Commonwealth of Kentucky
Division for Air Quality

STATEMENT OF BASIS / SUMMARY

Title V, Construction/ Operating
Permit: V-26-017

Texas Eastern Transmission, LP
1745 Airport Road
Danville, KY 40422

4/23/2026
Colby Freeman, Reviewer

SOURCE ID:	21-137-00008
AGENCY INTEREST:	44065
ACTIVITIES:	APE20210001, APE20190001, APE20250001

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SECTION 1 – SOURCE DESCRIPTION

SIC Code and description: 4922, Natural Gas Transmission

Single Source Det. ☐ Yes ☒ No If Yes, Affiliated Source AI:

Source-wide Limit ☒ Yes ☐ No If Yes, See Section 4, Table A

28 Source Category ☐ Yes ☒ No If Yes, Category:

County: Lincoln
Nonattainment Area ☒ N/A ☐ PM_{10} ☐ $PM_{2.5}$ ☐ CO ☐ NO_X ☐ SO_2 ☐ Ozone ☐ Lead
If yes, list Classification:

PTE* greater than 100 tpy for any criteria air pollutant ☒ Yes ☐ No
If yes, for what pollutant(s)?
☐ PM_{10} ☒ $PM_{2.5}$ ☒ CO ☒ NO_X ☐ SO_2 ☐ VOC

PTE* greater than 250 tpy for any criteria air pollutant ☒ Yes ☐ No
If yes, for what pollutant(s)?
☐ PM_{10} ☐ $PM_{2.5}$ ☐ CO ☒ NO_X ☐ SO_2 ☐ VOC

PTE* greater than 10 tpy for any single hazardous air pollutant (HAP) ☒ Yes ☐ No
If yes, list which pollutant(s): Formaldehyde

PTE* greater than 25 tpy for combined HAP ☒ Yes ☐ No

*PTE does not include self-imposed emission limitations.

Description of Facility:
Texas Eastern Transmission, LP (Texas Eastern) owns and operates a natural gas compressor station in Danville, Kentucky in Lincoln County. The Danville Compressor Station has historically employed natural gas turbine-driven centrifugal compressors and reciprocating engine-driven compressors to compress and move natural gas through transmission pipelines for delivery to customers. Line pressure must be maintained in order to ensure natural gas moves at sufficient volumes for reliable service at all delivery points. The site also included additional support equipment such as auxiliary emergency generators, small storage tanks and separator vessels, truck loading, parts washing, natural gas-fired boilers and process heaters, and several natural gas-fired heat exchangers with firing rates of less than 1 MMBtu/hr.

SECTION 2 – CURRENT APPLICATION AND EMISSION SUMMARY FORM

Permit Number: V-26-017 Activities: APE20210001, APE20190001, APE20230001, APE20250001

Application:	Received Date(s):	Application Complete Date(s):
APE20190001	July 1, 2019	January 14, 2020
APE20210001	October 1, 2021	October 16, 2024
APE20250001	August 5, 2025	November 14, 2025

Permit Action: ☐ Initial ☒ Renewal ☒ Significant Rev ☐ Minor Rev ☐ Administrative
Construction/Modification Requested? ☒Yes ☐No NSR Applicable? ☐Yes ☒No

Previous 502(b)(10) or Off-Permit Changes incorporated with this permit action ☒Yes ☐No

Off-Permit Change

APE20180001: The application received November 9, 2017, requested a waiver from the pre-project testing requirement for NO_X emissions from EU 04. This testing requirement was intended to determine whether addition of the oxidation catalyst would cause an increase in NO_X emissions, triggering a modification of the turbine. Pursuant to 40 CFR 60.14(e)(5), the addition or use of any system or device whose primary function is the reduction of air pollutants shall not, by itself, be considered a modification under 40 CFR part 60. The Division granted the request, and the testing requirement has been removed from the permit.

APE20230001: The application received on March 20, 2023, addressed the construction and installation of two horizontal filter separators (FS-301 and FS-302) on natural gas transmissions lines entering the station. Associated changes include addition of 60+ piping components, a slight increase (<0.2%) in PTE of gas releases, and an additional 500 gallons per year throughput through tanks included in Section D (<0.5%). Based on the represented PTE of the associated units and the magnitude of the changes relative to previous operating capacity, it has been demonstrated that the increase in emissions associated with the change will not exceed any significant emission rates as defined in 401 KAR 51:001.

