WEST VIRGINIA AIR QUALITY BOARD
CHARLESTON, WEST VIRGINIA

TUCKER UNITED,
WEST VIRGINIA HIGHLANDS
CONSERVANCY, and
SIERRA CLUB
Appellants,

v.

Appeal No. 25-02-AQB

DIRECTOR, DIVISION OF AIR
QUALITY, DEPARTMENT OF
ENVIRONMENTAL PROTECTION
Appellee,

NOTICE OF APPEAL

Action Complained of: Appellants respectfully assert that they are aggrieved by the Appellee's issuance, on August 15, 2025, of the attached permit to Fundamental Data LLC for its Ridgeline Facility under the West Virginia Air Pollution Control Act. Specific objections are set forth in more detail in separate numbered paragraphs attached to this notice. Generally, Appellants complain that Appellee inappropriately determined that critical information relevant to the permit could be protected as confidential information, that the Appellee permitted the facility as a synthetic minor source, that the Appellee failed to require necessary emissions monitoring, that the Appellee failed to require pollution modelling, and that the permit as issued does not meet the overall objectives and purposes of the West Virginia Air Pollution Control Act, as described in W.Va. Code § 22-5-1.

Relief Requested: Appellants respectfully request that the Board disapprove Appellee's issuance of the attached West Virginia Air Pollution Control Act permit, issued on August 15, 2025 to Fundamental Data for its Ridgeline Facility.

Specific Objections; The specific objections, including those of fact and law are set forth in more detail in separate numbered paragraphs attached hereto.

Appellants reserve the right to amend this Notice of Appeal with leave of the Board and for good cause shown

Dated this 12th day of September, 2025

J. Michael Becher (W.Va. Bar# 10588)
Appalachian Mountain Advocates
P.O. Box 11571
Charleston, WV 25339
304-382-4799
mbecher@appalmad.org

CERTIFICATE OF SERVICE

I, J. Michael Becher hereby certify that I served the foregoing Notice of Appeal, Specific Objections, Questions of Law and Fact and where required a copy of the permit by certified mail or hand delivery to the following:

By Hand Delivery (original and 8 copies)

West Virginia Air Quality Board
c/o Kenna M. DeRaimo, Clerk of the Board
601 57th Street S.E.
Charleston, WV 25304

By Hand Delivery

Director, WVDEP Division of Air Quality
601 57th Street SE
Charleston, WV 25304

By Certified Mail

Fundamental Data, LLC
c/o Casey L. Chapman, Responsible Official
125 Hirst Rd. Suite 1A
Purcellville, VA 20132

J. Michael Becher (W.Va. Bar No. 10588)

STATEMENT OF FACTS AND SPECIFIC OBJECTIONS

I. Statement of Facts

1. Appellants are citizen organizations opposed to the Appellee's issuance of a West Virginia Air Pollution Control Act to Fundamental Data for its proposed Ridgeline Facility. Each of the Appellant organizations has members who reside and/or recreate in the areas of Tucker County, West Virginia that will be negatively affected by the issuance of this permit. Additionally, each organization includes as member individuals who submitted public comments on the draft permit as proposed by the West Virginia Department of Environmental Protection.

2. Tucker United, is a coalition of Tucker County residents and allies who demand the power to shape their collective future and protect their community, families, natural resources, and economy. Tucker United's mission is to ensure that Tucker County remains a vibrant, healthy, and beautiful place where they can live, work, and play for generations to come. Tucker United Works through collective action, civic and community engagement, and public education. They ensure that all local voices are heard and that economic development honors the unique ecological, rural, and cultural heritage of the region.

3. The West Virginia Highlands Conservancy is a West Virginia non-profit organization dedicated to the preservation and wise management of West Virginia's natural resources. West Virginia Highlands Conservancy focuses primarily on the Highlands Region of West Virginia, which includes Tucker County. Their work is for the cultural, social, educational, physical health, spiritual and economic benefit of present and future generations of residents and visitors to the Highland Regions of West Virginia. West Virginia Highlands Conservancy works for government policies and actions that protect, encourage and enforce laws for the health and well-being of the natural world and her inhabitants.

4. The Sierra Club is a national non-profit organization with an active and dedicated chapter in West Virginia. The Sierra Club's purpose is to explore, enjoy and protect the wild places of the earth; to practice and promote the responsible use of Earth's ecosystems and resources; to educate and enlist humanity to protect and restore the quality of the natural and human environment; and to use all lawful means to carry out these objectives.

5. On March 18, 2025, Fundamental Data submitted a permit application for a West Virginia Air Pollution Control Act permit for its proposed Ridgeline Facility gas power station. Although this is a large plant, with a maximum heat design input of more than 5,600 MMBtu/hr the permit application proposed that the facility be permitted as a synthetic minor source of pollution with operating limits of 61,320 cumulative hours of turbine operation if powered by natural gas, and 25,000 hours if powered by diesel.

