.

The emission abatement system that will be employed on each engine results in the following emissions reductions when operating in the following modes:

Mode	NOx (%)	CO (%)	VOC/HAP (%)	PM (%)	SO_2 (%)
Speed Up	0	0	0	0	95.0
Fuel Changeover	0	0	0	0	99.0
Generator Switched On	0	0	0	0	99.0
Load Up Cold Control	25.0	25.0	25.0	0	99.0
Normal Operation	99.0	99.0	99.0	25.0	99.0
Compensation Mode	99.0	95.0	99.0	25.0	99.0
Ramp Down	99.0	94.0	99.0	25.0	99.0
Min Load	70.0	50.0	70.0	0	70.0
Spin Out	40.0	35.0	40.0	0	40.0
Emergency	98.0	91.0	99.0	25.0	99.0

As discussed in the DESCRIPTION OF PROCESS and also as shown in the above table, the engines will operate in multiple modes. Under normal operations, the engine will remain comfortably below the PSD threshold. However, to ensure that the facility can be operated under worst-case conditions, the following worst-case scenario was examined.

The pipeline is out for eight (8) days, which equates to 192 hours. During this outage, the facility would be operated only on diesel fuel. During the same year, an unplanned event resulted in 31 engines are down and the remaining 86 engines are operated in compensation mode and will continue to deliver full power. This would increase the engines output to 99.4% load. It was estimated that the compensation mode would last for 24 days or 567 hours. Finally, the engines would have to go through 5 startups and shutdowns in place of the scheduled one (1) event. Using this worst case scenario results in the following hourly breakdown by operational mode:

Mode	Hours
Speed Up	0.42
Fuel Changeover	0.17
Generator Switched On	0.42
Load Up Cold Control	0.83
Normal Operation	7996.80
Compensation Mode	567.20
Ramp Down	1.67
Min Load	0.42
Spin Out	0.08
Emergency	192
Total Time	**8,760**

The operating hours used for the worst-case scenario results in the following potential to emit (PTE) for all of the engines:

Pollutant	**Annual Emissions (tons/year)**
Nitrogen Oxides	194.30
Carbon Monoxide	205.62
Volatile Organic Compounds	116.59
Particulate Matter-10/2.5	186.53
Sulfur Dioxide	9.93
Benzene	0.45
Toluene	0.16
Xylenes	0.11
Formaldehyde	0.046
Acrolein	0.0045
Acetaldehyde	0.013
Naphthalene	0.075
Total Hazardous Air Pollutants	0.86

The following table represents the maximum hourly and annual emissions during *normal operations* for one engine:

Pollutant	**Hourly Emissions (lb/hr)**	**Annual Emissions (tons/year)**
Nitrogen Oxides	0.14	0.61
Carbon Monoxide	0.34	1.47
Volatile Organic Compounds	0.23	0.99
Particulate Matter-10/2.5	0.34	1.49
Sulfur Dioxide	0.01	0.03
Benzene	0.00088	0.00352
Toluene	0.00032	0.00128
Xylenes	0.00022	0.00088
Formaldehyde	0.00009	0.00036
Acrolein	0.00001	0.00004
Acetaldehyde	0.00003	0.00012
Naphthalene	0.00015	0.0006
Total Hazardous Air Pollutants	0.0017	0.0068

Storage Tanks
The potential aggregate emissions for the 40 – 170,000 gallon diesel storage tanks include the losses from working and breathing. Due to the very low vapor pressure of diesel fuel (0.007 psia), the emissions associated with the diesel fuel tanks are low. EPA TANKS 4.09d allows users to enter specific information about a storage tank (dimensions, construction, paint condition, etc.), the liquid contents (chemical components and liquid temperature), and the meteorological conditions and location of the tank (nearest city, ambient temperature, etc.) to generate an air emissions report. Report features include estimates of monthly, annual, or partial year emissions for each chemical or mixture of chemicals stored in the tank. The closest meteorological location available in EPA TANKS 4.09d that was used was Charleston. As stated above, due to the very low vapor pressure of diesel fuel, the emissions associated with the diesel fuel tanks are low. The results of the EPA TANKS 4.09d analysis resulted in the following diesel storage tank emissions:

Pollutant	**Hourly Emissions (lb/hr)**	**Annual Emissions (tons/year)**
Volatile Organic Compounds	7.34	0.75

Truck Loading
There will also be potential emissions associated with the truck loading of the 40 – 170,000 gallon diesel storage tanks. These emissions were accounted for and included as working losses in the aforementioned storage tank emissions.

Paved Haul Roads
There are paved haul road activities associated with this facility. The following table indicates the assumptions made in estimating the emissions:

Operating Condition	**Parameter**
Potential Operating Days	365
Estimated Roundtrip Distance per Vehicle	1.25 miles/vehicle
Fluid Delivery Trucks per Year	5,583
Miscellaneous Vehicles per Year	4,380

Using these operating conditions, the potential emissions associated with these haul road operations result in the following:

Pollutant	**Hourly Emissions (lb/hr)**	**Annual Emissions (tons/year)**
Particulate Matter	2.88	7.16
Particulate Matter-10	0.58	1.43
Particulate Matter-2.5	0.15	0.38

Fugitive Emission Leaks
The fugitive equipment leaks (VOC/HAP) associated with fugitive components (valves, pressure relief valves, connections, flanges, etc.) were estimated using EPA's Protocol for Equipment Leak Emission Estimates Table 2-1 (SOCMI average emission factors) and Table 2-5 (SOCMI screening ranges emission factors) and the component counts associated with the proposed facility. Based on this

analysis, the fugitive equipment leaks associated with this facility would be 0.31 tons per year of VOC and less than 0.01 tons per year of HAPs. The permit does require minimization of fugitive emissions and further requires any above-ground piping, valves, pumps, etc. that shows signs of excess wear that have a reasonable potential for fugitive emissions of regulated air pollutants to be repaired or replaced.

The following table represents the emissions associated with this 45CSR13 construction permit:

Emission Source	Annual Emissions (tons/year)					
	NO_x	**CO**	**VOC**	**SO_2**	**PM_{10}**	**Total HAPs**
Engines	194.30	205.62	116.59	9.93	186.53	0.86
Storage Tanks	-	-	0.75	-	-	-
Paved Haul Roads	-	-	-	-	1.43	-
Fugitive Leaks	-	-	0.31	-	-	0.01
Facility PTE	**194.30**	**205.62**	**117.66**	**9.93**	**187.96**	**0.87**

REGULATORY APPLICABILITY

State

45 CSR 2 - Particulate Air Pollution from Combustion of Fuel in Indirect Heat Exchangers ***(not applicable)***

This rule establishes emission limitations for smoke and particulate matter which are discharged from fuel burning units. 45 CSR 2 states that any fuel burning unit that has a heat input under ten (10) million B.T.U.'s per hour is exempt from sections 4 (weight emission standard), 5 (control of fugitive particulate matter), 6 (registration), 8 (testing, monitoring, recordkeeping, reporting) and 9 (startups, shutdowns, malfunctions). However, failure to attain acceptable air quality in parts of some urban areas may require the mandatory control of these sources at a later date. A fuel burning unit is defined in 45 CSR 2 section 2.10 as any furnace, boiler apparatus, device, mechanism, stack or structure used in the process of burning fuel or other combustible material for the primary purpose of producing heat or power by indirect heat transfer. The engines are not fuel burning units because this operation is not their primary purpose. Therefore, these units would not be subject to this rule.

45 CSR 4 - To Prevent and Control the Discharge of Air Pollutants into the Open Air Which Causes or Contributes to an Objectionable Odor or Odors

The purpose of this rule is to prevent and control the discharge of pollutants into the open air which causes or contributes to an objectionable odor or odors. This facility would generally be subject to this rule, however, this type of facility normally does not have issues with odors. However, the DAQ will, using the authority under this rule to respond to complaints involving objectionable odors if confirmed while the facility is operating, and may require mitigation at that time to reduce the odor potential of the source. An objectionable odor must be determined by the DAQ in the course of an inspection or investigation of an actual odor, and is possible to prove quantitatively, pursuant to this rule, that an objectionable odor will be present before a facility is in operation.

45 CSR 10 - To Prevent and Control Air Pollution from the Emissions of Sulfur Oxides ***(not applicable)***

This rule establishes emission limitations for sulfur dioxide which are discharged from fuel burning units. 45 CSR 10 states that any fuel burning unit that has a heat input under ten (10) million B.T.U.'s per hour is exempt from sections 3 (weight emission standard), 6 (registration), 7 (permits), and 8 (testing, monitoring, recordkeeping, reporting). However, failure to attain acceptable air quality in parts of some urban areas may require the mandatory control of these sources at a later date. A fuel burning unit is defined in 45 CSR 10 section 2.8 as any furnace, boiler apparatus, device, mechanism, stack or structure used in the process of burning fuel or other combustible material for the primary purpose of producing heat or power by indirect heat transfer. The engines are not fuel burning units because this operation is not their primary purpose. Therefore, these units would not be subject to this rule.

45 CSR 13 (Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Administrative Updates, Temporary Permits, General Permits, and Procedures for Evaluation)

Pursuant to §45-13-5.1, "[n]o person shall cause, suffer, allow or permit the construction, modification, relocation and operation of any stationary source to be commenced without . . . obtaining a permit to construct."

Based upon the potential emissions for the facility, TransGas is required to obtain a permit under 45CSR13 for this facility.

As required under §45-13-8.3 ("Notice Le vel A"), TransGas placed a Class I legal advertisement in the *Williamson Daily News* on April 9, 2025. Additionally, TransGas paid the appropriate application fee of $2,000 ($1,000 45 CSR 13 permit application fee, $1,000 NSPS fee) on April 2, 2025.

45 CSR 14 - Permits for Construction and Major Modification of Major Stationary Sources of Air Pollutants ***(not applicable)***
45 CSR 19 - Permits for Construction and Major Modification of Major Stationary Sources of Air Pollution which Cause or Contribute to Nonattainment ***(not applicable)***

45CSR14 establishes and adopts a preconstruction permit program for the construction and major modification of major stationary sources in areas of attainment with the National Ambient Air Quality Standards (NAAQS). Mingo County is currently classified as in attainment/unclassifiable with the NAAQS and, therefore, a proposed new "major stationary source" in Mingo County would be subject to the provisions of 45CSR14. The proposed facility is not defined as a source listed under §45-14-2.43(a), therefore, pursuant to 2.4(b), would be defined as a "major stationary source" if any regulated pollutant has a PTE in excess of 250 TPY. The proposed facility, however, does not have a PTE of any regulated pollutant in excess of 250 TPY as shown in the table on the following page, therefore, not defined as a major stationary source and is not subject to the provisions of 45 CSR 14. 45 CSR 19 applies to sources that are located in areas that are classified as non-attainment with the NAAQS. Mingo County is an attainment/unclassified area, therefore, 45 CSR 19 would not apply.

Pollutant	PSD (45CSR14) Threshold (TPY)	NANSR (45CSR19) Threshold (TPY)	Facility PTE (TPY)	45CSR14 or 45CSR19 Review Required?
Carbon Monoxide	250	NA	205.62	No
Nitrogen Oxides	250	NA	194.30	No
Sulfur Dioxide	250	NA	9.93	No
Particulate Matter 2.5	250	NA	186.53	No
Ozone (VOC)	250	NA	117.35	No

45 CSR 16 - Standards of Performance for New Stationary Sources

This rule incorporates the federal Clean Air Act (CAA) standards of performance for new stationary sources (NSPS) set forth in 40 CFR Part 60 by reference. 45 CSR 16 applies to this source by reference of 40 CFR 60 Subpart IIII. These requirements are discussed under that rule below.

45 CSR 17 - To Prevent and Control Particulate Matter Air Pollution from Materials Handling, Preparation, Storage and Other Sources of Fugitive Particulate Matter

The purpose of this rule is to prevent and control particulate matter air pollution from materials handling, preparation, storage and other sources of fugitive particulate matter. TransGas will ensure appropriate precautions are taken to prevent the escape of fugitive particulate matter beyond the boundary lines of the property.

45 CSR 21 - Control of Air Pollution from the Emission of Volatile Organic Compounds ***(not applicable)***

This rule establishes reasonably available control technology to control emissions of volatile organic compounds from sources that manufacture, mix, store, use, or apply materials containing volatile organic compounds that are located in Cabell, Kanawha, Putnam, Wayne and Wood Counties. This facility is located in Mingo County, and therefore, not applicable to this rule.