Description of Action:

APE20190001 (significant revision):

On July 2, 2019, the Division received an application for a significant revision to the Title V air quality permit for the Texas Eastern Danville Compressor Station. The purpose for the application was for the following objectives:

1. Installation of NO_X continuous emission monitoring systems (CEMS) on the Frame 3 turbines;
2. Listing modes of operation for the HBA-8T engines, Frame 3 turbines, and Frame 5 turbine, presented as different process IDs under each emission unit description;
3. Addition of NO_X emission limits and corresponding testing requirements to the HBA-8T engines;
4. Rewriting the emission limits for EU 04 from parts per million by volume to terms of mass emission in lb/hr;
5. Adjusting the existing short-term emission limits for EU 03 and EU 04 to incorporate

averaging periods, as well as for standards at 3-hours and 12-month rolling averages.
6. Removal of Frame 3 turbine NO_X parametric monitoring requirements in favor of CEMS;
7. Changes to existing monitoring, recordkeeping, and reporting requirements for the Frame 3 and Frame 5 turbines;
8. Addition of source-wide synthetic minor emission limits in Section D
9. Removal of alternate operating scenarios under Section H;
10. Moving the 6.28 MMBtu/hr boiler (BL1) from Section C to Section B due to its applicable regulation not being a generally applicable requirement (401 KAR 59:015), and adding 40 CFR 63, Subpart DDDDD as an applicable regulation.

The Division has incorporated the requested changes as follows:
1. NO_X CEMS for EU 03 is not authorized for compliance purposes. See 6. below.
2. Process IDs remain from the previous permit. The uncontrolled modes of operation proposed in the application are not incorporated.
3. Emission limits and testing requirements were not incorporated into the permit. However, emission factors for NO_X were updated based on the use of Clean Burn technology achieving 1 g/bhp-hr per the July 30, 2015, Spectra Energy Design Basis Memorandum provided in the response to NOD #1. Although not required, NO_X emissions from each of the engines in EU 02 were tested in a Division witnessed and approved test on March 19, 2018. The engines achieved average NO_X emission rates of 0.56, 0.37, and 0.62 g/bhp-hr. The Division does not find that further testing is necessary to support use of an emission factor of 1 g/bhp-hr in consideration of the imminent decommissioning of these engines.
4. Not incorporated. The lb/hr emission limitations proposed in the application are not equivalent to the emission limitations previously incorporated into the permit to preclude 401 KAR 51:017.
5. Not incorporated.
6. The Frame 3 turbine NO_X parametric monitoring requirements were removed, but CEMS is not incorporated. The CAM plan submitted for EU 03 under the renewal application, APE20210001, supersedes the previous NO_X parametric monitoring requirements.
7. Not incorporated. The only changes to existing monitoring, recordkeeping, and reporting requirements for the Frame 3 and Frame 5 turbines are related to the incorporation of the CAM plans.
8. The synthetic minor limits requested in this application were not incorporated because none of the requested changes which would necessitate synthetic minor limitations were incorporated. Group synthetic minor emission limitations in Section D are for the TEM IV project requested in APE20250001.
9. Permit F-16-063 contained pre-project requirements for certain units in Section H. These requirements were removed as the project is now completed. Alternate operating scenarios in Section H of the current permit are pre-project requirements for the TEM IV project.
10. The 6.28 MMBtu/hr boiler (BL1) was moved from Section C to Section B due to its applicable regulation not being a generally applicable requirement (401 KAR 59:015). 40 CFR 63, Subpart DDDDD is listed as an applicable regulation for the unit in Section H. Upon reclassification as an area source, Subpart DDDDD will no longer apply.

APE20210001 (renewal):

On October 1, 2021, the Division received an application for the renewal of the Title V air quality permit for the Texas Eastern Danville Compressor Station. As review of the July 2019 significant revision was ongoing, no additional information or changes were provided with this application. The application references an off permit change which was approved in February

2018 (APE20180001). The Division removed Condition 3.b to perform pre-project stack testing for VOC and formaldehyde emissions from the GE Frame 5 Gas Turbine (EU 04) as the testing was completed in 2018.