6. The permitted facility would be located on the land between the towns of Davis and Thomas, West Virginia just north of US Route 48 and near the Tucker County Landfill.

7. The permit application contains large amounts of redacted material, including information necessary to determine how projected emissions were calculated. This includes all inputs and assumptions that were used to generate emissions calculations—making it impossible for the public to review, check, verify, or understand these emissions calculations. All of the relevant calculations are literally contained in a "black box" available only to the permittee and the Department of Environmental Protection ("Department").

8. In addition to emissions data, the permit application omits more general information such as the number of turbines and brand/manufacturer of turbine. Redactions on the number of turbines makes it impossible for any reviewer, including Appellants or the public, from understanding the practical effect of the hourly operational limits that are critical to the permitting

of the Ridgeline facility as a synthetic minor source. The lack of manufacturer's information likewise makes it impossible for any review including Appellants of the public, to look up information regarding efficiency of combustion factors for the facility.

9. On April 25, 2025, Appellee notified Fundamental Data:

> [I]nformation claimed as CBI (confidential business information) may not qualify for such designation, as it falls under the definition of "Types and Amounts of Air Pollutants Discharged," as excluded under § 45-31-6 and defined under § 45-31-2.4 (and further defined under 45CSR31b). There is also some concern that the claimed CBI may not meet the eligibility requirements under § 45-31-4.1(b) and 4.1(e).

On account of this finding, the permit application was deemed to be incomplete and was returned to Fundamental Data for supplementation.

10. On May 7, 2025, Fundamental Data responded in writing, asserting that "the redacted materials meet the statutory definition of 'trade secrets' under § 45-31-2.3." Fundamental data further stated,

> The redacted information can be CBI because it is not necessary to the determination of emissions limits. Verifiable limits can be developed without the redacted material, based on general knowledge of the turbine operations, permissible fuel sources, hours of operations and other factors that can be specified in the permit. The proposed project is one where alternatives to CBI, such as the use of "aggregation, categorization, surrogate parameters, emissions monitoring and sampling, or parametric monitoring" can result in a "practically enforceable method of determining emissions." § 45-31-B-4.1.

Moreover, Fundamental data proffered that "[e]ven without the redacted material, the Department has sufficient information to set verifiable limits on the collective emissions from this equipment, which cumulatively constitute the source."

11. On May 12, 2025, Appellee responded to Fundamental Data reversing its earlier findings and allowed the application to proceed as a complete application.

12. On or about June 10, 2025, citizen groups including Tucker United and The West Virginia Highlands Conservancy appealed the Department's confidential business information decision to the Board. That appeal was docketed as 25-AQB-1.

13. On or about June 18, 2025, Appellee issued a draft permit for the Ridgeline Facility and initiated the public comment period for that draft permit. During the public comment period Appellants Tucker United, West Virginia Highlands Conservancy, and Sierra Club each commented and/or had members who provided comments on the draft permit.

14. Appellee received more than 1,600 comments regarding the draft permit, overwhelmingly opposed to the permitting of the Ridgeline Facility.

15. On or about August 15, 2025, Appellee issued the final permit to Fundamental Data for its Ridgeline Facility. On the same day, the Appellee released a response to comments and a final engineering determination for the permit. The final permit allows for the construction and operation of the Ridgeline Facility as a synthetic minor source of pollution.

16. On or about September 4, 2025, the Air Quality Board dismissed the appeal at issue in 25-AQB-1. The Board noted "that dismissal [was] granted because the appeal was based upon a draft permit and the Board concludes that a draft permit is not an official action of the West Virginia Department of Environmental Protection, by its very nature a draft permit can be modified before the actual permit is issued."

17. Appellants are raising issues regarding confidential business information in this appeal of the final issued permit as a result of the Board's order and dismissal of the prior appeal.

18. Upon information and belief, the use of different assumptions or inputs into projected emission calculations would have increased total projected emissions above that which would have allowed the Ridgeline Facility to be permitted as a minor source.

19. The final permit and associated documents illustrate that Appellee and the permittee used manufacturer specific information to calculate projected emissions for pollutants including but not limited to NOx and formaldehyde.

20. Upon information and belief, in evaluating the permit the Appellee did not consider fugitive NOx emissions from any source, including but not limited to trucks using a haul road unloading diesel at the facility.

21. Upon information and belief, the design capacity of the Ridgeline Facility would make it one of the three for four largest electric power generation facilities in the state of West Virginia.