45 CSR 27 - To Prevent and Control the Emissions of Toxic Air Pollutants ***(not applicable)***

The purpose of this rule is to prevent and control the discharge of toxic air pollutants requiring the application of best available technology (BAT) for chemical processing units. Section 2.4 defines a chemical processing unit as an assembly of reactors, tanks, distillation columns, heat exchangers, vaporizers, compressors, dryers, decanters, and/or other equipment used to treat, store, manufacture, or use toxic air pollutants. For the purpose of this rule, the term chemical processing unit includes surface coating equipment or similar equipment utilizing a toxic air pollutant as a solvent or for other purposes but does not include equipment used in the production and distribution of petroleum products providing that such equipment does not produce or contact materials containing more than 5% benzene by weight. Potential emissions of toxic air pollutants from this facility result from the combustion of natural gas or diesel in the engines. Regulation of emissions of toxic air pollutants from these unit types are not included in this rule, and therefore, not applicable.

45 CSR 30 - Requirements for Operating Permits

The facility is a major source and is subject to 45CSR30 based upon CO, NOx, PM, and VOC emissions each exceeding 100 tons per year. Due to this facility's PTE over 100 tons per year of a criteria pollutant, TransGas is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30. TransGas is required to pay the appropriate annual operating fees and submit an annual Certified Emissions Statement.

45 CSR 31 - Confidential Information

The purpose of this rule is to establish the requirements for claiming information submitted to the Director as confidential and the procedures for determinations of confidentiality in accordance with the provisions of W. Va. Code §22-5-10. The reason for the CBI submittal is that the application contains information that is fully protected under non-disclosure and confidentiality agreements between the applicant and equipment provider concerning development of the process and facility design. This was previously discussed in detail in the CONFIDENTIAL BUSINESS INFORMATION section.

45 CSR31B – Confidential Business Information and Emission Data

The purpose of this rule is to provide guidance and clarification concerning the term "types and amounts of pollutants discharged" defined under 45 CSR §31-2.4, the DAQ's legislative rule (45 CSR 31) and thus what information may not be claimed confidential in accordance with 45 CSR §31-6. An in-depth discussion regarding this was previously discussed in detail in the CONFIDENTIAL BUSINESS INFORMATION section.

45 CSR 33 - Acid Rain Provisions and Permits ***(not applicable)***

This rule establishes and adopts general provisions and the operating permit program requirements for affected sources and affected units under the Acid Rain Program promulgated by the United States Environmental Protection Agency under Title IV of the Clean Air Act, as amended (CAA). The rule and associated reference methods, performance specifications and other test methods which are appended to these standards are adopted by reference. These units are exempt under the New Unit Exemption in §40-72.7. See explanation below in Federal for 40 CFR 72 (Permits Regulation).

45 CSR 34 - Emission Standards for Hazardous Air Pollutants

This rule incorporates the federal Clean Air Act (CAA) national emission standards for hazardous air pollutants (NESHAPs) set forth in 40 CFR Parts 61 and 63 by reference. 45 CSR 34 applies to this source by reference of 40 CFR 63 Subpart ZZZZ. These requirements are discussed under that rule below.

45 CSR 40 - Control of Ozone Season Nitrogen Oxide Emissions ***(not applicable)***

The purpose of this rule is to establish ozone season NOx emission limitation, monitoring, recordkeeping, reporting, excess emissions, and NOx budget demonstration requirements for large industrial boilers and combustion turbines that have a maximum design heat input greater than 250

MMBTU/hr, in accordance with 40 CFR §51.121. Ozone season is defined as May 1 through September 30 in the same calendar year. This facility does not have industrial boilers or combustion turbines, therefore, this rule does not apply.

Federal

40 CFR 51.166 - Prevention of Significant Deterioration of Air Quality ***(not applicable)***

Federal construction permitting programs regulate new and modified sources of attainment pollutants under Prevention of Significant Deterioration (PSD) and new and modified sources of non-attainment pollutants under Non-Attainment New Source Review (NANSR). The provisions of this section are captured in the West Virginia state rules discussed above known as 45 CSR 14 (PSD) and 45 CSR 19 (NANSR). Both of these rules are part of West Virginia's State Implementation Plan (SIP).

Mingo County is designated as attainment/unclassifiable for all criteria pollutants. PSD regulations apply when a new source is constructed in which emissions exceed major source thresholds, an existing minor source undergoes modification in which emission increases exceed PSD major source thresholds, or an existing major source undergoes a modification in which emission increases exceed PSD significant emission rates. PSD major source thresholds are 250 tons per year of a regulated pollutant, except for the 28 regulated facility categories. This facility is not one of listed 28 regulated facility categories. Therefore, the PSD major source threshold is 250 tons per year of a regulated pollutant. The emissions associated with this facility is less than the PSD major source threshold, therefore, this rule does not apply.

40 CFR 60 Subpart Kc - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After October 4, 2023 ***(not applicable)***

Subpart Kc applies to storage vessels of volatile organic liquids with capacities greater than or equal to 20,000 gallons for which construction commenced after October 4, 2023. § 60.110c(b)(8) exempts storage vessels that only store volatile organic liquids with a maximum true vapor pressure less than 0.25 psia (1.7 kPa absolute). Each storage vessel at the facility has a capacity of 170,000 gallons. However, the maximum vapor pressure of the storage vessels is 0.007 psia, which is less than 0.25 psia. Therefore, this rule does not apply.

40 CFR 60 Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

Subpart IIII applies to owners and operators of compression ignition internal combustion engines that commenced construction after July 11, 2005, and were manufactured after April 1, 2006, and not a fire pump engine.

The 28,194 HP engines (1S – 117S) are configured to be dual-fuel units and have the ability to operate on natural gas or diesel fuel, or can be operated on diesel fuel only, in backup mode. Under normal operation, the engines consume natural gas as their primary fuel with a pilot injection of ULSD. Under

natural gas operation, 2% of the energy comes from the pilot fuel, which can be increased to 100% in emergency operation.

The engines commenced construction after July 11, 2005, are non-emergency engines, were manufactured after April 1, 2006, utilizes diesel fuel, have displacements greater than 30 liters per cylinder, less than 130 rpm, not reducing PM by 60%, do not have diesel particulate filters, and were installed after January 1, 2016. Due to these parameters, the following are the regulatory requirements for each pollutant:

NOx

Emission Limit	3.4 g/KW-hr (2.5 g/HP-hr)
Standards	§60.4204(c)(3)
Monitoring/Testing	§60.4213(e)

PM

Emission Limit	0.15 g/kW-hr (0.11 g/HP-hr)
Standards	§60.4204(c)(4)
Monitoring/Testing	§60.4213(f)

Based upon the proposed hourly emission limits for the engines, the regulatory emission limits will be met.

The following requirements also apply to these pollutants:

Standards	§60.4206, §60.4207(d), §60.4211(d)
Monitoring/Testing	§60.4213(a), (b), (c); §60.4211(d)(1), (d)(3)
Recordkeeping	§60.4214(a)(2), §60.4211(d)(2)
Reporting	§60.4214(a)(1), §60.4211(d)(2)

40 CFR 60 Subpart TTTTa - Standards of Performance for Greenhouse Gas Emissions for Modified Coal-Fired Steam Electric Generating Units and New Construction and Reconstruction Stationary Combustion Turbine Electric Generating Units ***(not applicable)***

Subpart TTTTa applies to stationary combustion turbines that commence construction after May 23, 2023, that also serve a generator or generators capable of selling greater than 25 MW of electricity to a utility power distribution system. There are no combustion turbines at the proposed facility, therefore, Subpart TTTTa is not applicable.

40 CFR 63 Subpart EEEE - National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline) ***(not applicable)***

Subpart EEEE applies to organic liquids storage and distribution at major sources of HAPs. The facility is not a major source of HAPs because its PTE of total HAPs is less than 25 tons per year and its PTE of any single HAP is less than 10 tons per year. Therefore, Subpart EEEE does not apply.

40 CFR 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE)

Subpart ZZZZ applies to stationary combustion RICE at area and major sources of HAPs. As stated in §63.6590(c), stationary RICE that are subject to regulations under 40 CFR 60 (IIII) must meet those requirements, and no further requirements apply for these units under this subpart.

40 CFR 64 - Compliance Assurance Monitoring ***(not applicable)***

Compliance Assurance Monitoring (CAM) applies to pollutant-specific emissions units at a major source under 40 CFR 70. The facility is not a major source under 40 CFR 70; therefore, CAM does not apply.

40 CFR 72 - Permits Regulation ***(not applicable)***

The purpose of this part is to establish certain general provisions and the operating permit program requirements for affected sources and affected units under the Acid Rain Program, pursuant to title IV of the Clean Air Act, 42 U.S.C. 7401, et seq., as amended by Public Law 101-549 (November 15, 1990).

The nameplate capacity of the generators attached to each unit is 25 MWe or less. The units do not burn coal or a coal-derived fuel, and burns fuel with sulfur of 0.05% or less by weight. Therefore, these units are exempt under the New Unit Exemption in Section 72.7 and are exempt from permit requirements, monitoring, and allowance holdings, except for the provisions of §72.7 itself, and §72.2 through 72.6 (definitions, measurements, abbreviations, and acronyms, federal authority, state authority, and applicability) and 72.10 through 72.13 (availability of information, computation of time, administrative appeals, and incorporation by reference).

40 CFR 97 Subpart DDDDD - Federal NOx Budget Trading Program, CAIR NOx and SO_2 Trading Programs, CSAPR NOx and SO_2 Trading Programs, and Texas SO_2 Trading Program ***(not applicable)***

This rule sets forth the general, designated representative, allowance, and monitoring provisions for the Cross-State Air Pollution Rule (CSAPR) SO_2 Group 2 Trading Program, under section 110 of the Clean Air Act and §52.39 of this chapter, as a means of mitigating interstate transport of fine particulates and sulfur dioxide.

This rule applies to fossil-fuel-fired combustion turbines serving at any time, on of after January 1, 2005, a generator with a nameplate capacity of more than 25 MWe producing electricity for sale. These units are RICEs and not combustion turbines. Additionally, the nameplate capacity of the generators attached to each unit is 25 Mwe. Therefore, this regulation does not apply.

ANALYSIS OF NON-CRITERIA REGULATED POLLUTANTS

This section provides information on those regulated pollutants that are not classified as "criteria pollutants". Criteria pollutants are defined as Carbon Monoxide (CO), Lead (Pb), Oxides of Nitrogen (NOx), Ozone, Particulate Matter (PM_{10} and $PM_{2.5}$), and Sulfur Dioxide (SO_2). These pollutants have National Ambient Air Quality Standards (NAAQS) set for each that are designed to protect public health and welfare. Other pollutants of concern, although designated as non-criteria *and without national air quality standards*, are regulated through various state and federal programs designed to limit their emissions and public exposure. These programs include federal source-specific HAP regulations promulgated under 40 CFR 61 and 40 CFR 63 (NESHAPS/MACT), and WV Legislative Rule 45 CSR 27 that regulates certain HAPs as Toxic Air Pollutants (TAPs). Any potential applicability to these programs were addressed in the REGULATORY APPLICABILITY section of this document.

The majority of non-criteria regulated pollutants fall under the definition of HAPs which, with some revision since, were 188 compounds identified under Section 112(b) of the Clean Air Act (CAA) as pollutants or groups of pollutants that EPA knows, or suspects *may* cause cancer or other serious human health effects. These adverse health effects may be associated with a wide range of ambient concentrations and exposure times and are influenced by source-specific characteristics such as emission rates and local meteorological conditions. Health impacts are also dependent on multiple factors that affect variability in humans such as genetics, age, health status (e.g., the presence of pre-existing disease) and lifestyle. As stated previously, *there are no federal or state ambient air quality standards for these specific chemicals*. It is also important to note that the USEPA does not divide the various HAPs into further classifications based on toxicity or if the compound is a suspected carcinogen. The HAP emissions associated with this application are found in the ESTIMATE OF EMISSIONS section of this document. For a complete discussion of the known health effects of each compound refer to the IRIS database located at *www.epa.gov/iris*.

The HAPs emitted from the proposed facility are created during the combustion of natural gas and diesel fuel. The HAP emission values were estimated using EPA AP-42: Compilation of Air Emissions Factors from Stationary Sources. AP-42 contains emission factors and process information for more than 200 air pollution source categories. AP-42 Chapter 3.2 contains HAP emission factors for reciprocating engines.

The table on the following page lists each HAP currently identified by TransGas as potentially being emitted based upon the information available in AP-42 Chapter 3.2, Tables 3.2-1, 3.2-3, and 3.2-4. Additionally, the Chemical Abstracts Service (CAS) registry number, the type of HAP, the PTE of the individual HAP, and any potentially applicable Most Available Control Technology (MACT) is provided.

Pollutant	CAS #	Type	PTE (TPY)	MACT[1]
Acetaldehyde	75-07-0	VOC	0.013	None
Acrolein	107-02-8	VOC	0.0045	None
Benzene	71-43-2	VOC	0.448	None
Formaldehyde	50-00-0	VOC	0.046	None
Naphthalene	91-20-3	VOC	0.075	None
Toluene	108-88-3	VOC	0.163	None
Xylenes	1330-20-7	VOC	0.111	None

[1] Does a MACT apply to this specific HAP for any emission unit at the facility? See REGULATORY APPLICABILITY section for discussion.