The permittee was required to submit a CAM plan for CO for the Frame 5 turbine (EU 04) and for NO_X for the Frame 3 turbines (EU 03) by the deadline specified in 40 CFR 64.5. The turbines under both EUs are considered "other pollutant-specific emissions units" (PSEUs) because they are subject to 40 CFR 64 and are not large PSEUs. Large PSEUs have the potential to emit (taking into account control devices to the extent appropriate under the definition of PTE in 40 CFR 64.1) the regulated pollutant in an amount equal to or greater than 100 percent of the amount, in tons per year, required for the source to be classified as a major source. For other PSEUs, the permittee shall submit the information required in 40 CFR 64.4 (CAM plan) as part of an application for a renewal of a part 70 or part 71 permit. CAM plans were not received with the initial renewal application. The Division informed the permittee of this requirement on January 8, 2026. The CAM plans for EU 03 and 04 were submitted as an addendum to the renewal application on February 27, 2026.

With issuance of permit V-26-017, the Division approves the CAM plan for EU 04 as submitted. The CAM plan and related requirements have been incorporated into the permit as Appendix A. The Division is disapproving the CAM plan submitted for NO_X emissions from EU 03 pursuant to 40 CFR 64.6(e). See comments for EU 03 in Section 3 – Emissions, Limitations and Basis. The permit contains monitoring that satisfies the requirements of 40 CFR 70.6(a)(3)(i)(B) and a compliance schedule in Section I of the permit requiring submittal of a revised monitoring plan within 180 days from the date of issuance of the draft permit.

APE20250001 (Significant Revision):

On August 5, 2025, the Division received an application for a significant revision of the Title V air quality permit for the Texas Eastern Danville Compressor Station. The application proposed the following changes under the "TEM IV project":

1. Removal of ten (10) natural gas-fired reciprocating engines (EU 01 and EU 02), three (3) natural gas-fired combustion turbines (EU 03 and EU 04), two (2) natural gas-fired emergency engine generators (EU 05 and EU 06), existing separator vessels, storage tanks, and truck loading areas upon completion of the project
2. Addition of three (3) natural gas-fired Solar Titan 130 turbines – 18,000 HP each (EU 08 through 10) equipped with:
    - Dry Low Nox Burners (SoLoNOx) achieving 9 ppm_{vd} NO_x concentration
    - Oxidation Catalyst (OxCat) to control CO, volatile organic compounds (VOC), and hazardous air pollutant (HAP) emissions
3. Addition of one (1) Waukesha VGF48SE emergency engine generator – 1,100 HP (EU 11)
4. Addition of three (3) natural gas-fired fuel gas heaters – 1.2 MMBtu/hr each (EU 12)
5. Addition of six (6) pipeline liquids storage tanks/separator vessels, including the following:
    - One 2,640-gallon pipeline liquids tank, V05 (EU 13)
    - Five other vessels (<500 gallons each (IAs))
6. Modify emission characteristics/operating parameters for Gas Releases and Fugitive Piping Components (EU 07)

The project's emissions increases are as follows:

Phase I - PSD Step 1: Project Emissions Increase			
Pollutant	**Project Emissions Increase[a], PEI (tpy)**	**Significant Emissions Rate, SER (tpy)**	**PEI > SER?**
CO	76.9	100	No
NO_x	36[c]	40	No
VOC	26.9[d]	40	No
PM	14.0	25	No
PM_{10}	14.0	15	No
$PM_{2.5}$	9[c]	10	No
SO_2	28.9	40	No
CO_2e[b]	275,805	75,000	No

[a] Includes the increase in emissions from EU 07 through 13, except EU 12-4 and PC-1 through PC-4 in EU07, which is a redesignated existing unit and fugitive emissions from piping components, respectively.

[b] Although greenhouse gas emissions are greater than the SER, BACT is not triggered unless it is triggered for a criteria pollutant. Since the facility has chosen to take a synthetic minor limit for NO_X and $PM_{2.5}$, the facility does not need to go through BACT nor take a limit on CO2e.

[c] PTE of New Emission Units limited by a federally enforceable emission limitation during Phase I.

[d] Includes actual to projected actual emissions for EU 07 (GR-ST and GR-PL) calculated pursuant to 401 KAR 51:001, Section 1(199)(b)2.