22. Upon information and belief, no other state has permitted a facility with as large a design heat input as the Ridgeline Facility as a minor source of pollution, synthetic or otherwise.

23. The permit does not require periodic visual emissions testing or weight emissions testing.

24. During the permitting process, the Appellee did not require the permittee to undertake any pollutant dispersion modeling, or other modeling that could be used to determine the location and effects of pollution from the Ridgeline Facility on residents, visitors, or the environment of Tucker County and other potentially affected areas.

25. During the permitting process Appellee did not require any pollution dispersion modelling analyzing the effects of the Ridgeline Facility on the environment or public health in Tucker County and other potentially affected areas.

26. Upon information and belief, Tucker County relies heavily on tourism for its economic base. Most tourism opportunities in the county are centered on outdoor activities and taking advantage of Tucker County's unique geological and ecological features. Two state parks,

national forest, and a wilderness area—Dolly Sods—are located all or in part within Tucker County.

27. Because of Tucker County's high elevation and unique geography within the state, it is subject to regular temperature inversions which trap pollutants close to the surface, reducing their dispersion and often leading to higher concentrations of air pollutants in the affected area.

28. Fundamental Data has publicly stated that the Ridgeline Facility will be associated with a large data center and/or data centers, which will be among the largest data center campuses in the world.[1]

29. Fundamental Data stated in comments to the Appellee in correspondence regarding its claim of confidential business information:

> The Ridgeline project arises at a time of extraordinary technological transformation and global competition. The United States faces growing pressure from foreign adversaries, particularly in areas of artificial intelligence and advanced computing. The essential infrastructure to support this innovation, particularly reliable power generation, has lagged nationwide due to regulatory and permitting delays. Policymakers in West Virginia, including Governor Morrissey and the Legislature, should be commended for their foresight in enacting the Power Generation and Consumption Act of 2025 (the "Power Act"), which positions the State to capitalize on this fleeting opportunity. Our project directly supports West Virginia's stated goal and represents more than a power generation resource — it is a strategic investment in national and economic security.

The only logical interpretation of these statements, including the references to artificial intelligence, advanced computing and the Power Generation and Consumption Act of 2025, is that the Ridgeline Facility is being constructed and will be operated with the intent to power a data center or multiple data centers.

---

[1] See e.g. Maher, K. (May 18, 2025) Small-Town Locals and Newcomers Unite Against a Common Foe: Data Centers. *The Wall Street Journal,* https://www.wsj.com/us-news/climate-environment/west-virginia-data-centers-2f9c9ece. *See also,* Public Comment Period Open on Air Quality Permit for Tucker County Microgrid Facility, West Virginia Public Broadcasting (June 23, 2025) https://wvpublic.org/story/energy-environment/public-comment-open-on-air-quality-permit-for-tucker-county-microgrid-facility/.

30. Upon information and belief, data centers operate continuously or nearly continuously 24 hours a day, 7 days a week, and 365 days a year. This means they need a consistent source of power, which a synthetically limited generation facility cannot provide.

31. Upon information and belief, the Ridgeline Facility will be built with the capacity to operate at thresholds above the synthetic minor limitations and emit pollutants above the limits for a minor source.

32. Upon information and belief, operating the Ridgeline Facility above synthetic minor thresholds and above the pollution limits on a minor source would allow the facility to provide more consistent and reliable power to any associated data center or data centers.

II. Specific Objections

1. Appellee inappropriately concluded that redacted information in Fundamental Data's permit application—including but not limited to, information relevant and necessary to calculate potential emissions, the number of turbines that would be installed at the facility, and the manufacturer of such turbines—was properly withheld as confidential business information and/or trade secrets pursuant to W.Va. CSR § 45-31-1 *et seq.* or other relevant law.

2. Appellee incorrectly concluded that information withheld in Fundamental Data's permit application constituted trade secrets pursuant to W.Va. CSR § 45-31-2.3.

3. Appellee incorrectly concluded that information redacted in Fundamental Data's permit application did not fit the definition of "Types and amounts of air pollutants discharged" as defined in W.Va. CSR § 45-31-2.4.

4. Appellee incorrectly concluded or did not give appropriate weight to the necessary consideration that information such as manufacturer's air emissions factors or EPA compiled

emissions factors under AP-42 could be obtained by other persons without Fundamental Data's consent pursuant to W.Va. CSR § 45-31-4.

5. Appellee's determination that redacted information in Fundamental Data's permit application was confidential business information was arbitrary, capricious, or otherwise in violation of the law and thus a violation of the West Virginia Administrative Procedure Act.

6. Appellee erroneously determined that confidential business information claimed by Fundamental Data could remain confidential despite the provision of W.Va. CSR § 45-31-6, which provides "[n]o person shall claim as confidential, information concerning the types and amounts of air pollutants discharged."