AIR QUALITY IMPACT ANALYSIS

Modeling was not required of this source because the facility is not subject to 45CSR14 (Permits for Construction and Major Modification of Major Stationary Sources of Air Pollutants) as discussed in the Regulatory Discussion Section.

SOURCE AGGREGATION

"Building, structure, facility, or installation" is defined as all the pollutant emitting activities which belong to the same industrial grouping, are located on one or more contiguous and adjacent properties, and are under the control of the same person.

TransGas has an option on the site with the current owner, therefore, they do have control of the proposed site. There are no other emission units belonging to the same industrial grouping, under common control, and located on contiguous or adjacent properties with the facility. Therefore, the emissions from the Adams Fork Harless Data Center facility should not be aggregated in determining Title V or PSD status.

MONITORING, RECORDKEEPING, REPORTING, AND TESTING (MRRT) OF OPERATIONS

TransGas will be required to perform the following MRRT:

- **Operational Limitations**
  - Operating limits will be established on the engines. TransGas will be required to monitor the operating hours, operational mode, and the throughput of each type of fuel will be continuously monitored and recorded for each engine. Required to keep records of the total amount of hours each engine uses natural gas as a fuel and the total amount of hours each engine uses diesel as a fuel. The 12-month rolling sum of emissions will be calculated monthly.
- **40 CFR 60 Subpart IIII MRRT**
  - Monitor and utilize diesel fuel that meets a maximum per-gallon sulfur content of 1,000 ppm. [§60.4207(d)]
  - Conduct an initial performance test to demonstrate initial compliance with the emission standards as specified in §60.4213. [§60.4211(d)(1)]
  - Conduct an annual performance test to demonstrate initial compliance with the emission standards as specified in §60.4213. [§60.4211(d)(3)]
  - Keep records of the information in paragraphs (a)(2)(i) through (iv) of this section.
    - (i) All notifications submitted to comply with this subpart and all documentation supporting any notification.
    - (ii) Maintenance conducted on the engine.
    - (iii) If the stationary CI internal combustion is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards.
    - (iv) If the stationary CI internal combustion is not a certified engine, documentation that the engine meets the emission standards. [§60.4214(a)(2)]
  - Establish operating parameters to be monitored continuously to ensure the stationary internal combustion engine continues to meet the emission standards. The owner or operator must petition the Administrator for approval of operating parameters to be monitored continuously. The petition must include the information described in paragraphs (d)(2)(i) through (v) of this section.
    - (i) Identification of the specific parameters you propose to monitor continuously;
    - (ii) A discussion of the relationship between these parameters and NOX and PM emissions, identifying how the emissions of these pollutants change with changes in these parameters, and how limitations on these parameters will serve to limit NOX and PM emissions;
    - (iii) A discussion of how you will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations;
    - (iv) A discussion identifying the methods and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and
    - (v) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters. [§60.4211(d)(2)]

    - Submit an initial notification as required in § 60.7(a)(1). The notification must include the information in paragraphs (a)(1)(i) through (v) of this section. Beginning on February 26, 2025, submit the notification electronically according to paragraph (g) of this section.
        - (i) Name and address of the owner or operator;
        - (ii) The address of the affected source;
        - (iii) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;
        - (iv) Emission control equipment; and
        - (v) Fuel used. [§60.4214(a)(1)]
- **Tank Throughput and Loading**
    - TransGas will be required to monitor the tank throughput and loading operations for each storage tank. The 12-month rolling sum of throughputs/emissions will be calculated monthly.
- **45 CSR 17 Fugitive Sources of Particulate Matter**
    - Sources of fugitive particulate matter at the facility include diesel truck and employee traffic on paved plant roads. Conduct a visual inspection of the paved roads once each operating day to ensure no fugitive emissions are generated. When needed, roads will be swept and/or watered to minimize fugitive dust. Records will be kept of the inspections and any corrective actions.
- Maintain records of testing conducted in accordance with the permit. Said records shall be maintained on-site or in a readily accessible off-site location.
- Maintain the corresponding records specified by the on-going monitoring requirements of and testing requirements of the permit.
- Maintain a record of all PTE HAP calculations for the entire facility.

The records shall be maintained on site or in a readily available off-site location maintained by TransGas for a period of five (5) years.

STATUTORY AUTHORITY OF THE DAQ

The statutory authority of the DAQ is given under the Air Pollution Control Act (APCA) – West Virginia Code §22-5-1, *et. seq.* – which states, under §22-5-1 ("Declaration of policy and purpose"), that:

> It is hereby declared that public policy of this state and the purpose of this article is to achieve and maintain such levels of air quality ***as will*** (underlining and emphasis added) protect human health and safety, and to the greatest degree practicable, prevent injury to plant and animal life and property, foster the comfort and convenience of the people, promote the economic and social development of this state and facilitate the enjoyment of the natural attractions of this state.

Therefore, while the code states that the intent of the rule includes the criteria outlined in the latter part of the above sentence, it is clear by the underlined and bolded section of the above sentence that the scope of the delegated authority does not extend beyond the *impact of air quality* on these criteria. Based on the language under §22-5-1, *et. seq.*, the DAQ, in making determinations on issuance or denial of permits under WV Legislative Rule 45 CSR 13 (45 CSR 13), does not take into consideration

substantive non-air quality issues such as job creation, economic viability of proposed project, strategic energy issues, non-air quality environmental impacts, nuisance issues, etc.

The basis for issuance or denial of an air quality permit is given under 45 CSR 13. Pursuant to §45-13-5.7, the DAQ shall issue a permit unless:

> a determination is made that the proposed construction, modification, registration or relocation will violate applicable emission standards, will interfere with attainment or maintenance of an applicable ambient air quality standard, cause or contribute to a violation of an applicable air quality increment, or be inconsistent with the intent and purpose of this rule or W. Va. Code § 22-5-1, et seq., in which case the Secretary shall issue an order denying such construction, modification, relocation and operation. The Secretary shall, to the extent possible, give priority to the issuance of any such permit so as to avoid undue delay and hardship.

It is clear under 45 CSR 13 that denial of a permit must be based on one of the above explicitly stated criteria or, as noted, is inconsistent with 45 CSR 13 or §22-5-1, *et. seq*. As is stated above, it is the DAQ's position that the intent of both the APCA and 45 CSR 13 is to circumscribe the authority of the DAQ to air quality issues as outlined in the APCA and in West Virginia's State Implementation Plan (SIP).

The air quality issues evaluated relating to TransGas' proposed construction are outlined in this document. All applicable and potentially applicable rules were evaluated in the REGULATORY DISCUSSION section. The items covered under that section represent the extent of the substantive air quality issues over which the DAQ has authority to evaluate under 45 CSR 13 and the APCA as relating to this permit application.

RECOMMENDATION TO DIRECTOR

The information provided in permit application R13-3714 indicates that compliance with all applicable state and federal air quality regulations will be achieved. Therefore, I recommend to the Director that the DAQ go to public notice with a preliminary determination to issue Permit Number R13-3714 to TransGas for the proposed construction of the Adams Fork Harless Data Center Energy Campus located in Holden, Mingo County, WV.

Jerry Williams

Digitally signed by: Jerry Williams
DN: CN = Jerry Williams email = jerry.williams@wv.gov C = US
Date: 2025.06.27 09:57:22 -04'00'

Jerry Williams, P.E.
Engineer

West Virginia Department of Environmental Protection

Harold D. Ward
Cabinet Secretary

Construction Permit

R13-3714

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§22-5-1 et seq.) and 45 C.S.R. 13 – Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits and Procedures for Evaluation. The permittee identified at the above-referenced facility is authorized to construct the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Issued to:

TransGas Development Systems, LLC
Adams Fork Harless Data Center Energy Campus
059-00133

_____

Laura M. Crowder
Director, Division of Air Quality

Issued: Draft

Facility Location:	Off of 22 Mine Road, Holden, Mingo County, West Virginia
Mailing Address:	630 First Avenue, Suite 30C, New York, NY 10016-3799
Facility Description:	Off-grid Power Generation Facility
NAICS Codes:	221112 – Fossil Fuel Electric Power Generation
UTM Coordinates:	401.420 km Easting • 4,179.002 km Northing • Zone 17
Latitude/Longitude:	37.75302 / -82.11905
Permit Type:	Construction
Description of Change:	Construction and operation of an off-grid power generation facility.

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §§22-5-14.

As a result of the granting of this permit, the source is subject to 45CSR30. The Title V (45CSR30) application will be due within twelve (12) months after the date of the commencement of the operation or activity (activities) authorized by this permit, unless granted a deferral or exemption by the Director from such filing deadline pursuant to a request from the permittee.

Table of Contents

1.0. Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
1S – 117S	1E – 117E	Engine 1 – Engine 117	2026	28,194 HP (each)	1C – 117C
118S – 157S	118E – 157E	ULSD Tanks (TK1 – TK40)	2026	170,000 gal (each)	None
DM	DM	Hydrous Ammonia Tanks 1-39	2026	4,600 gal (each)	None
DM	DM	Caustic Soda Tanks 1-39	2026	4,600 gal (each)	None
DM	DM	Sulfuric Acid Tanks 1-39	2026	4,600 gal (each)	None
DM	DM	Sodium Chlorite Tanks 1-39	2026	4,600 gal (each)	None
DM	DM	Sodium Hydrosulfide Tanks 1-39	2026	4,600 gal (each)	None
UNLOAD	UNLOAD-E	Diesel Truck Unloading	2026	3,907,000 gal (normal operation)	None

2.0. General Conditions

2.1. Definitions

2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.

2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.

2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.

2.2. Acronyms

CAAA	Clean Air Act Amendments	**NO_X**	Nitrogen Oxides
CBI	Confidential Business Information	**NSPS**	New Source Performance Standards
CEM	Continuous Emission Monitor	**PM**	Particulate Matter
CES	Certified Emission Statement	**$PM_{2.5}$**	Particulate Matter less than 2.5 µm in diameter
C.F.R. *or* CFR	Code of Federal Regulations	**PM_{10}**	Particulate Matter less than 10µm in diameter
CO	Carbon Monoxide	**Ppb**	Pounds per Batch
C.S.R. *or* CSR	Codes of State Rules	**Pph**	Pounds per Hour
DAQ	Division of Air Quality	**Ppm**	Parts per Million
DEP	Department of Environmental Protection	**Ppm_V or ppmv**	Parts per Million by Volume
dscm	Dry Standard Cubic Meter	**PSD**	Prevention of Significant Deterioration
FOIA	Freedom of Information Act	**Psi**	Pounds per Square Inch
HAP	Hazardous Air Pollutant	**SIC**	Standard Industrial Classification
HON	Hazardous Organic NESHAP	**SIP**	State Implementation Plan
HP	Horsepower	**SO_2**	Sulfur Dioxide
lbs/hr	Pounds per Hour	**TAP**	Toxic Air Pollutant
LDAR	Leak Detection and Repair	**TPY**	Tons per Year
M	Thousand	**TRS**	Total Reduced Sulfur
MACT	Maximum Achievable Control Technology	**TSP**	Total Suspended Particulate
MDHI	Maximum Design Heat Input	**USEPA**	United States Environmental Protection Agency
MM	Million	**UTM**	Universal Transverse Mercator
MMBtu/hr *or* mmbtu/hr	Million British Thermal Units per Hour	**VEE**	Visual Emissions Evaluation
MMCF/hr *or* mmcf/hr	Million Cubic Feet per Hour	**VOC**	Volatile Organic Compounds
NA	Not Applicable	**VOL**	Volatile Organic Liquids
NAAQS	National Ambient Air Quality Standards		
NESHAPS	National Emissions Standards for Hazardous Air Pollutants		

2.3. Authority

This permit is issued in accordance with West Virginia air pollution control law W.Va. Code §§ 22-5-1. et seq. and the following Legislative Rules promulgated thereunder:

2.3.1. 45CSR13 – *Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits and Procedures for Evaluation*;

2.4. Term and Renewal

2.4.1. This Permit shall remain valid, continuous and in effect unless it is revised, suspended, revoked or otherwise changed under an applicable provision of 45CSR13 or any other applicable legislative rule;

2.5. Duty to Comply

2.5.1. The permitted facility shall be constructed and operated in accordance with the plans and specifications filed in Permit Application R13-3714 and any modifications, administrative updates, or amendments thereto. The Secretary may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to;
[45CSR§§13-5.10 and -10.3.]