The permittee has accepted a phased limit on NO_X and $PM_{2.5}$ emissions which applies to the new units installed as part of the project (EUs 08 through 13). Note that although EU 07 is modified as part of the project, emissions from fugitive emission components are not considered for PSD, and the only criteria pollutant emitted from GR-ST and GR-PL (except CO_2e) is VOC, which is below the SER without any limits taken. Because the PEI exceeds 50% of the SER for VOC in part due to a modified existing unit, the "reasonable possibility" recordkeeping and reporting requirements of 401 KAR 51:017, Section 16(5) were included in Section D of the permit.

Phase I begins upon startup of any one of the new emission units. The permittee shall limit total emissions of NO_X from new emission units to 36 tpy, corresponding to 90% of the SER, on a twelve-month rolling basis. The permittee shall limit total emissions from new emission units of NO_X and $PM_{2.5}$ to 36 tpy and 9 tpy, respectively, on a twelve-month rolling basis. By doing so, the PTE of new emission units is effectively limited, and the "Step One" PEI remains below the SER for each pollutant. Thus, determining the "Step Two" net emissions increase (NEI) is not necessary for Phase I. In addition, the permittee has requested a limitation on emissions of single HAP and combined HAP below major source thresholds to be effective upon startup of any one of the new turbines (EU 08 through EU 10) to preclude HAP major source requirements for these units.

Phase II - PSD Step 1: Project Emissions Increase			
Pollutant	**Project Emissions Increase[a], PEI (tpy)**	**Significant Emissions Rate, SER (tpy)**	**PEI > SER?**
CO	76.9	100	No
NO_x	75.6	40	Yes
VOC	25.0	40	No
PM	14.0	25	No
PM_{10}	14.0	15	No
$PM_{2.5}$	14.0	10	Yes
SO_2	28.9	40	No
CO_2e[b]	275,805	75,000	Yes

[a] Includes the increase in emissions from EU 07 through 13, except EU 12-4 and PC-1 through PC-4 in EU07, which is a redesignated existing unit and fugitive emissions from piping components, respectively.

These group emission limitations shall remain in place through decommissioning of all the existing engines and turbines as proposed in the application. Deactivation of the limits, which starts Phase II, causes the PEI to exceed SER for "Step 1" because the original increase will be within the contemporaneous period. Therefore, netting is required for NO_X and $PM_{2.5}$. The permit includes a federally enforceable requirement to decommission and remove from service all of the existing engines and turbines (EU 01 though EU 06) prior to deactivation of the group emission limitation for New Emission Units in order for these decreases to be creditable for the Step 2 analysis shown below.

Phase II - PSD Step 2: Net Emissions Increase					
Pollutant	**Past Actual[a] (tpy)**	**Projected Actual[b] (tpy)**	**Creditable Contemporaneous Emissions (tpy)**	**Net Emissions Increase[c], NEI**	**NEI > SER?**
NO_x	546.8	0	-546.8	-471.2	No
$PM_{2.5}$	15.2	0	-15.2	-1.2	No

[a] Average of 2022 and 2023 actuals for EU 01 through 07, except fugitive emissions from piping components (PC-1 through PC-4).

[b] Includes the emissions increase from addition of two filter separators from APE20230001 and EUs 01-07 post project, except fugitive emissions from piping components. Only VOC and CO_2e emissions increased due to changes in APE20230001.

[c] Net Emissions Increase = PEI + Creditable Contemporaneous Emissions (Projected Actual – Past Actual).

V-26-017 Emission Summary				
Pollutant	2024 Actual (tpy)	Previous PTE* V-16-056 (tpy)	Change (tpy)	Revised PTE* V-26-017 (tpy)
CO	23.78	259.42	70.39	329.81
NO_X	395.25	1,234.31	5.80	1240.11
PT	11.71	28.34	13.46	41.80
PM_{10}	11.71	28.37	13.46	41.83
$PM_{2.5}$	11.71	28.37	13.46	41.83
SO_2	0.22	5.43	29.62	35.05
VOC	32.32	211.62	-7.02	204.60
Lead	--	0	0	0
Greenhouse Gases (GHGs)				
Carbon Dioxide		475,462	55,105	530,567
Methane		955	3	958
Nitrous Oxide		4	1	5
CO_2 Equivalent (CO_2e)		500,529	55,478	556,007
Hazardous Air Pollutants (HAPs)				
Acetaldehyde	0.38	4.31	0.27	4.58
Acrolein	0.39	3.94	0.85	4.79
Benzene	0.28	1.62	0.45	2.07
Ethyl Benzene	0.11	0.47	0.54	1.01
Formaldehyde	3.27	34.81	-1.79	33.02
Hexane; N-Hexane	0.27	0.71	0.81	1.52
Methanol	0.11	1.29	0.39	1.68
Toluene	0.69	2.51	1.06	3.57
Xylenes (Total)	0.75	1.52	1.72	3.24
Combined HAPs:	6.25	51.43	4.85	56.28

* PTE includes controls but does not include group emission limitations or source-wide emission limitations where applicable. NO_X PTE was updated for EU 02 based on test data after installation of Clean Burn technology.