7. The Appellee violated W.Va. Code § 22-5-10(c)[2] by determining that Fundamental Data's permit application was complete and proceeding to issue a draft permit, open a period for public comment, and by issuing a final permit when there was an ongoing appeal of its determination of confidential business information.

8. Appellee erred when it failed to consider fugitive emissions from sources including but not limited to trucks transporting and unloading diesel and haul roads when it determined that the Fundamental Data Ridgeline Facility could be permitted as a minor source. Examples of other fugitive emissions sources not included in the calculations at all are fire suppression equipment, ammonia tanks or reservoirs for the Selective Catalytic Reduction controls or cooling equipment. This failure to assess emissions from fugitive sources is in violation of W.Va. CSR § 45-14-2.43.e.

---

[2] This provision provides in relevant part, "[a]ny person adversely affected by a determination, by order or otherwise, regarding information confidentiality under this article may appeal the determination to the air quality board pursuant to the provisions of article one, chapter twenty-two-b of this code. The filing of a timely notice of appeal shall stay any determination, by order or otherwise, to disclose confidential information pending a final decision on the appeal."

9. Appellee erred when it failed to consider fugitive emissions from sources including but not limited to trucks transporting and unloading diesel and haul roads when it determined the operational limits and pollution limits for the Fundamental Data Ridgeline Facility. Examples of other fugitive emissions sources not included in the calculations at all are fire suppression equipment, ammonia tanks or reservoirs for the Selective Catalytic Reduction controls or cooling equipment.

10. Appellee erred when it used redacted information specific to the equipment manufacturer for calculations of potential pollutant emissions—including but not limited to emissions of NOx, particulate, and formaldehyde.

11. Appellee erred by failing to appropriately scrutinize the assumptions and inputs supplied by Fundamental Data to determine potential pollutant emissions.

12. Appellee erred by failing to adequately consider the fact that the Fundamental Data Ridgeline Facility would be used to power a large data center or data centers which are ill-suited to rely on power generated by a synthetically limited source of electricity.

13. Appellee erred by permitting the Ridgeline Facility as a minor source considering the maximum design heat input disclosed by the applicant and the fact that few if any comparable power stations of this size have been permitted as minor sources of pollution.

14. Appellee's permitting of the Ridgeline Facility as a minor source of pollution was arbitrary, capricious, or otherwise contrary to law given the facts available to the Department.

15. The final permit erroneously omits requirements for periodic visual or weight-based emissions testing as required pursuant to W.Va. CSR § 45-2A-5.

16. Appellee failed to adhere to the purpose of the West Virgina Air Pollution Control Act, as described in W. Va. Code § 22-5-1,[3] when it permitted Fundamental Data's Ridgeline Facility as a synthetic minor source of pollution.

17. Appellee's decision not to require air dispersion or other modelling that would inform an assessment of the pollution impacts resulting from Fundamental Data's Ridgeline Facility in accordance with W.Va. CSR § 45-13-7—particularly considering the unique ecology, geography, natural resources, and economy of Tucker County and other affected areas—was arbitrary and capricious and inconsistent with the purpose and policy behind the West Virginia Air Pollution Control Act.

[3] That provision provides in relevant part, "[i]t is hereby declared to be the public policy of this state and the purpose of this article to achieve such levels of air quality as will protect human health and safety, and to the greatest degree practicable, prevent injry 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.

Questions of Law and Fact

1. Did Appellee inappropriately determine that information redacted from Fundamental Data's permit application was properly withheld from the public pursuant to W.Va. CSR § 45-31-1 *et seq.*? (This is primarily a question of law.)

2. Does the redacted information in Fundamental Data's permit application qualify as "trade secrets" pursuant to W.Va. CSR § 45-31-2.3? (This is primarily a question of law.)

3. Does the redacted information in Fundamental Data's permit application constitute "Types and amounts of air pollutants discharged" as defined in W.Va. CSR § 45-31-2.4? (This is primarily a question of law.)

4. Was the Appellee's consideration of proposed confidential business information pursuant to W.Va. CSR § 45-31-4, arbitrary, capricious, or otherwise contrary to law? (This is a mixed question of both law and fact.)

5. Is the information redacted in Fundamental Data's permit application "information concerning the types and amounts of air pollutants discharged?" (This is a mixed question of both law and fact.)

6. Did Appellee violate W.Va. Code § 22-5-10(c) when it determined Fundamental Data's permit application was administratively complete and proceeded to issue a draft permit, open public comment and issue a final permit while a challenge to its determination of confidential business information was pending? (This is primarily a question of law.)