2.5.2. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA;

2.5.3. Violations of any of the conditions contained in this permit, or incorporated herein by reference, may subject the permittee to civil and/or criminal penalties for each violation and further action or remedies as provided by West Virginia Code 22-5-6 and 22-5-7;

2.5.4. Approval of this permit does not relieve the permittee herein of the responsibility to apply for and obtain all other permits, licenses, and/or approvals from other agencies; i.e., local, state, and federal, which may have jurisdiction over the construction and/or operation of the source(s) and/or facility herein permitted.

2.6. Duty to Provide Information

The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for administratively updating, modifying, revoking, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.

2.7. Duty to Supplement and Correct Information

Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.

2.8. Administrative Update

The permittee may request an administrative update to this permit as defined in and according to the procedures specified in 45CSR13.
[45CSR§13-4.]

2.9. Permit Modification

The permittee may request a minor modification to this permit as defined in and according to the procedures specified in 45CSR13.
[45CSR§13-5.4.]

2.10 Major Permit Modification

The permittee may request a major modification as defined in and according to the procedures specified in 45CSR14 or 45CSR19, as appropriate.
[45CSR§13-5.1]

2.11. Inspection and Entry

The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:

a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;

d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

2.12. *[Reserved]*

2.13. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a permittee in an enforcement action that it should have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety,

or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.

2.14. Suspension of Activities

In the event the permittee should deem it necessary to suspend, for a period in excess of sixty (60) consecutive calendar days, the operations authorized by this permit, the permittee shall notify the Secretary, in writing, within two (2) calendar weeks of the passing of the sixtieth (60) day of the suspension period.

2.15. Property Rights

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

2.16. Severability

The provisions of this permit are severable and should any provision(s) be declared by a court of competent jurisdiction to be invalid or unenforceable, all other provisions shall remain in full force and effect.

2.17. Transferability

This permit is transferable in accordance with the requirements outlined in Section 10.1 of 45CSR13. **[45CSR§13-10.1.]**

2.18. Notification Requirements

The permittee shall notify the Secretary, in writing, no later than thirty (30) calendar days after the actual startup of the operations authorized under this permit.

2.19. Credible Evidence

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defense otherwise available to the permittee including, but not limited to, any challenge to the credible evidence rule in the context of any future proceeding.

3.0. Facility-Wide Requirements

3.1. Limitations and Standards

3.1.1. **Open burning.** The open burning of refuse by any person, firm, corporation, association or public agency is prohibited except as noted in 45CSR§6-3.1.
[45CSR§6-3.1.]

3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause, suffer, allow or permit any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.
[45CSR§6-3.2.]

3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management, and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them.
[40CFR§61.145(b) and 45CSR§34]

3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.
[45CSR§4-3.1] ***[State Enforceable Only]***

3.1.5. **Permanent shutdown.** A source which has not operated at least 500 hours in one 12-month period within the previous five (5) year time period may be considered permanently shutdown, unless such source can provide to the Secretary, with reasonable specificity, information to the contrary. All permits may be modified or revoked and/or reapplication or application for new permits may be required for any source determined to be permanently shutdown.
[45CSR§13-10.5.]

3.1.6. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11.
[45CSR§11-5.2.]

3.2. Monitoring Requirements

3.2.1. **Emission Limit Averaging Time.** Unless otherwise specified, compliance with all annual limits shall be based on a rolling twelve month total. A rolling twelve month total shall be the sum of the measured parameter of the previous twelve calendar months. Compliance with all hourly emission limits shall be based on the applicable NAAQS averaging times or, where applicable, as given in any approved performance test method.

3.3. Testing Requirements

3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63 in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit may be revised in accordance with 45CSR§13-4. or 45CSR§13-5.4 as applicable.

b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit may be revised in accordance with 45CSR§13-4. or 45CSR§13-5.4 as applicable.

c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.

d. The permittee shall submit a report of the results of the stack test within sixty (60) days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1.; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:

1. The permit or rule evaluated, with the citation number and language;
2. The result of the test for each permit or rule condition; and,
3. A statement of compliance or noncompliance with each permit or rule condition.

[WV Code § 22-5-4(a)(14-15) and 45CSR13]

3.4. Recordkeeping Requirements

3.4.1. **Retention of records.** The permittee shall maintain records of all information (including monitoring data, support information, reports, and notifications) required by this permit recorded in a form suitable and readily available for expeditious inspection and review. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation. The files shall be maintained for at least five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two (2) years of data shall be maintained on site. The remaining three (3) years of data may be maintained off site, but must remain accessible within a reasonable time. Where appropriate, the permittee may maintain records electronically (on a computer, on computer floppy disks, CDs, DVDs, or magnetic tape disks), on microfilm, or on microfiche.

3.4.2. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.
[45CSR§4. *State Enforceable Only.*]

3.5. Reporting Requirements

3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

3.5.2. **Confidential information.** A permittee may request confidential treatment for the submission of reporting required by this permit pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.

3.5.3. **Correspondence.** All notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, or mailed first class or by private carrier with postage prepaid to the address(es), or submitted in electronic format by email as set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

DAQ:
Director
WVDEP
Division of Air Quality
601 57th Street
Charleston, WV 25304-2345

US EPA:
Section Chief, USEPA, Region III
Enforcement and Compliance Assurance Division
Air Section (3ED21)
Four Penn Center
1600 John F Kennedy Blvd
Philadelphia, PA 19103-2852

DAQ Compliance and Enforcement[1]:
DEPAirQualityReports@wv.gov

[1]For all self-monitoring reports (MACT, GACT, NSPS, etc.), stack tests and protocols, Notice of Compliance Status Reports, Initial Notifications, etc.

3.5.4. **Operating Fee**

3.5.4.1. In accordance with 45CSR30 – Operating Permit Program, the permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality. A receipt for the appropriate fee shall be maintained on the premises for which the receipt has been issued, and shall be made immediately available for inspection by the Secretary or his/her duly authorized representative.

3.5.4.2. In accordance with 45CSR30 – Operating Permit Program, enclosed with this permit is a Certified Emissions Statement (CES) Invoice, from the date of initial startup through the following June 30. Said invoice and the appropriate fee shall be submitted to this office no later than 30 days prior to the date of initial startup. For any startup date other than July 1, the permittee shall pay a fee or prorated fee in accordance with Section 4.5 of 45CSR22. A copy of this schedule may be found attached to the Certified Emissions Statement (CES) Invoice.

3.5.5. **Emission inventory.** At such time(s) as the Secretary may designate, the permittee herein shall prepare and submit an emission inventory for the previous year, addressing the emissions from the facility and/or process(es) authorized herein, in accordance with the emission inventory submittal requirements of the Division of Air Quality. After the initial submittal, the Secretary may, based upon the type and quantity of the pollutants emitted, establish a frequency other than on an annual basis.

4.0. Source-Specific Requirements

4.1. Limitations and Standards

4.1.1. The facility shall consist of only the pollutant-emitting equipment and processes identified under Section 1.0 of this permit. In accordance with the information filed under Permit Application R13-3714, the equipment shall be installed, maintained and operated so as to minimize any fugitive escape of pollutants and the equipment/processes shall use the specified air pollution control devices.

4.1.2. **Maximum Horsepower.** The maximum horsepower of each engine (1S – 117S) shall be 28,194 hp.

4.1.3. **Operation Modes.** The engines (1S – 117S) have the ability to operate in the following operational modes. Each operation mode shall abide by the descriptions included in Permit Application R13-3714.

Operation Mode
Normal
Compensation
Emergency
Startup (Speed Up, Fuel Switch, Generator Switched On, Load Up Cold Control)
Shutdown (Ramp Down, Min Load, Spin Out)

4.1.4. The maximum hourly emissions during each operating mode shall not exceed the following for each engine (1S – 117S):

a. Normal

Pollutant	Maximum Hourly Emissions (lb/hr)
Nitrogen Oxides	0.14
Carbon Monoxide	0.34
Volatile Organic Compounds	0.23
Particulate Matter-10/2.5[1]	0.34
Sulfur Dioxide	0.01
Total Hazardous Air Pollutants	0.004

[1] Includes both filterable and condensable particulate matter.

b. Compensation

Pollutant	Maximum Hourly Emissions (lb/hr)
Nitrogen Oxides	0.46
Carbon Monoxide	1.41
Volatile Organic Compounds	0.27
Particulate Matter-10/2.5[1]	0.53
Sulfur Dioxide	0.01
Total Hazardous Air Pollutants	0.005

[1] Includes both filterable and condensable particulate matter.

c. Emergency

Pollutant	Maximum Hourly Emissions (lb/hr)
Nitrogen Oxides	10.35
Carbon Monoxide	0.58
Volatile Organic Compounds	0.29
Particulate Matter-10/2.5[1]	1.29
Sulfur Dioxide	0.11
Total Hazardous Air Pollutants	0.005

[1] Includes both filterable and condensable particulate matter.

d. Startup – Speed Up

Pollutant	Maximum Hourly Emissions (lb/hr)
Nitrogen Oxides	89.54
Carbon Monoxide	2.50
Volatile Organic Compounds	19.49
Particulate Matter-10/2.5[1]	0.34
Sulfur Dioxide	0.10
Total Hazardous Air Pollutants	0.32

[1] Includes both filterable and condensable particulate matter.

e. Startup – Fuel Switch

Pollutant	Maximum Hourly Emissions (lb/hr)
Nitrogen Oxides	4.81
Carbon Monoxide	8.65
Volatile Organic Compounds	13.07
Particulate Matter-10/2.5[1]	0.53
Sulfur Dioxide	0.01
Total Hazardous Air Pollutants	0.22

[1] Includes both filterable and condensable particulate matter.

g. Startup – Generator Switched On

Pollutant	Maximum Hourly Emissions (lb/hr)
Nitrogen Oxides	8.15
Carbon Monoxide	9.25
Volatile Organic Compounds	12.48
Particulate Matter-10/2.5[1]	0.46
Sulfur Dioxide	0.01
Total Hazardous Air Pollutants	0.21

[1] Includes both filterable and condensable particulate matter.

h. Startup – Load Up Cold Control

Pollutant	Maximum Hourly Emissions (lb/hr)
Nitrogen Oxides	6.94
Carbon Monoxide	7.16
Volatile Organic Compounds	9.14
Particulate Matter-10/2.5[1]	0.43
Sulfur Dioxide	0.01
Total Hazardous Air Pollutants	0.15

[1] Includes both filterable and condensable particulate matter.

i. Shutdown – Ramp Down

Pollutant	Maximum Hourly Emissions (lb/hr)
Nitrogen Oxides	0.10
Carbon Monoxide	0.83
Volatile Organic Compounds	0.15
Particulate Matter-10/2.5[1]	0.32
Sulfur Dioxide	0.01
Total Hazardous Air Pollutants	0.003

[1] Includes both filterable and condensable particulate matter.

j. Shutdown – Min Load

Pollutant	Maximum Hourly Emissions (lb/hr)
Nitrogen Oxides	2.44
Carbon Monoxide	4.62
Volatile Organic Compounds	3.75
Particulate Matter-10/2.5[1]	0.46
Sulfur Dioxide	0.07
Total Hazardous Air Pollutants	0.06

[1] Includes both filterable and condensable particulate matter.

k. Shutdown – Spin Out

Pollutant	Maximum Hourly Emissions (lb/hr)
Nitrogen Oxides	2.89
Carbon Monoxide	5.62
Volatile Organic Compounds	7.84
Particulate Matter-10/2.5[1]	0.53
Sulfur Dioxide	0.07
Total Hazardous Air Pollutants	0.13

[1] Includes both filterable and condensable particulate matter.

4.1.5. The maximum aggregate total annual emissions[1] from the engines (1S – 117S) shall not exceed the following:

Pollutant	Maximum Annual Emissions (tons/year)[1]
Nitrogen Oxides	194.30
Carbon Monoxide	205.62
Volatile Organic Compounds	116.59
Particulate Matter-10/2.5[2]	186.53
Sulfur Dioxide	9.93
Total Hazardous Air Pollutants	0.86

[1] Includes all operation modes in permit condition 4.1.4.
[2] Includes both filterable and condensable particulate matter.

Compliance with the annual emission limits shall be determined by multiplying each operational mode hourly emissions in permit condition 4.1.4 by the hours operated in each operation mode.