SECTION 3 – EMISSIONS, LIMITATIONS AND BASIS

Emission Unit 01 (001) – Seven (7) Clark HBA-8 engines
Emission Unit 02 (002) – Three (3) Clark HBA-8T engines

Initial Construction Date: See below

Process Description:
Emission Unit: 01 (01-07) Seven Compressor Engines

Process 001 Reciprocating Internal Combustion Engine (Plant ID 20901)
Process 002 Reciprocating Internal Combustion Engine (Plant ID 20902)
Process 003 Reciprocating Internal Combustion Engine (Plant ID 20903)
Process 004 Reciprocating Internal Combustion Engine (Plant ID 20904)
Process 005 Reciprocating Internal Combustion Engine (Plant ID 20905)
Process 006 Reciprocating Internal Combustion Engine (Plant ID 20906)
Process 007 Reciprocating Internal Combustion Engine (Plant ID 20907)

Description: 1,760 hp (each) Clark HBA-8

Engine Type:	2 stroke lean burn
Fuel:	Natural gas
Maximum rating:	16.60 MMBTU/hr, each
Date Constructed:	1952

Emission Unit: 02 (08-10) Three Compressor Engines

Process 001 Reciprocating Internal Combustion Engine (Plant ID 20908)
Process 002 Reciprocating Internal Combustion Engine (Plant ID 20909)
Process 003 Reciprocating Internal Combustion Engine (Plant ID 20910)

Description: 2,050 hp (each) Clark HBA-8T

Engine Type:	2 stroke lean burn
Fuel:	Natural gas
Maximum rating:	18.68 MMBTU/hr, each
Date Constructed:	1957
Controls:	Oxidation Catalyst (installed October 2017)

Applicable Regulation:
401 KAR 63:002 Section 2(4)(eeee), 40 C.F.R. 63.6580 through 63.6675, Tables 1a through 8, and Appendix A (**Subpart ZZZZ**), *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*

Comments:
NO_X and CO emission factors are based on vendor data. VOC, methane, and HAP emission factors are based on a scaling of AP-42 emission factors using vendor data for THC. PM and SO_2 are from AP-42, Section 3.2. CO_2 and nitrous oxide are from 40 CFR 98 Subpart C, table C-1 and C-2, respectively.

Emission Unit 01 (001) – Seven (7) Clark HBA-8 engines
Emission Unit 02 (002) – Three (3) Clark HBA-8T engines

40 CFR 63, Subpart ZZZZ: These units, which are 2 stroke lean burn (2SLB) engines, were installed prior to December 19, 2002, and thus are classified as existing sources. Pursuant to 40 CFR 63.6590(b)(3)(i), existing 2SLB stationary RICE located at a major source of HAP emissions do not have to meet the requirements of 40 CFR 63, Subpart ZZZZ or the general provisions of 40 CFR 63, Subpart A.

However, upon reclassification of the facility as an area source of HAP emissions (effective upon startup of any one of the new emission units), requirements for existing 2SLB engines at an area source of HAP emissions will apply. These requirements are included in Section B of the permit, whereas HAP major source requirements are listed in Section H of the permit and should be complied with prior to reclassification as an area source of HAP emissions.

40 CFR 64, Compliance Assurance Monitoring (CAM). EU 02 is subject to an emission limitation and uses a control device to meet the standard for CO and VOC. However, pre-control PTE is less than 100% of the major source threshold for these pollutants, therefore CAM does not apply. The OxCat control installed for compliance with the CO and VOC emission limitations also controls formaldehyde. Pre-control emissions of formaldehyde are greater than 100% of the major source threshold (10 tpy single HAP). The permittee has accepted a source-wide emission limitation of single HAP to preclude HAP major source requirements upon startup of any one of the new emission units 08 through 12 to be installed as part of the TEM IV project. This limit is an emission limitation that is exempt under 40 CFR 64.2(b)(1)(v) – an emissions cap that meets the requirements specified in 40 CFR 70.4(b)(12). Therefore, CAM does not apply.