7. Did Appellee appropriately consider fugitive emissions from all appropriate sources and for all appropriate pollutants when it permitted the Ridgeline Facility as a synthetic minor source? (This is a mixed question of both law and fact.)

8. Did Appellee appropriately consider fugitive emissions from all appropriate sources and for all appropriate pollutants when it established limits for the Ridgeline Facility? (This is a mixed question of both law and fact.)

9. Did the Appellee use the appropriate inputs and assumptions, or appropriately scrutinize the inputs and assumptions provided by Fundamental Data when it calculated potential emissions for all pollutants for the Ridgeline Facility? (This is a mixed question of both law and fact.)

10. Was the Appellee determination not to consider the fact that the Ridgeline Facility will be used to power a large data center or data centers arbitrary, capricious, or otherwise in violation of the law? (This is a mixed question of both law and fact.)

11. Was the Appellee's determination to permit the Ridgeline Facility as a synthetic minor source arbitrary, capricious, or otherwise contrary to the law given the ability (and likelihood) of the facility to operate well above the limits established, the maximum design heat input, and other characteristics of the facility—particularly when comparable electric power generation facilities are typically permitted as major sources? (This is a mixed question of both law and fact.)

12. Was the Appellee's permitting of the Fundamental Data's Ridgeline Facility consistent with the purpose and policy of the West Virginia Air Pollution Control Act as described in W.Va. Code § 22-5-1? (This is a mixed question of both law and fact.)

13. Was the Appellee's decision not to require dispersion or other modelling of pollutants pursuant to W.Va. CSR § 45-13-7, consistent with the purpose and policy of the West Virginia Air Pollution Control Act as described in W.Va. Code § 22-5-1? (This is a mixed question of both law and fact.)

14. Was the Appellee's decision not to consider the unique ecological, geographical, and economic situation of Tucker County and other potentially affected areas consistent with the purpose and policy of West Virginia Air Pollution Control Act as described in W.Va. Code § 22-5-1? (This is a mixed question of both law and fact.)

West Virginia Department of Environmental Protection

Harold D. Ward
Cabinet Secretary

Construction Permit

R13-3713

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:

Fundamental Data LLC
Ridgeline Facility
093-00034

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: 2025.08.15 09:26:18 -04'00'

Issued: August 15, 2025

Facility Location:	Off of US-48, Thomas, Tucker County, West Virginia
Mailing Address:	125 Hirst Rd. Suite 1A, Purcellville, VA 20132
Facility Description:	Turbine Power Facility
NAICS Codes:	221112 – Fossil Fuel Electric Power Generation
UTM Coordinates:	632.512 km Easting • 4,334.946 km Northing • Zone 17
Latitude/Longitude:	39.15364 / -79.46641
Permit Type:	Construction
Description of Change:	Construction and operation of a turbine power 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.

The source is not subject to 45CSR30.

Table of Contents

1.0. Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
CT	CT	Combustion Turbines	2025	Natural Gas 5,649.6 MMBtu/hr (aggregate) Diesel 4,503.4 MMBtu/hr (aggregate)	NOx – SCR[1] CO -CO Catalyst
TK1	TK1-E	Diesel Storage Tank	2025	10,000,000 gal (nominal[2])	None
TK2	TK2-E	Diesel Storage Tank	2025	10,000,000 gal (nominal[2])	None
TK3	TK3-E	Diesel Storage Tank	2025	10,000,000 gal (nominal[2])	None
UNLOAD	UNLOAD-E	Diesel Truck Unloading	2025	15,000,000 gal/yr	None

[1] Selective Catalytic Reduction
[2] Nominal capacity is "working volume" which considers design liquid levels