4.1.6. The permittee shall meet the air pollution control technology requirements for each engine (1S – 117S). The emission control systems for the engines consist of two main systems. The dry system on the high pressure side of the engine (before the turbocharger) and the wet system on the low pressure side, which is downstream of the turbocharger. The dry systems consist of an oxidation catalyst and an SCR catalyst. The catalytic reduction of CO has a reduction efficiency of over 99%. The same system oxidizes VOC emissions with a reduction efficiency of 99%. The de-NOx unit is a urea based SCR technology, and the reduction efficiency exceeds 90%. The wet system consists of four (4) stages, which reduce NOx further with 90.9% reduction efficiency and SO2 with 70% reduction efficiency. The emission abatement system (dry and wet) that will be employed on each engine shall meet the following emissions reductions when operating in the following modes:

Mode	NOx (%)	CO (%)	VOC (%)	PM (%)	SO_2 (%)
Speed Up	0	0	0	0	95.0
Fuel Changeover	0	0	0	0	99.0
Generator Switched On	0	0	0	0	99.0
Load Up Cold Control	25.0	25.0	25.0	0	99.0
Normal Operation	99.0	99.0	99.0	25.0	99.0
Compensation Mode	99.0	95.0	99.0	25.0	99.0
Ramp Down	99.0	94.0	99.0	25.0	99.0
Min Load	70.0	50.0	70.0	0	70.0
Spin Out	40.0	35.0	40.0	0	40.0
Emergency	98.0	91.0	99.0	25.0	99.0

4.1.7. During startup and shutdown operations, the permittee shall minimize emissions by:

a. Operating and maintaining the engines (1S – 117S) and associated air pollution control devices (1C – 117C) in accordance with good combustion and air pollution control practices, safe operating practices, and protection of the facility. Good combustion and air pollution control practices shall mean proper operation and maintenance of the engine control systems and air pollution control equipment in accordance with manufacturer specifications. Additionally, it shall mean such practices that promote sufficient residence time of fuel in the combustion zone, thorough mixing of air and fuel, and proper combustion temperatures.

b. Implementing operations and maintenance practices comprised of maintaining a high level of steady state operation time and minimizing (as much as practicable) the frequency of startup and shutdown events.

4.1.8. **Fuel Throughput Parameters.** The engines (1S – 117S) are capable of firing natural gas with co-firing diesel or diesel fuel only. The following maximum hourly fuel consumptions apply to the engines:

Mode	Maximum NG Hourly Throughput (scf/hr per engine)	Maximum Diesel Hourly Throughput (gal/hr per engine)[1]
Speed Up	0	143.46
Fuel Changeover	13,994	1.43
Generator Switched On	27,459	2.35
Load Up Cold Control	33,993	2.61
Normal Operation	98,924	3.91
Compensation Mode	138,112	3.91
Ramp Down	52,882	3.13
Min Load	27,459	2.35
Spin Out	13,994	1.43
Emergency	0	798.13

[1] Sulfur content of ultra-low sulfur diesel (ULSD) fuel shall be less than 15 ppm.

4.1.9. **Annual Operational Limitation.**

a. The operating hours of each engine (1S – 117S), the throughput of each type of fuel (natural gas/diesel), and operation mode (permit condition 4.1.3) will be continuously monitored and recorded. The permittee will keep records of the fuel consumption (natural gas/diesel), and operating hours (natural gas/diesel) for each engine. The 12-month rolling sum of emissions will be calculated monthly.

b. Natural gas and diesel fuel meters shall be installed on each engine (1S – 117S).

c. Operational hour meters shall be installed on each engine (1S – 117S).

4.1.10. In order to minimize NOx emissions, within 180 days of startup, the permittee shall determine the optimal injection rate of aqueous ammonia into the SCR. The permittee shall then operate the SCR at the determined optimal injection rate.

4.1.11. The permittee shall meet the following emission standards:

a. For engines (1S – 117S) installed on or after January 1, 2016, limit the emissions of NOX in the stationary CI internal combustion engine exhaust to the following:

i. 3.4 g/KW-hr (2.5 g/HP-hr) when maximum engine speed is less than 130 rpm;
ii. Reduce particulate matter (PM) emissions by 60 percent or more, or limit the emissions of PM in the stationary CI internal combustion engine exhaust to 0.15 g/KW-hr (0.11 g/HP-hr).

[40CFR§60.4204(c)]

4.1.12. The permittee must operate and maintain stationary CI ICE that achieve the emission standards as required in §§ 60.4204 and 60.4205 over the entire life of the engines (1S – 117S).
[40CFR§60.4206]

4.1.13. The permittee shall meet the following fuel requirements:

a. Beginning June 1, 2012, owners and operators of stationary CI ICE subject to this subpart with a displacement of greater than or equal to 30 liters per cylinder must use diesel fuel that meets a maximum per-gallon sulfur content of 1,000 parts per million (ppm).
[40CFR§60.4207(d)]

4.1.14. The engines (1S – 117S) shall use the air pollution control devices (1C – 117C) specified in Section 1.0 and permit condition 4.1.6 and identified in Permit Application R13-3714 at all times when in operation except during periods of startup and shutdown when operating temperatures do not allow for proper use of the air pollution control devices.

4.1.15. The maximum annual throughput of diesel fuel to the storage tanks shall not exceed the following:

Storage Tank ID	Nominal Capacity (gal)	Product Stored	Maximum Annual Throughput (gal/yr)
TK1 – TK40	170,000 (each)	Diesel Fuel	3,907,000 (all tanks) Normal Operation

4.1.16. The storage tanks (TK1 – TK40) shall be designed and operated as specified in the paragraphs (a) through (c).

a. The cover and all openings on the cover (e.g., access hatches, sampling ports, pressure relief valves and gauge wells) shall form a continuous impermeable barrier over the entire surface area of the liquid in the storage vessel.

b. Each cover opening shall be secured in a closed, sealed position (e.g., covered by a gasketed lid or cap) whenever material is in the unit on which the cover is installed except during those times when it is necessary to use an opening as follows:

(i) To add material to, or remove material from the unit (this includes openings necessary to equalize or balance the internal pressure of the unit following changes in the level of the material in the unit);

(ii) To inspect or sample the material in the unit; or

(iii) To inspect, maintain, repair, or replace equipment located inside the unit.

c. The storage tanks (TK1 – TK40) thief hatch shall be weighted and properly seated. **[45CSR§13-5.10]**

4.1.17. The permittee shall comply with all applicable provisions of 45 CSR 17 to minimize fugitive particulate matter emissions on the haul roads.

4.1.18. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.
[45CSR§13-5.10]

4.1.19. The permittee shall install, maintain, and operate all above-ground piping, valves, pumps, etc. that service lines in the transport of potential sources of regulated air pollutants to minimize any fugitive escape of regulated air pollutants (leak). Any above-ground piping, valves, pumps, etc. that shows signs of excess wear that have a reasonable potential for fugitive emissions of regulated air pollutants shall be repaired or replaced.
[45CSR§13-5.10]

4.2. Monitoring Requirements

4.2.1. To determine compliance with permit conditions 4.1.2, 4.1.3, 4.1.4, 4.1.5, 4.1.6, and 4.1.9, the permittee shall monitor the operation type (listed in permit condition 4.1.4), number of startup/shutdown events, and hours of operation in each operating mode (natural gas/diesel) on a daily basis.

4.2.2. To demonstrate compliance with permit condition 4.1.8, the permittee shall monitor fuel consumption (natural gas/diesel) on a daily basis.

4.2.3. To demonstrate compliance with permit conditions 4.1.10 and 4.1.14, the permittee shall monitor the operating times for the air pollution control devices on at least an hourly basis.

4.2.4. The permittee will install air pollution control devices on the engines (1S – 117S) to show compliance with permit condition 4.1.6.b. The air pollution control devices shall be continuously

monitored to verify proper operation. The permittee shall operate the air pollution control devices in accordance with manufacturer specifications. **[45CSR§13-5.10]**

4.2.5. To demonstrate compliance with permit condition 4.1.15, the permittee shall monitor diesel fuel unloading on a daily basis.

4.2.6. To demonstrate compliance with permit condition 4.1.17, the permittee shall conduct a visible inspection of the paved roads once each operating day to ensure no fugitive particulate matter emissions from diesel truck and employee traffic are generated. If necessary, roads will be swept and/or watered to minimize fugitive particulate matter.

4.2.7. The permittee shall, at the time of initial startup, maintain on-site and have readily available to be made available to the Director or his/her representative upon request, a copy of the all current vendor guarantees relevant to the air emissions associated with the facility. This includes information relating to the performance of both emission units and control devices.

4.2.8. The permittee shall meet all applicable requirements, including those not specified above, as given under 45 CSR 4, 45 CSR 13, 45 CSR 16, 45 CSR 17, 45 CSR 30, 45 CSR 34, 40 CFR 60, Subpart IIII, and 40 CFR 63 Subpart ZZZZ. Any final revisions made to the above rules will, where applicable, supercede those specifically cited in this permit.

4.2.9. **Record of Monitoring.** The permittee shall keep records of monitoring information that include the following:

a. The date, place as defined in this permit, and time of sampling or measurements;
b. The date(s) analyses were performed;
c. The company or entity that performed the analyses;
d. The analytical techniques or methods used;
e. The results of the analyses; and
f. The operating conditions existing at the time of sampling or measurement.

4.3. Testing Requirements

4.3.1. See Facility-Wide Testing Requirements Section 3.3.

4.3.2. The permittee shall meet the following testing requirements for the engines (1S – 117S):

a. Conduct an initial performance test to demonstrate initial compliance with the emission standards as specified in § 60.4213.

b. Establish operating parameters to be monitored continuously to ensure the stationary internal combustion engine continues to meet the emission standards. The owner or operator must petition the Administrator for approval of operating parameters to be monitored continuously. The petition must include the information described in paragraphs (d)(2)(i) through (v) of this section.

i. Identification of the specific parameters you propose to monitor continuously;

ii. A discussion of the relationship between these parameters and NOX and PM emissions, identifying how the emissions of these pollutants change with changes in these parameters, and how limitations on these parameters will serve to limit NOX and PM emissions;

iii. A discussion of how you will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations;

iv. A discussion identifying the methods and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and

v. A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.

c. For non-emergency engines with a displacement of greater than or equal to 30 liters per cylinder, conduct annual performance tests to demonstrate continuous compliance with the emission standards as specified in § 60.4213.

[40CFR§4211(d)]

4.4. Recordkeeping Requirements

4.4.1. To determine compliance with permit conditions 4.1.5, 4.1.8, and 4.1.9, the permittee shall keep records of the operating hours of each engine, the throughput of each type of fuel (natural gas/diesel), and operation type (as outlined in permit condition 4.1.4) on a daily basis. The permittee shall multiply the hourly operation type emissions in permit condition 4.1.4 by the number of hours operated in that operational mode. The permittee shall calculate the emissions monthly and on a twelve-month rolling total. A twelve-month rolling total shall mean the sum of operating hours at any given time during the previous twelve consecutive calendar months.

4.4.2. To determine compliance with permit condition 4.2.7, the permittee shall keep records of the daily road particulate matter fugitive inspections and any corrective actions taken.

4.4.3. To determine compliance with permit conditions 4.1.15 and 4.2.6, the permittee shall keep records of the diesel unloading on a daily basis. Compliance with the throughput limit shall be determined on a 12 month rolling total basis.

4.4.4. To demonstrate compliance with permit condition 4.1.19, the permittee shall keep records of the fugitive emissions components repairs and replacements.

4.4.5. The permittee shall keep the following engine (1S – 117S) records:

a. All notifications submitted to comply with this subpart and all documentation supporting any notification.

b. Maintenance conducted on the engine.

c. If the stationary CI internal combustion is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards.

d. If the stationary CI internal combustion is not a certified engine, documentation that the engine meets the emission standards.

[40CFR§4214(a)(2)]

4.5. Reporting Requirements

4.5.1. See Facility-Wide Reporting Requirements Section 3.5.

4.5.2. The permittee shall submit notifications of the date construction commences, the actual date of initial startup as required under §60.7. The notification must include the information below. Beginning on February 26, 2025, submit the notification electronically according to paragraph (g) of this section.

a. Name and address of the owner or operator;

b. The address of the affected source;

c. Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;

d. Emission control equipment; and

e. Fuel used.
[40CFR§4214(a)(1)]

CERTIFICATION OF DATA ACCURACY

I, the undersigned, hereby certify that, based on information and belief formed after reasonable inquiry, all information contained in the attached _____, representing the period beginning _____ and ending _____, and any supporting documents appended hereto, is true, accurate, and complete.

Signature[1] (please use blue ink) _____ Responsible Official or Authorized Representative _____ Date

Name & Title (please print or type) _____ Name _____ Title

Telephone No. _____ Fax No. _____

[1] This form shall be signed by a "Responsible Official." "Responsible Official" means one of the following:

a. For a corporation: The president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:

(i) the facilities employ more than 250 persons or have a gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars), or

(ii) the delegation of authority to such representative is approved in advance by the Director;

b. For a partnership or sole proprietorship: a general partner or the proprietor, respectively;

c. For a municipality, State, Federal, or other public entity: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of U.S. EPA); or

d. The designated representative delegated with such authority and approved in advance by the Director.

Williams, Jerry <jerry.williams@wv.gov>

Public Meeting Request - Adams Fork Data Center Permits

Williams, Jerry <jerry.williams@wv.gov> Tue, Jul 22, 2025 at 10:18 AM
To: "Patrick E. Ward" <PEWard@potesta.com>

This is a sample of the public meeting requests that we have received.