Emission Unit 03 (11-12) – Two (2) GE Frame 3 Gas Combustion Turbines
Emission Unit 04 (13) – GE Frame 5 Gas Combustion Turbine

Pollutant	Emission Limit or Standard	Regulatory Basis for Emission Limit or Standard	Emission Factor Used and Basis		Compliance Method
NO_X	EU 03 only: 25 ppmvd at 15% O_2	To preclude 401 KAR 51:017	25.0 ppmvd at 15% O_2; vendor guarantee		Initial and annual testing, reduced to biennial if results <75% of limit
CO	12.5 ppmvd at 15% O_2	To preclude 401 KAR 51:017	12.5 ppmvd @ 15% O_2; vendor guarantee		
VOC	EU 03: 13.28 lb/mmscf	To preclude 401 KAR 51:017	13.28 lb/mmscf	Controlled, vendor TOC factor scaled to AP-42 VOC	Initial testing
	EU 04: 10.36 lb/mmscf		10.36 lb/mmscf		

Initial Construction Date: See below

Process Description:
Emission Unit: 03 (11-12) Two Gas Turbines
Process 001 GE Frame 3 Gas Combustion Turbine (Plant ID 21001)
Process 002 GE Frame 3 Gas Combustion Turbine (Plant ID 21002)

Emission Unit 03 (11-12) – Two (2) GE Frame 3 Gas Combustion Turbines
Emission Unit 04 (13) – GE Frame 5 Gas Combustion Turbine

Description: 8,000 hp turbines

Fuel:	Natural gas
Maximum rating:	83.51 MMBTU/hr, each
Construction commenced:	1961
Controls:	Oxidation Catalyst and Selective Catalytic Reduction (SCR) (installed 2017)

Emission Unit: 04 (13) Gas Turbine

Description: GE Frame 5 Gas Combustion 18,500 hp Turbine (Plant ID 21003)

Fuel:	Natural gas
Maximum rating:	183.82 MMBTU/hr
Construction commenced:	1969
Controls:	Oxidation Catalyst (installed 2017)

Applicable Regulation:
401 KAR 63:002, Section 2(4)(dddd), 40 C.F.R. 63.6080 through 63.6175, Tables 1 through 7 (**Subpart YYYY**), *National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines*

40 CFR Part 64, *Compliance Assurance Monitoring (CAM)* for EU 03 for NO_X, and for EU 04 for CO

401 KAR 63:020, *Potentially hazardous matter or toxic substances* [State-Origin Requirement]. Only applies following reclassification as a minor source for HAP emissions

Comments:
Emission factors for NO_X, CO, and VOC are based on vendor data. Emission factors for methane and HAPs are based on a scaling of AP-42 factors using vendor data for VOC. Emission factors for $PM/PM_{10}/PM_{2.5}$ are based on AP-42, Section 3.1. Emissions for CO_2 and nitrous oxide are based on 40 CFR 98, Subpart C, table C-1 and table C-2, respectively.

The turbines under each emission unit are considered existing stationary combustion turbine affected sources for 40 CFR 63, Subpart YYYY, as construction commenced before January 14, 2003, and they are located at a major source of HAP emissions. Pursuant to 40 CFR 63.6090(b)(4), existing stationary combustion turbines in all subcategories do not have to meet the requirements of 40 CFR 63, Subpart YYYY or Subpart A. Following reclassification of the site to an area source of HAP emissions, the turbines under each emission unit will no longer be affected facilities subject to 40 CFR 63, Subpart YY. Thus, 401 KAR 63:020 will apply at that time.

40 CFR 64, *Compliance Assurance Monitoring*.

For EU 04, the CAM plan and clarifying information received by the Division on February 26, 2026 and March 20, 2026, selects oxidation catalyst bed inlet and outlet temperatures as indicators. The permittee monitored both inlet and outlet temperatures (see Testing Requirements/Results at the end of this Section 3) on multiple occasions. The Division concurs with the permittee's justification that the temperature at each end of the catalyst bed provides a good indication of catalytic reduction performance because it indicates that the gas stream and catalyst bed are at sufficient temperature for oxidation (i.e., reduction) of CO. Along with the periodic testing requirements, monitoring of these indicators is sufficient for assuring

Emission Unit 03 (11-12) – Two (2) GE Frame 3 Gas Combustion Turbines
Emission Unit 04 (13) – GE Frame 5 Gas Combustion Turbine

compliance with the applicable emission limitation.