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	**NOx**	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		
CO	Carbon Monoxide	**PM_{10}**	Particulate Matter less than 10μm in diameter
C.S.R. *or* CSR	Codes of State Rules		
DAQ	Division of Air Quality	**Ppb**	Pounds per Batch
DEP	Department of Environmental Protection	**Pph**	Pounds per Hour
		Ppm	Parts per Million
dscm	Dry Standard Cubic Meter	**Ppm_v or ppmv**	Parts per Million by Volume
FOIA	Freedom of Information Act		
HAP	Hazardous Air Pollutant	**PSD**	Prevention of Significant Deterioration
HON	Hazardous Organic NESHAP		
HP	Horsepower	**Psi**	Pounds per Square Inch
lbs/hr	Pounds per Hour	**SIC**	Standard Industrial Classification
LDAR	Leak Detection and Repair		
M	Thousand	**SIP**	State Implementation Plan
MACT	Maximum Achievable Control Technology	**SO_2**	Sulfur Dioxide
		TAP	Toxic Air Pollutant
MDHI	Maximum Design Heat Input	**TPY**	Tons per Year
MM	Million	**TRS**	Total Reduced Sulfur
MMBtu/hr *or* mmbtu/hr	Million British Thermal Units per Hour	**TSP**	Total Suspended Particulate
		USEPA	United States Environmental Protection Agency
MMCF/hr *or* mmcf/hr	Million Cubic Feet per Hour	**UTM**	Universal Transverse Mercator
NA	Not Applicable	**VEE**	Visual Emissions Evaluation
NAAQS	National Ambient Air Quality Standards	**VOC**	Volatile Organic Compounds
		VOL	Volatile Organic Liquids
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 R13-3713 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 45CSR22 – Air Quality Management Fee Program, the permittee shall not operate nor cause to operate the permitted facility or other associated facilities on the same or contiguous sites comprising the plant without first obtaining and having in current effect a Certificate to Operate (CTO). Such Certificate to Operate (CTO) shall be renewed annually, shall be maintained on the premises for which the certificate 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 45CSR22 – Air Quality Management Fee Program, enclosed with this permit is an Application for a Certificate to Operate (CTO). The CTO will cover the time period beginning with the date of initial startup through the following June 30. Said application and the appropriate fee shall be submitted to this office 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 on the reverse side of the CTO application.

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 Ridgeline 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 R13-3713, 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 Design Heat Input.** The aggregate maximum design heat input (MDHI) of the combustion turbines/heat recovery steam generating units (HRSG) shall not be exceeded when firing the following fuels:

Fuel Type	MDHI (MMBtu/hr)
Natural Gas	5,649.6
Diesel Fuel	4,503.4

4.1.3. The maximum aggregate hourly emissions during steady state operations (excluding startups and shutdowns) from the combustion turbines/HRSG shall not exceed the following when firing the following fuels:

a. Natural Gas

Pollutant	Maximum Hourly Emissions (lb/hr)[2]
Nitrogen Oxides	30.80
Carbon Monoxide	6.30
Volatile Organic Compounds	14.30
Particulate Matter-10/2.5[1]	23.30
Sulfur Dioxide	19.21
Formaldehyde	1.26
Total Hazardous Air Pollutants	3.04

[1] Includes both filterable and condensable particulate matter.
[2] CT shall have zero duct burner firing emissions. All emissions are attributed to CT only.

b. Diesel

Pollutant	Maximum Hourly Emissions (lb/hr)[2]
Nitrogen Oxides	74.50
Carbon Monoxide	5.40
Volatile Organic Compounds	30.90
Particulate Matter-10/2.5[1]	22.10
Sulfur Dioxide	6.82
Formaldehyde	1.26
Total Hazardous Air Pollutants	5.64

[1] Includes both filterable and condensable particulate matter.
[2] CT shall have zero duct burner firing emissions. All emissions are attributed to CT only.

4.1.4. The maximum aggregate annual emissions during startups and shutdowns from the combustion turbines/HRSG shall not exceed the following when firing the following fuels:

a. Natural Gas

Pollutant[1]	Maximum Annual Emissions (tons/year)
Nitrogen Oxides	4.54
Carbon Monoxide	37.05

[1] Pollutants not listed in this table are limited to the rates in permit conditions 4.1.3 and 4.1.5 at all times including startups and shutdowns.

b. Diesel

Pollutant[1]	Maximum Annual Emissions (tons/year)
Nitrogen Oxides	6.22
Carbon Monoxide	46.10

[1] Pollutants not listed in this table are limited to the rates in permit conditions 4.1.3 and 4.1.5 at all times including startups and shutdowns.

4.1.5. a. The maximum aggregate total annual emissions[1] from the combustion turbines/HRSG shall not exceed the following emission limits when firing either fuel (natural gas or diesel exclusively) or any combination of natural gas or diesel:

Pollutant	Maximum Annual Emissions (tons/year)[3]
Nitrogen Oxides	99.35
Carbon Monoxide	56.36
Volatile Organic Compounds	43.84
Particulate Matter-10/2.5[2]	71.44
Sulfur Dioxide	58.89
Formaldehyde	3.86
Total Hazardous Air Pollutants	9.33

[1] Includes annual startup and shutdown emissions in permit condition 4.1.4.
[2] Includes both filterable and condensable particulate matter.
[3] CT has no duct burner firing emissions. All emissions are attributed to CT only.

b. *Natural Gas Operations Exclusively*

If natural gas is fired exclusively during a consecutive twelve-month rolling total, the maximum number of hours the aggregate combustion turbines/HRSG may operate is 61,320 hours per year. A twelve-month rolling total shall mean the sum of operating hours at any given time during the previous twelve consecutive calendar months.

c. *Diesel Operations Exclusively*

If diesel is fired exclusively during a consecutive twelve-month rolling total, the maximum number of hours the aggregate combustion turbines/HRSG may operate is 25,000 hours per year. A twelve-month rolling total shall mean the sum of operating hours at any given time during the previous twelve consecutive calendar months.