---------- Forwarded message ---------
From: **Robin Blakeman** <rbrobinjh@everyactioncustom.com>
Date: Wed, Jul 16, 2025 at 7:56 AM
Subject: Public Meeting Request - Adams Fork Data Center Permits
To: <jerry.williams@wv.gov>

Dear Division of Air Quality Jerry Williams,

I urge you to host two public hearings on the Adams Fork Harless Data Center Energy Campus and Adams Fork Data Center Energy Campus permits. These proposals are unique, especially for this area, and are part of a broad vision. Therefore, I request that you hold one meeting in the City of Logan and another in the Town of Gilbert. Each meeting should cover both permits.

My main concern is that NO additional fees or costs should be passed on to existing rate payers - residential or business - because of this proposed facility. Rate payers in WV are already heavily burdened with utility costs; many residential customers are being forced to choose between paying their electric bill or paying for other necessities - like food and medicine.

This should be a priority because the impacts of these permits span from Whitman Creek to Ben Creek. We need an opportunity to learn more from WVDEP, speak with the developer, and voice our concerns regarding these permits.

Sincerely,
Robin Blakeman
32 Nedra Dr Barboursville, WV 25504-1023
rbrobinjh@gmail.com

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Jerry Williams, P.E.
Engineer, Division of Air Quality

WV Department of Environmental Protection
601 57th Street SE, Charleston, WV 25304
Phone 304-414-1214
Web dep.wv.gov **Email** jerry.williams@wv.gov

18. Final Permit R13-3714

West Virginia Department of Environmental Protection

Harold D. Ward
Cabinet Secretary

Construction Permit

R13-3714

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§22-5-1 et seq.) and 45 C.S.R. 13 – Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits and Procedures for Evaluation. The permittee identified at the above-referenced facility is authorized to construct the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Issued to:

TransGas Development Systems, LLC
Adams Fork Harless Data Center Energy Campus
059-00133

Laura M. Crowder

Laura M. Crowder
Director, Division of Air Quality

Laura M. Crowder
Digitally signed by: Laura M. Crowder
DN: CN = Laura M. Crowder email = Laura.M.Crowder@wv.gov C = US O = WV DEP OU = DAQ
Date: 2025.10.02 10:51:12 -04'00'

Issued: October 2, 2025

Facility Location:	Off of 22 Mine Road, Holden, Mingo County, West Virginia
Mailing Address:	630 First Avenue, Suite 30C, New York, NY 10016-3799
Facility Description:	Off-grid Power Generation Facility
NAICS Codes:	221112 – Fossil Fuel Electric Power Generation
UTM Coordinates:	401.420 km Easting • 4,179.002 km Northing • Zone 17
Latitude/Longitude:	37.75302 / -82.11905
Permit Type:	Construction
Description of Change:	Construction and operation of an off-grid power generation facility.

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §§22-5-14.

As a result of the granting of this permit, the source is subject to 45CSR30. The Title V (45CSR30) application will be due within twelve (12) months after the date of the commencement of the operation or activity (activities) authorized by this permit, unless granted a deferral or exemption by the Director from such filing deadline pursuant to a request from the permittee.

Table of Contents

1.0. Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
1S – 117S	1E – 117E	Engine 1 – Engine 117	2026	28,194 HP (each)	1C – 117C
118S – 157S	118E – 157E	ULSD Tanks (TK1 – TK40)	2026	170,000 gal (each)	None
DM	DM	Hydrous Ammonia Tanks 1-39	2026	4,600 gal (each)	None
DM	DM	Caustic Soda Tanks 1-39	2026	4,600 gal (each)	None
DM	DM	Sulfuric Acid Tanks 1-39	2026	4,600 gal (each)	None
DM	DM	Sodium Chlorite Tanks 1-39	2026	4,600 gal (each)	None
DM	DM	Sodium Hydrosulfide Tanks 1-39	2026	4,600 gal (each)	None
UNLOAD	UNLOAD-E	Diesel Truck Unloading	2026	21,297,199 gal/yr (All Operating Modes)	None

2.0. General Conditions

2.1. Definitions

2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.

2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.

2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.

2.2. Acronyms

CAAA	Clean Air Act Amendments	**NO_X**	Nitrogen Oxides
CBI	Confidential Business Information	**NSPS**	New Source Performance Standards
CEM	Continuous Emission Monitor	**PM**	Particulate Matter
CES	Certified Emission Statement	**$PM_{2.5}$**	Particulate Matter less than 2.5 µm in diameter
C.F.R. *or* CFR	Code of Federal Regulations	**PM_{10}**	Particulate Matter less than 10µm in diameter
CI	Compression Ignition	**Ppb**	Pounds per Batch
CO	Carbon Monoxide	**Pph**	Pounds per Hour
C.S.R. *or* CSR	Codes of State Rules	**Ppm**	Parts per Million
DAQ	Division of Air Quality	**Ppm_V or ppmv**	Parts per Million by Volume
DEP	Department of Environmental Protection	**PSD**	Prevention of Significant Deterioration
dscm	Dry Standard Cubic Meter	**Psi**	Pounds per Square Inch
FOIA	Freedom of Information Act	**SCR**	Selective Catalytic Reduction
HAP	Hazardous Air Pollutant	**SIC**	Standard Industrial Classification
HON	Hazardous Organic NESHAP	**SIP**	State Implementation Plan
HP	Horsepower	**SO_2**	Sulfur Dioxide
ICE	Internal Combustion Engine	**TAP**	Toxic Air Pollutant
lbs/hr	Pounds per Hour	**TPY**	Tons per Year
LDAR	Leak Detection and Repair	**TRS**	Total Reduced Sulfur
M	Thousand	**TSP**	Total Suspended Particulate
MACT	Maximum Achievable Control Technology	**USEPA**	United States Environmental Protection Agency
MDHI	Maximum Design Heat Input	**UTM**	Universal Transverse Mercator
MM	Million	**VEE**	Visual Emissions Evaluation
MMBtu/hr *or* mmbtu/hr	Million British Thermal Units per Hour	**VOC**	Volatile Organic Compounds
MMCF/hr *or* mmcf/hr	Million Cubic Feet per Hour	**VOL**	Volatile Organic Liquids
NA	Not Applicable		
NAAQS	National Ambient Air Quality Standards		
NESHAPS	National Emissions Standards for Hazardous Air Pollutants		

2.3. Authority

This permit is issued in accordance with West Virginia air pollution control law W.Va. Code §§ 22-5-1. et seq. and the following Legislative Rules promulgated thereunder:

2.3.1. 45CSR13 – *Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits and Procedures for Evaluation*;

2.4. Term and Renewal

2.4.1. This Permit shall remain valid, continuous and in effect unless it is revised, suspended, revoked or otherwise changed under an applicable provision of 45CSR13 or any other applicable legislative rule;

2.5. Duty to Comply

2.5.1. The permitted facility shall be constructed and operated in accordance with the plans and specifications filed in Permit Application R13-3714 and any modifications, administrative updates, or amendments thereto. The Secretary may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to;
[45CSR§§13-5.10 and -10.3.]

2.5.2. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA;

2.5.3. Violations of any of the conditions contained in this permit, or incorporated herein by reference, may subject the permittee to civil and/or criminal penalties for each violation and further action or remedies as provided by West Virginia Code 22-5-6 and 22-5-7;

2.5.4. Approval of this permit does not relieve the permittee herein of the responsibility to apply for and obtain all other permits, licenses, and/or approvals from other agencies; i.e., local, state, and federal, which may have jurisdiction over the construction and/or operation of the source(s) and/or facility herein permitted.

2.6. Duty to Provide Information

The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for administratively updating, modifying, revoking, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.

2.7. Duty to Supplement and Correct Information

Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.

2.8. Administrative Update

The permittee may request an administrative update to this permit as defined in and according to the procedures specified in 45CSR13.
[45CSR§13-4.]

2.9. Permit Modification

The permittee may request a minor modification to this permit as defined in and according to the procedures specified in 45CSR13.
[45CSR§13-5.4.]

2.10 Major Permit Modification

The permittee may request a major modification as defined in and according to the procedures specified in 45CSR14 or 45CSR19, as appropriate.
[45CSR§13-5.1]

2.11. Inspection and Entry

The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:

a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;

d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

2.12. *[Reserved]*

2.13. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a permittee in an enforcement action that it should have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or

reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.

2.14. Suspension of Activities

In the event the permittee should deem it necessary to suspend, for a period in excess of sixty (60) consecutive calendar days, the operations authorized by this permit, the permittee shall notify the Secretary, in writing, within two (2) calendar weeks of the passing of the sixtieth (60) day of the suspension period.

2.15. Property Rights

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

2.16. Severability

The provisions of this permit are severable and should any provision(s) be declared by a court of competent jurisdiction to be invalid or unenforceable, all other provisions shall remain in full force and effect.

2.17. Transferability

This permit is transferable in accordance with the requirements outlined in Section 10.1 of 45CSR13. **[45CSR§13-10.1.]**

2.18. Notification Requirements

The permittee shall notify the Secretary, in writing, no later than thirty (30) calendar days after the actual startup of the operations authorized under this permit.

2.19. Credible Evidence

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defense otherwise available to the permittee including, but not limited to, any challenge to the credible evidence rule in the context of any future proceeding.

3.0. Facility-Wide Requirements

3.1. Limitations and Standards

3.1.1. **Open burning.** The open burning of refuse by any person, firm, corporation, association or public agency is prohibited except as noted in 45CSR§6-3.1.
[45CSR§6-3.1.]

3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause, suffer, allow or permit any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.
[45CSR§6-3.2.]

3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management, and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them.
[40CFR§61.145(b) and 45CSR§34]

3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.
[45CSR§4-3.1] ***[State Enforceable Only]***

3.1.5. **Permanent shutdown.** A source which has not operated at least 500 hours in one 12-month period within the previous five (5) year time period may be considered permanently shutdown, unless such source can provide to the Secretary, with reasonable specificity, information to the contrary. All permits may be modified or revoked and/or reapplication or application for new permits may be required for any source determined to be permanently shutdown.
[45CSR§13-10.5.]

3.1.6. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11.
[45CSR§11-5.2.]

3.2. Monitoring Requirements

3.2.1. **Emission Limit Averaging Time.** Unless otherwise specified, compliance with all annual limits shall be based on a rolling twelve month total. A rolling twelve month total shall be the sum of the measured parameter of the previous twelve calendar months. Compliance with all hourly emission limits shall be based on the applicable NAAQS averaging times or, where applicable, as given in any approved performance test method.

3.3. Testing Requirements

3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63 in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit may be revised in accordance with 45CSR§13-4. or 45CSR§13-5.4 as applicable.

b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit may be revised in accordance with 45CSR§13-4. or 45CSR§13-5.4 as applicable.

c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.

d. The permittee shall submit a report of the results of the stack test within sixty (60) days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1.; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:

1. The permit or rule evaluated, with the citation number and language;
2. The result of the test for each permit or rule condition; and,
3. A statement of compliance or noncompliance with each permit or rule condition.

[WV Code § 22-5-4(a)(14-15) and 45CSR13]

3.4. Recordkeeping Requirements

3.4.1. **Retention of records.** The permittee shall maintain records of all information (including monitoring data, support information, reports, and notifications) required by this permit recorded in a form suitable and readily available for expeditious inspection and review. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation. The files shall be maintained for at least five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two (2) years of data shall be maintained on site. The remaining three (3) years of data may be maintained off site, but must remain accessible within a reasonable time. Where appropriate, the permittee may maintain records electronically (on a computer, on computer floppy disks, CDs, DVDs, or magnetic tape disks), on microfilm, or on microfiche.

3.4.2. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.
[45CSR§4. *State Enforceable Only.*]

3.5. Reporting Requirements

3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

3.5.2. **Confidential information.** A permittee may request confidential treatment for the submission of reporting required by this permit pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.

3.5.3. **Correspondence.** All notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, or mailed first class or by private carrier with postage prepaid to the address(es), or submitted in electronic format by email as set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

DAQ:
Director
WVDEP
Division of Air Quality
601 57th Street
Charleston, WV 25304-2345

US EPA:
Section Chief, USEPA, Region III
Enforcement and Compliance Assurance Division
Air Section (3ED21)
Four Penn Center
1600 John F Kennedy Blvd
Philadelphia, PA 19103-2852

DAQ Compliance and Enforcement[1]:
DEPAirQualityReports@wv.gov

[1]For all self-monitoring reports (MACT, GACT, NSPS, etc.), stack tests and protocols, Notice of Compliance Status Reports, Initial Notifications, etc.

3.5.4. **Operating Fee**

3.5.4.1. In accordance with 45CSR30 – Operating Permit Program, the permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality. A receipt for the appropriate fee shall be maintained on the premises for which the receipt has been issued, and shall be made immediately available for inspection by the Secretary or his/her duly authorized representative.