For EU 03, the plan submitted on February 27, 2026 selects SCR catalyst bed outlet temperature and ammonia injection rate. The range for the catalyst outlet bed is greater than 426 °F. The permittee performed low-load performance testing on unit 12 in December 2018 (CMN20180002) which confirmed catalyst activity at this temperature. The Division agrees that catalyst bed outlet temperature is justified as sufficient temperatures are necessary for catalyst activity, although this indicator cannot adequately assure compliance alone. Ammonia flow rates were proposed to be monitored and compared to the injection set-point as determined by the unit Injection Controls System algorithm. The submittal did not include adequate justification for this element of the proposed monitoring. 40 CFR 64.4(c)(1) requires the permittee to submit control device operating parameter data obtained during the conduct of the applicable performance test under conditions specified by the applicable rule. Permit V-16-053 required initial and annual testing of NO_X emissions from EU 03. The submittal referred to, but did not include, performance testing data. The Division reviewed the complete performance testing history for EU 03. The performance test reports provided the average ammonia injection rate during each test. No data or analysis of the ammonia injection rate as compared to the injection set-point was provided. The Division determined that without further data supporting the Injection Control System algorithm, the NO_X CAM plan for EU 03 cannot be approved.

The Division included a compliance schedule for submission of a revised CAM plan in Section I of the permit pursuant to 40 CFR 64.6(e). The permittee must submit a CAM plan meeting the requirements of 40 CFR 64.3 and 64.4 within 180 days of the date of issuance of the draft permit.

40 CFR 60, Subpart GG, *Standards of Performance for Stationary Gas Turbines*. Any gas turbine which commences construction, modification, or reconstruction after October 3, 1977, is subject to the requirements of this part. All three (3) gas turbines at the source were installed prior to October 3, 1977 and as such they are existing units and are not subject to this regulation.

40 CFR 60, Subpart KKKK, *Standards of Performance for Stationary Combustion Turbines*. This regulation does not apply to these turbines as they were constructed prior to February 18, 2005, and have not been modified or reconstructed since that time.

Emission Unit 05 (005) – Auxiliary Emergency Generator
Emission Unit 06 (006) – Auxiliary Emergency Generator
Emission Unit 11 (011) – Auxiliary Emergency Generator

Pollutant	Emission Limit or Standard	Regulatory Basis for Emission Limit or Standard	Emission Factor Used and Basis	Compliance Method
NO_x	2.0 g/hp-hr or 160 ppmvd at 15 percent O_2	40 CFR 60.4233(e); Table 1 to 40 CFR 60, Subpart JJJJ; Emergency engines with maximum engine power HP≥130	2.0 g/hp-hr See Notes	Purchasing an engine certified engine and demonstrating compliance according to 60.4243(a); or Purchasing a non-certified engine and demonstrate compliance according to 40.4243(b)(2)(ii)
CO	4.0 g/hp-hr or 540 ppmvd at 15 percent O_2		2.1 g/hp-hr (EU 05); 4.0 g/hp-hr (EUs 06 & 11); See Notes	
VOC (non-formaldehyde)	1.0 g/hp-hr or 86 ppmvd at 15 percent O_2		0.35 g/hp-hr (EU 05); 503.92 lb/MMscf (EU 06); 3.25 g/hp-hr (EU 11); See Notes	

Initial Construction Date: See below

Process Description:

Emission Unit: 05 (005) Auxiliary Emergency Generator

Caterpillar G3516 Reciprocating Internal Combustion Engine
Capacity: 1,462 hp
Engine type: 4 cycle lean burn
Maximum rating: 12.64 MMBtu/hr
Engine manufactured: June 29, 2010
Construction commenced: October 15, 2010

Emission Unit: 06 (006) Auxiliary Emergency Generator

Caterpillar G3512 Reciprocating Internal Combustion Engine
Capacity: 1,102 hp
Engine type: 4 cycle lean burn
Maximum rating: 8.82 MMBtu/hr
Engine manufactured: March 2017
Construction commenced: October 2017