4.1.6. The permittee shall meet the air pollution control technology requirements for the combustion turbines/HRSG:

Pollutant	Control Technology
Nitrogen Oxides	SCR
Carbon Monoxide	CO Catalyst

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

a. Operating and maintaining the combustion turbines/HRSG and associated air pollution control devices 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 combustion 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 Operating Parameters.** The combustion turbines/HRSG at the facility are capable of firing either natural gas or diesel fuel. The following fuel operating parameters apply to the permittee to address the various fuel firing scenarios:

Fuel Type	Operating Condition	Operating Parameter
Natural Gas	Maximum Hourly Fuel Consumption	5.35 MMscfh (all units)
Diesel	Maximum Hourly Fuel Consumption	32,872 gal/hr (all units)
	Sulfur Content	15 ppm (ULSD)

4.1.9. **Annual Operational Limitation.**

a. The operating hours of each combustion turbine/HRSG, the throughput of each type of fuel (natural gas/diesel), and operation type (steady state or startup/shutdown) 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 combustion turbine/HRSG. The 12-month rolling sum of emissions will be calculated monthly in accordance with permit condition 4.4.1.

b. Natural gas and diesel fuel meters shall be installed on each combustion turbine/HSRG.

c. Operational hour meters shall be installed on each combustion turbine/HSRG.

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 each SCR for each fuel (natural gas/diesel). The permittee shall then operate the SCR at the determined optimal injection rate.

4.1.11. Emissions of NOx from each of the combustion turbines/HRSG shall not exceed one of the following when firing natural gas:

a. 25 ppm at 15% O_2; or

b. 1.2 lb/MW-hr gross energy output.

[40 CFR §60.4320]

4.1.12. Emissions of NOx from each of the combustion turbines/HRSG shall not exceed one of the following when firing diesel fuel:

a. 74 ppm at 15% O_2; or

b. 3.6 lb/MW-hr gross energy output.
[40 CFR §60.4320]

4.1.13. Each combustion turbine/HRSG shall meet one of the following requirements:

a. The permittee shall not cause to be discharged into the atmosphere from the subject stationary combustion turbine any gases which contain SO_2 in excess of 110 nanograms per Joule (ng/J) (0.90 pounds per megawatt-hour (lb/MWh) gross output; or

b. The permittee must not burn in the subject stationary combustion turbine any fuel which contains total potential sulfur emissions in excess of 26 ng SO_2/J (0.060 lb SO2/MMBtu) heat input.
[40 CFR §60.4330(a)]

4.1.14. The combustion turbines/HRSG shall use the air pollution control devices specified in Section 1.0 and permit condition 4.1.6 and identified in Permit Application R13-3713 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, TK2, TK3	10,000,000 (each)	Diesel Fuel	15,000,000 (all tanks)

4.1.16. The storage tanks (TK1, TK2, TK3) 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, TK2, TK3) 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 plant roads.

4.1.18. The permittee shall comply with the alternative applicable provisions of 45 CSR 40 Section 6.6.

a. The permittee shall conduct initial performance testing as required by 40 CFR 60 Subpart KKKK, as prescribed in permit condition 4.3.2.

b. The permittee shall continuously monitor the parameters of the SCR systems to verify proper operation as required in permit conditions 4.2.4 and 4.4.3.

c. The permittee shall continuously monitor and record the amount of each type of fuel to determine the heat input of each combustion turbine. The total monthly heat input will be determined using the monitored fuel data.

d. The permittee will calculate the total monthly NOx emissions for each month during the ozone season. The total NOx mass emissions will be calculated for the ozone season each year. Ozone season is defined as May 1 through September 30 in the same calendar year.

4.1.19. The permittee shall comply with all applicable provisions of 45 CSR 33 (Acid Rain Provisions and Permits), 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), 40 CFR 72 (Permits Regulation – Acid Rain Program), and 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).

If it is determined that 45 CSR 33 and 40 CFR 72 applies, the permittee is required to submit applications for an Acid Rain permit and a 45 CSR 30 permit. These permit types are independent of the 45 CSR 13 permitting process.

4.1.20. **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]

4.1.21. 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 (steady state or startup/shutdown), 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 aggregate 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 SCR 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 SCR systems on each turbine to control NOx emissions. The parameters of the SCR systems must be continuously monitored to verify proper operation. The permittee shall monitor each catalyst bed inlet temperature and pressure differential across each catalyst bed to indicate proper operation. **[40CFR§60.4340(b)(iii)]**

4.2.5. The permittee will install a CO catalyst on each turbine to control CO emissions. The CO catalyst shall be continuously monitored to verify proper operation. The permittee shall operate the CO catalyst in accordance with manufacturer specifications. **[45CSR§13-5.10]**

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

4.2.7. 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.