3.5.4.2. In accordance with 45CSR30 – Operating Permit Program, enclosed with this permit is a Certified Emissions Statement (CES) Invoice, from the date of initial startup through the following June 30. Said invoice and the appropriate fee shall be submitted to this office no later than 30 days prior to the date of initial startup. For any startup date other than July 1, the permittee shall pay a fee or prorated fee in accordance with Section 4.5 of 45CSR22. A copy of this schedule may be found attached to the Certified Emissions Statement (CES) Invoice.

3.5.5. **Emission inventory.** At such time(s) as the Secretary may designate, the permittee herein shall prepare and submit an emission inventory for the previous year, addressing the emissions from the facility and/or process(es) authorized herein, in accordance with the emission inventory submittal requirements of the Division of Air Quality. After the initial submittal, the Secretary may, based upon the type and quantity of the pollutants emitted, establish a frequency other than on an annual basis.

4.0. Source-Specific Requirements

4.1. Limitations and Standards

4.1.1. The facility shall consist of only the pollutant-emitting equipment and processes identified under Section 1.0 of this permit. In accordance with the information filed under Permit Application R13-3714, the equipment shall be installed, maintained and operated so as to minimize any fugitive escape of pollutants and the equipment/processes shall use the specified air pollution control devices.

4.1.2. **Maximum Horsepower.** The maximum horsepower of each engine (1S – 117S) shall be 28,194 hp. Only 114 of the 117 engines may operate at any one time.

4.1.3. **Operation Modes.** The engines (1S – 117S) have the ability to operate in the following operational modes. Each operation mode shall abide by the descriptions included in Permit Application R13-3714.

Operation Mode
Normal
Compensation
Emergency
Startup (Speed Up, Fuel Switch, Generator Switched On, Load Up Cold Control)
Shutdown (Ramp Down, Min Load, Spin Out)

4.1.4. The maximum hourly emissions during each operating mode shall not exceed the following for each engine (1S – 117S):

a. Normal

Pollutant	Maximum Hourly Emissions (lb/hr)
Nitrogen Oxides	0.14
Carbon Monoxide	0.34
Volatile Organic Compounds	0.23
Particulate Matter-10/2.5[1]	0.34
Sulfur Dioxide	0.01
Total Hazardous Air Pollutants	0.004
Benzene	0.00088

[1] Includes both filterable and condensable particulate matter.

b. Compensation

Pollutant	Maximum Hourly Emissions (lb/hr)
Nitrogen Oxides	0.46
Carbon Monoxide	1.41
Volatile Organic Compounds	0.27
Particulate Matter-10/2.5[1]	0.53
Sulfur Dioxide	0.01
Total Hazardous Air Pollutants	0.005
Benzene	0.0011

[1] Includes both filterable and condensable particulate matter.

c. Emergency

Pollutant	Maximum Hourly Emissions (lb/hr)
Nitrogen Oxides	10.35
Carbon Monoxide	0.58
Volatile Organic Compounds	0.29
Particulate Matter-10/2.5[1]	1.29
Sulfur Dioxide	0.11
Total Hazardous Air Pollutants	0.005
Benzene	0.00112

[1] Includes both filterable and condensable particulate matter.

d. Startup – Speed Up

Pollutant	Maximum Hourly Emissions (lb/hr)
Nitrogen Oxides	89.54
Carbon Monoxide	2.50
Volatile Organic Compounds	19.49
Particulate Matter-10/2.5[1]	0.34
Sulfur Dioxide	0.10
Total Hazardous Air Pollutants	0.32
Benzene	0.076

[1] Includes both filterable and condensable particulate matter.

e. Startup – Fuel Switch

Pollutant	Maximum Hourly Emissions (lb/hr)
Nitrogen Oxides	4.81
Carbon Monoxide	8.65
Volatile Organic Compounds	13.07
Particulate Matter-10/2.5[1]	0.53
Sulfur Dioxide	0.01
Total Hazardous Air Pollutants	0.22
Benzene	0.051

[1] Includes both filterable and condensable particulate matter.

f. Startup – Generator Switched On

Pollutant	Maximum Hourly Emissions (lb/hr)
Nitrogen Oxides	8.15
Carbon Monoxide	9.25
Volatile Organic Compounds	12.48
Particulate Matter-10/2.5[1]	0.46
Sulfur Dioxide	0.01
Total Hazardous Air Pollutants	0.21
Benzene	0.049

[1] Includes both filterable and condensable particulate matter.

g. Startup – Load Up Cold Control

Pollutant	Maximum Hourly Emissions (lb/hr)
Nitrogen Oxides	6.94
Carbon Monoxide	7.16
Volatile Organic Compounds	9.14
Particulate Matter-10/2.5[1]	0.43
Sulfur Dioxide	0.01
Total Hazardous Air Pollutants	0.15
Benzene	0.036

[1] Includes both filterable and condensable particulate matter.

h. Shutdown – Ramp Down

Pollutant	Maximum Hourly Emissions (lb/hr)
Nitrogen Oxides	0.10
Carbon Monoxide	0.83
Volatile Organic Compounds	0.15
Particulate Matter-10/2.5[1]	0.32
Sulfur Dioxide	0.01
Total Hazardous Air Pollutants	0.003
Benzene	0.0006

[1] Includes both filterable and condensable particulate matter.

i. Shutdown – Min Load

Pollutant	Maximum Hourly Emissions (lb/hr)
Nitrogen Oxides	2.44
Carbon Monoxide	4.62
Volatile Organic Compounds	3.75
Particulate Matter-10/2.5[1]	0.46
Sulfur Dioxide	0.07
Total Hazardous Air Pollutants	0.06
Benzene	0.0146

[1] Includes both filterable and condensable particulate matter.

j. Shutdown – Spin Out

Pollutant	Maximum Hourly Emissions (lb/hr)
Nitrogen Oxides	2.89
Carbon Monoxide	5.62
Volatile Organic Compounds	7.84
Particulate Matter-10/2.5[1]	0.53
Sulfur Dioxide	0.07
Total Hazardous Air Pollutants	0.13
Benzene	0.051

[1] Includes both filterable and condensable particulate matter.

4.1.5. The maximum aggregate total annual emissions[1] from the engines (1S – 117S) shall not exceed the following:

Pollutant	Maximum Annual Emissions (tons/year)[1, 3]
Nitrogen Oxides	194.30
Carbon Monoxide	205.62
Volatile Organic Compounds	116.59
Particulate Matter-10/2.5[2]	186.53
Sulfur Dioxide	9.93
Total Hazardous Air Pollutants	0.86
Benzene	0.45

[1] Includes all operation modes in permit condition 4.1.4.
[2] Includes both filterable and condensable particulate matter.
[3] Only 114 engines may operate at any one time.

Compliance with the annual emission limits shall be determined by multiplying each operational mode hourly emissions in permit condition 4.1.4 by the hours operated in each operation mode.

4.1.6. The permittee shall meet the air pollution control technology requirements for each engine (1S – 117S). The emission control systems for the engines consist of two main systems. The dry system on the high pressure side of the engine (before the turbocharger) and the wet system on the low pressure side, which is downstream of the turbocharger. The dry systems consist of an oxidation catalyst and an SCR catalyst. The catalytic reduction of CO has a reduction efficiency of over 99%. The same system oxidizes VOC emissions with a reduction efficiency of 99%. The de-NOx unit is a urea based SCR technology, and the reduction efficiency exceeds 90%. The wet system consists of four (4) stages, which reduce NOx further with 90.9% reduction efficiency and SO2 with 70% reduction efficiency. The emission abatement system (dry and wet) that will be employed on each engine shall meet the following emissions reductions when operating in the following modes:

Mode	NOx (%)	CO (%)	VOC (%)	PM (%)	SO_2 (%)
Speed Up	0	0	0	0	95.0
Fuel Changeover	0	0	0	0	99.0
Generator Switched On	0	0	0	0	99.0
Load Up Cold Control	25.0	25.0	25.0	0	99.0
Normal Operation	99.0	99.0	99.0	25.0	99.0
Compensation Mode	99.0	95.0	99.0	25.0	99.0
Ramp Down	99.0	94.0	99.0	25.0	99.0
Min Load	70.0	50.0	70.0	0	70.0
Spin Out	40.0	35.0	40.0	0	40.0
Emergency	98.0	91.0	99.0	25.0	99.0

4.1.7. During startup and shutdown operations, the permittee shall minimize emissions by:

a. Operating and maintaining the engines (1S – 117S) and associated air pollution control devices (1C – 117C) in accordance with good combustion and air pollution control practices, safe operating practices, and protection of the facility. Good combustion and air pollution control practices shall mean proper operation and maintenance of the engine control systems and air pollution control equipment in accordance with manufacturer specifications. Additionally, it shall mean such practices that promote sufficient residence time of fuel in the combustion zone, thorough mixing of air and fuel, and proper combustion temperatures.

b. Implementing operations and maintenance practices comprised of maintaining a high level of steady state operation time and minimizing (as much as practicable) the frequency of startup and shutdown events.

4.1.8. **Fuel Throughput Parameters.** The engines (1S – 117S) are capable of firing natural gas with co-firing diesel or diesel fuel only.

a. The following maximum hourly fuel consumptions apply to the engines:

Mode	Maximum NG Hourly Throughput (scf/hr per engine)	Maximum Diesel Hourly Throughput (gal/hr per engine)[1]
Speed Up	0	143.46
Fuel Changeover	13,994	1.43
Generator Switched On	27,459	2.35
Load Up Cold Control	33,993	2.61
Normal Operation	98,924	3.91
Compensation Mode	138,112	3.91
Ramp Down	52,882	3.13
Min Load	27,459	2.35
Spin Out	13,994	1.43
Emergency	0	798.13

[1] Sulfur content of ultra-low sulfur diesel (ULSD) fuel shall be less than 15 ppm.

b. The maximum aggregate annual natural gas fuel consumption for all engines (1S – 117S) shall not exceed 107,723,114,286 standard cubic feet per year.

c. The maximum aggregate annual diesel fuel consumption for all engines (1S – 117S) shall not exceed 21,297,199 gallons per year.

4.1.9. **Annual Operational Limitation.**

a. The operating hours of each engine (1S – 117S), the throughput of each type of fuel (natural gas/diesel), and operation mode (permit condition 4.1.3) will be continuously monitored and recorded. The 12-month rolling sum of emissions will be calculated monthly.

b. Natural gas and diesel fuel meters shall be installed on each engine (1S – 117S).

c. Operational hour meters shall be installed on each engine (1S – 117S).

4.1.10. In order to minimize NOx emissions, within 180 days of startup, the permittee shall determine the optimal injection rate of aqueous ammonia into the SCR for each fuel (natural gas/diesel). The permittee shall then operate the SCR at the determined optimal injection rate.

4.1.11. The permittee shall meet the following emission standards:

a. For engines (1S – 117S) installed on or after January 1, 2016, limit the emissions of NOX in the stationary CI internal combustion engine exhaust to the following:

i. 3.4 g/KW-hr (2.5 g/HP-hr) when maximum engine speed is less than 130 rpm;
ii. Reduce particulate matter (PM) emissions by 60 percent or more, or limit the emissions of PM in the stationary CI internal combustion engine exhaust to 0.15 g/KW-hr (0.11 g/HP-hr).

[40CFR§60.4204(c)]

4.1.12. The permittee must operate and maintain stationary CI ICE that achieve the emission standards as required in §§ 60.4204 and 60.4205 over the entire life of the engines (1S – 117S). **[40CFR§60.4206]**

4.1.13. The permittee shall meet the following fuel requirements:

a. Beginning June 1, 2012, owners and operators of stationary CI ICE subject to this subpart with a displacement of greater than or equal to 30 liters per cylinder must use diesel fuel that meets a maximum per-gallon sulfur content of 1,000 parts per million (ppm). **[40CFR§60.4207(d)]**

4.1.14. The engines (1S – 117S) shall use the air pollution control devices (1C – 117C) specified in Section 1.0 and permit condition 4.1.6 and identified in Permit Application R13-3714 at all times when in operation except during periods of startup and shutdown when operating temperatures do not allow for proper use of the air pollution control devices.

4.1.15. The maximum annual throughput of diesel fuel to the storage tanks shall not exceed the following:

Storage Tank ID	Nominal Capacity (gal)	Product Stored	Maximum Annual Throughput (gal/yr)
TK1 – TK40	170,000 (each)	Diesel Fuel	21,297,199 (all tanks) All Operating Modes

4.1.16. The storage tanks (TK1 – TK40) shall be designed and operated as specified in the paragraphs (a) through (c).

a. The cover and all openings on the cover (e.g., access hatches, sampling ports, pressure relief valves and gauge wells) shall form a continuous impermeable barrier over the entire surface area of the liquid in the storage vessel.

b. Each cover opening shall be secured in a closed, sealed position (e.g., covered by a gasketed lid or cap) whenever material is in the unit on which the cover is installed except during those times when it is necessary to use an opening as follows:

(i) To add material to, or remove material from the unit (this includes openings necessary to equalize or balance the internal pressure of the unit following changes in the level of the material in the unit);

(ii) To inspect or sample the material in the unit; or

(iii) To inspect, maintain, repair, or replace equipment located inside the unit.

c. The storage tanks (TK1 – TK40) thief hatch shall be weighted and properly seated. **[45CSR§13-5.10]**

4.1.17. The permittee shall comply with all applicable provisions of 45 CSR 17 to minimize fugitive particulate matter emissions on the haul roads.

4.1.18. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary. **[45CSR§13-5.10]**

4.1.19. The permittee shall install, maintain, and operate all above-ground piping, valves, pumps, etc. that service lines in the transport of potential sources of regulated air pollutants to minimize any fugitive escape of regulated air pollutants (leak). Any above-ground piping, valves, pumps, etc. that shows signs of excess wear that have a reasonable potential for fugitive emissions of regulated air pollutants shall be repaired or replaced.
[45CSR§13-5.10]

4.2. Monitoring Requirements

4.2.1. To determine compliance with permit conditions 4.1.2, 4.1.3, 4.1.4, 4.1.5, 4.1.6, and 4.1.9, the permittee shall monitor the operation type (listed in permit condition 4.1.4), number of startup/shutdown events, and hours of operation in each operating mode (natural gas/diesel) on a continuous basis.

4.2.2. To demonstrate compliance with permit condition 4.1.8, the permittee shall monitor fuel consumption (natural gas/diesel) on an hourly basis.

4.2.3. To demonstrate compliance with permit conditions 4.1.10 and 4.1.14, the permittee shall monitor the operating times for the air pollution control devices on at least an hourly basis. The permittee shall monitor the ammonia injection rate established in permit condition 4.1.10.

4.2.4. The permittee will install air pollution control devices on the engines (1S – 117S) to show compliance with permit condition 4.1.6. The air pollution control devices shall be continuously monitored to verify proper operation. The permittee shall operate the air pollution control devices in accordance with manufacturer specifications. **[45CSR§13-5.10]**

4.2.5. To demonstrate compliance with permit condition 4.1.15, the permittee shall monitor diesel fuel unloading on a daily basis.

4.2.6. To demonstrate compliance with permit condition 4.1.17, the permittee shall conduct a visible inspection of the paved roads once each operating day to minimize fugitive particulate matter emissions from diesel truck and employee traffic are generated. If necessary, roads will be swept and/or watered to minimize fugitive particulate matter.

4.2.7. The permittee shall, at the time of initial startup, maintain on-site and have readily available to be made available to the Director or his/her representative upon request, a copy of the all current vendor guarantees relevant to the air emissions associated with the facility. This includes information relating to the performance of both emission units and control devices.

4.2.8. The permittee shall meet all applicable requirements, including those not specified above, as given under 45 CSR 4, 45 CSR 13, 45 CSR 16, 45 CSR 17, 45 CSR 30, 45 CSR 34, 40 CFR 60, Subpart IIII, and 40 CFR 63 Subpart ZZZZ. Any final revisions made to the above rules will, where applicable, supercede those specifically cited in this permit.

4.2.9. **Record of Monitoring.** The permittee shall keep records of monitoring information that include the following:

a. The date, place as defined in this permit, and time of sampling or measurements;
b. The date(s) analyses were performed;
c. The company or entity that performed the analyses;
d. The analytical techniques or methods used;
e. The results of the analyses; and
f. The operating conditions existing at the time of sampling or measurement.

4.3. Testing Requirements

4.3.1. See Facility-Wide Testing Requirements Section 3.3.

4.3.2. The permittee shall meet the following testing requirements for the engines (1S – 117S):

a. Conduct an initial performance test to demonstrate initial compliance with the emission standards as specified in § 60.4213, including the NOx emission limit established in.§ 60.4213(e) and the PM emission limit established in § 60.4213(f).

b. Establish operating parameters to be monitored continuously to ensure the stationary internal combustion engine continues to meet the emission standards. The owner or operator must petition the Administrator for approval of operating parameters to be monitored continuously. The petition must include the information described in paragraphs (d)(2)(i) through (v) of this section.

i. Identification of the specific parameters you propose to monitor continuously;

ii. A discussion of the relationship between these parameters and NOX and PM emissions, identifying how the emissions of these pollutants change with changes in these parameters, and how limitations on these parameters will serve to limit NOX and PM emissions;

iii. A discussion of how you will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations;

iv. A discussion identifying the methods and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and

v. A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.

c. For non-emergency engines with a displacement of greater than or equal to 30 liters per cylinder, conduct annual performance tests to demonstrate continuous compliance with the emission standards as specified in § 60.4213.

[40CFR§4211(d)]

4.3.3. The permittee shall perform an initial performance test for CO emissions to demonstrate compliance with permit condition 4.1.4 (compliance demonstration is on a per engine basis). The initial performance test will be conducted within 60 days after achieving the maximum production rate, but not later than 180 days after initial startup. The performance test must be done at any load condition within plus or minus 25 percent of 100 percent of peak load. Separate performance testing is required for natural gas and diesel fuel. A representative number of engines will be tested as approved in the stack test protocol as required in permit condition 3.3.1.c.

The permittee shall utilize Method 10 – Determination of Carbon Monoxide Emissions from Stationary Sources (Instrumental Analyzer Procedure), Method 320 - Vapor Phase Organic and Inorganic Emissions by Extractive FTIR or approved alternative procedure outlined in permit condition 3.3.1 to comply with this permit condition.

[45CSR§13-5.10]

4.3.4. The permittee shall perform an initial performance test for benzene emissions to demonstrate compliance with permit condition 4.1.4 (compliance demonstration is on a per engine basis) during the combustion of natural gas. The initial performance test will be conducted within 60

days after achieving the maximum production rate, but not later than 180 days after initial startup. The performance test must be done at any load condition within plus or minus 25 percent of 100 percent of peak load. A representative number of engines will be tested as approved in the stack test protocol as required in permit condition 3.3.1.c.

The permittee shall utilize Method 320 - Vapor Phase Organic and Inorganic Emissions by Extractive FTIR or approved alternative procedure outlined in permit condition 3.3.1 to comply with this permit condition.
[45CSR§13-5.10]

4.3.5. The permittee may request from the Administrator a waiver for performance testing of each engine for the initial testing and/or annual testing based on the following:

Performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart unless the Administrator

(1) specifies or approves, in specific cases, the use of a reference method with minor changes in methodology,
(2) approves the use of an equivalent method,
(3) approves the use of an alternative method the results of which he has determined to be adequate for indicating whether a specific source is in compliance,
(4) waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Administrator's satisfaction that the affected facility is in compliance with the standard, or
(5) approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in this paragraph shall be construed to abrogate the Administrator's authority to require testing under section 114 of the Act.
[40CFR60.8(b)]

4.4. Recordkeeping Requirements

4.4.1. To determine compliance with permit conditions 4.1.5, 4.1.8, and 4.1.9, the permittee shall keep records of the operating hours of each engine, the throughput of each type of fuel (natural gas/diesel), and operation type (as outlined in permit condition 4.1.4) on a continuous basis. The permittee shall multiply the hourly operation type emissions in permit condition 4.1.4 by the number of hours operated in that operational mode. The permittee shall calculate the emissions monthly and on a twelve-month rolling total. A twelve-month rolling total shall mean the sum of operating hours at any given time during the previous twelve consecutive calendar months.

4.4.2. To determine compliance with permit condition 4.2.7, the permittee shall keep records of the daily road particulate matter fugitive inspections and any corrective actions taken.

4.4.3. To determine compliance with permit conditions 4.1.15 and 4.2.6, the permittee shall keep records of the diesel unloading on a daily basis. Compliance with the throughput limit shall be determined on a 12 month rolling total basis.

4.4.4. To demonstrate compliance with permit condition 4.1.19, the permittee shall keep records of the fugitive emissions components repairs and replacements.

4.4.5. The permittee shall keep the following engine (1S – 117S) records:

a. All notifications submitted to comply with this subpart and all documentation supporting any notification.

b. Maintenance conducted on the engine.

c. If the stationary CI internal combustion is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards.

d. If the stationary CI internal combustion is not a certified engine, documentation that the engine meets the emission standards.

[40CFR§4214(a)(2)]

4.4.6. To demonstrate compliance with permit condition 4.1.10, the permittee shall keep records of the optimal ammonia injection rate to each SCR when combusting either fuel (natural gas/diesel).

4.4.7. To demonstrate compliance with permit conditions 4.1.11 and 4.3.2, the permittee shall keep records of the operating parameters established in permit condition 4.3.2 that will be monitored continuously to ensure the stationary internal combustion engine continues to meet the emission standards.

4.5. Reporting Requirements

4.5.1. See Facility-Wide Reporting Requirements Section 3.5.

4.5.2. The permittee shall submit notifications of the date construction commences, the actual date of initial startup as required under §60.7. The notification must include the information below. Beginning on February 26, 2025, submit the notification electronically according to paragraph (g) of this section.

i. Name and address of the owner or operator;
ii. The address of the affected source;

iii. Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;

iv. Emission control equipment; and

v. Fuel used.

[40CFR§4214(a)(1)]

If you are required to submit notifications or reports following the procedure specified in this paragraph (g), you must submit notifications or reports to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI), which can be accessed through the EPA's Central Data Exchange (CDX) (https://cdx.epa.gov/). The EPA will make all the information submitted through CEDRI available to the public without further notice to you. Do not use CEDRI to submit information you claim as CBI. Although we do not expect persons to assert a claim of CBI, if you wish to assert a CBI claim for some of the information in the report or notification, you must submit a complete file in the format specified in this subpart, including information claimed to be CBI, to the EPA following the procedures in paragraphs (g)(1) and (2) of this section. Clearly mark the part or all of the information that you claim to be CBI. Information not marked as CBI may be authorized for public release without prior notice. Information marked as CBI will not be disclosed except in accordance with procedures set forth in 40 CFR part 2. All CBI claims must be asserted at the time of submission. Anything submitted using CEDRI cannot later be claimed CBI. Furthermore, under CAA section 114(c), emissions data is not entitled to confidential treatment, and the EPA is required to make emissions data available to the public. Thus, emissions data will not be protected as CBI and will be made publicly available. You must submit the same file submitted to the CBI office with the CBI omitted to the EPA via the EPA's CDX as described earlier in this paragraph (g).

(1) The preferred method to receive CBI is for it to be transmitted electronically using email attachments, File Transfer Protocol, or other online file sharing services. Electronic

submissions must be transmitted directly to the OAQPS CBI Office at the email address oaqpscbi@epa.gov, and as described in paragraph (g) of this section, should include clear CBI markings. ERT files should be flagged to the attention of the Group Leader, Measurement Policy Group; all other files should be flagged to the attention of the Stationary Compression Ignition Internal Combustion Engine Sector Lead. If assistance is needed with submitting large electronic files that exceed the file size limit for email attachments, and if you do not have your own file sharing service, please email oaqpscbi@epa.gov to request a file transfer link.

(2) If you cannot transmit the file electronically, you may send CBI information through the postal service to the following address: OAQPS Document Control Officer (C404-02), OAQPS, U.S. Environmental Protection Agency, 109 T.W. Alexander Drive, P.O. Box 12055, Research Triangle Park, North Carolina 27711. ERT files should be sent to the attention of the Group Leader, Measurement Policy Group, and all other files should be sent to the attention of the Stationary Compression Ignition Internal Combustion Engine Sector Lead. The mailed CBI material should be double wrapped and clearly marked. Any CBI markings should not show through the outer envelope.
[40CFR§4214(g)]

4.5.3. The permittee shall submit the results of each engine's performance test before the close of business on the 60th day following the completion of the performance tests.

CERTIFICATION OF DATA ACCURACY

I, the undersigned, hereby certify that, based on information and belief formed after reasonable inquiry, all information contained in the attached _____, representing the period beginning _____ and ending _____, and any supporting documents appended hereto, is true, accurate, and complete.

Signature[1] (please use blue ink) _____ Responsible Official or Authorized Representative _____ Date

Name & Title (please print or type) _____ Name _____ Title

Telephone No. _____ Fax No. _____

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[1] This form shall be signed by a "Responsible Official." "Responsible Official" means one of the following:

a. For a corporation: The president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:

(i) the facilities employ more than 250 persons or have a gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars), or

(ii) the delegation of authority to such representative is approved in advance by the Director;

b. For a partnership or sole proprietorship: a general partner or the proprietor, respectively;

c. For a municipality, State, Federal, or other public entity: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of U.S. EPA); or

d. The designated representative delegated with such authority and approved in advance by the Director.