4.2.8. To demonstrate compliance with permit conditions 4.1.11 – 4.1.13, the permittee shall monitor the gross energy output (lb/MW-hr) of each combustion turbine on a continuous basis.

4.2.9. 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 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 air pollution control devices.

4.2.10. 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 22, 45 CSR 40, and 40 CFR 60, Subpart KKKK. Any final revisions made to the above rules will, where applicable, supercede those specifically cited in this permit.

4.2.11. **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 perform an initial performance test for NOx emissions as required under §60.8 and §60.4400, and to demonstrate compliance with permit condition 4.1.3 (compliance demonstration is on a per combustion turbine 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.

4.3.3. The permittee shall perform an initial performance test for SO_2 emissions as required under §60.8 and §60.4415, and to demonstrate compliance with permit condition 4.1.3 (compliance demonstration is on a per combustion turbine 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.

4.3.4. The permittee shall perform an initial performance test for CO emissions to demonstrate compliance with permit condition 4.1.3 (compliance demonstration is on a per combustion turbine 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 combustion turbines 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]

4.3.5. The permittee shall perform an initial performance test for formaldehyde emissions to demonstrate compliance with permit condition 4.1.3 (compliance demonstration is on a per combustion turbine 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.

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]

4.4. 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 combustion turbine/HRSG, the throughput of each type of fuel (natural gas/diesel), and operation type (steady state or startup/shutdown) on a daily basis. The permittee shall multiply the hourly steady state operation emissions in permit condition 4.1.3 by the number of hours of steady state operations and adding the appropriate startup and shutdown emission from permit condition 4.1.4. The permittee shall calculate the emissions monthly and on a twelve-month rolling total. A twelve-month rolling total shall mean the sum of emissions at any given time during the previous twelve consecutive calendar months.

4.4.2. To determine compliance with permit condition 4.1.2, the permittee shall keep a verifiable record of the total MDHI of the combustion turbines.

4.4.3. To determine compliance with permit condition 4.2.4, the permittee shall keep records of the SCR continuous monitoring data, and 4-hour rolling unit operating hour averages of the monitored parameters. The permittee will develop an SCR monitoring plan that will outline the procedures used to document proper operation of the SCR systems in accordance with §60.4355. The SCR monitoring plan must include the following:

a. Include the indicators to be monitored and show there is a significant relationship to emissions and proper operation of the NOx emission controls;

b. Select ranges (or designated conditions) of the indicators, or describe the process by which such range (or designated condition) will be established;

c. Explain the process used to make certain that the data that is obtained is representative of the emissions or parameters being monitored (such as detector location, installation specification if applicable);

d. Describe quality assurance and control practices that are adequate to ensure the continuing validity of the data;

e. Describe the frequency of monitoring and the data collection procedures which are used; and

f. Submit justification for the proposed elements of the monitoring. If a proposed performance specification differs from manufacturer recommendation, the differences must be explained.

[40CFR§60.4355]

4.4.4. To determine compliance with §60.4365(a), the permittee shall keep records of the fuel characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the fuel, specifying the following parameters:

a. The maximum total sulfur content of oil is 0.05 weight percent (500 ppmw) or less.

b. The total sulfur content for natural gas is 20 grains of sulfur or less per 100 standard cubic feet.

c. Potential sulfur emissions are less than 0.060 pounds SO_2/million Btu heat input.

4.4.5. 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.

4.4.6. 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.

4.4.7. To demonstrate compliance with permit condition 4.1.21, the permittee shall keep records of the fugitive emissions components repairs and replacements.

4.4.8. 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).

4.4.9. To demonstrate compliance with permit conditions 4.1.11 – 4.1.13 and 4.2.8, the permittee shall keep records of the gross energy output (lb/MW-hr) for each combustion turbine on a continuous basis.

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.

4.5.3. The permittee shall submit the results of the combustion turbines initial performance test before the close of business on the 60th day following the completion of the performance tests.

4.5.4. The permittee shall report excess emissions and monitor downtime semi-annually, in accordance with §60.4375(a) and §60.7(c). Excess emissions will be reported for all periods of unit operation, including startup, shutdown, and malfunction. An excess emission is a 4-hour rolling unit operating hour average in which any monitored parameter does not achieve the target value or is outside the acceptable range defined in the parameter monitoring plan. A period of monitor downtime is a unit operating hour in which any of the required parametric data are either not recorded or are invalid.

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.