Emission Unit: 11 (011) Auxiliary Emergency Generator

Waukesha VGF48SE Reciprocating Internal Combustion Engine
Capacity: 1,475 hp
Engine type: 4 cycle rich burn
Maximum rating: 12.84 MMBtu/hr
Engine manufactured: Proposed 2026
Construction commenced: Proposed July 2026

Emission Unit 05 (005) – Auxiliary Emergency Generator
Emission Unit 06 (006) – Auxiliary Emergency Generator
Emission Unit 11 (011) – Auxiliary Emergency Generator

Applicable Regulation:
401 KAR 60:005 Section 2(2)(eeee), 40 C.F.R. 60.4230 through 60.4248, Tables 1 through 4 (**Subpart JJJJ**), *Standards of Performance for Stationary Spark Ignition Internal Combustion Engines*

401 KAR 63:002 Section 2(4)(eeee), 40 C.F.R. 63.6580 through 63.6675, Tables 1a through 8, and Appendix A (**Subpart ZZZZ**), *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Engines*

Comments:
Emission units EU 05 and EU 06 were installed prior to the TEM IV project and are planned to be removed following completion of the project. EU 11 was proposed to be added as part of the TEM IV project and is included in the group emission limitation to limit NO_x emissions to 36 tpy and $PM_{2.5}$ emissions to 9 tpy on a twelve-month rolling basis, to preclude 401 KAR 51:017 by maintaining the project emissions increase below the SER.

Emission factors for NO_X, CO and VOC are based on a manufacturer's guarantee for EU 05. Emission factors for CO and NO_X are based on the 40 CFR 60, Subpart JJJJ, Table 1 limit for EU 06 and EU 11. VOC is based on the Subpart JJJJ limit, adjusted to include formaldehyde based on the ratio of VOC to formaldehyde in AP-42 Tables 3.2-2 and 3.2-3 for EU 06 and EU 11, respectively. This is why the emission factor listed for VOC is higher than the VOC (non-formaldehyde) limit for EU 11. HAP emission factors are directly from AP-42 Table 3.2-2 for EU 05 and EU 06. HAP emission factors are determined based on the ratio of VOC to the individual HAP in AP 42 Table 3.2-3, multiplied by the VOC emission factor equivalent to the Subpart JJJJ limit for EU 11.

Pursuant to 40 CFR 63.6590(b)(1)(i), because EU 05 and EU 06 are new emergency stationary RICE with a site rating of more than 500 brake hp located at a major source of HAP emissions, they qualify as stationary RICE subject to limited requirements under 40 CFR 63, Subpart ZZZZ. These units only have to meet the initial notification requirements of 40 CFR 63.6645(f). EU 11 also qualifies as a stationary RICE subject to only the initial notification requirements prior to reclassification of the facility to an area source of HAP emissions. This requirement is included in Section H of the permit. Following reclassification of the facility as an area source of HAP emissions upon startup of any one of the new turbines (EU 08, 09, or 10), each emergency engine will be new stationary RICE located at an area source, which meet the requirements of 40 CFR part 60 by meeting the requirements of 40 CFR 60, Subpart JJJJ, for spark ignition engines.

Emission Unit 07 (PC-1, PC-2, PC-3, PC-4) – Fugitive Emissions from Piping Components
Emission Unit 07 (GR-ST, GR-PL) – Station Gas Releases and Pipeline Gas Releases

Initial Construction and/or Modification Date:
Initial Construction Date: 1956
Modification Date: July 2026 (Proposed)

Process Description:
Emission Unit 07 (PC-1 through PC-4): Fugitive Emissions from Piping Components

Designation	Component Type	Current[1.]	Post-TEM IV Project[2.]	Total[3.]
PC-1	Gas/Vapor Valves:	1,391	698	2,089
	Gas/Vapor Connectors:	8,081	3,222	11,303
	Gas/Vapor Flanges:	1,411	466	1,877
	Gas/Vapor Open Ended Lines:	107	36	143
	Gas Vapor Other:	215	71	286
PC-2	Light Oil Valves:	234	99	333
	Light Oil Connectors:	710	575	1,285
	Light Oil Flanges:	388	209	597
	Light Oil Open Ended Lines	44	36	80
	Light Oil Pump Seals:	1	1	2
	Light Oil Other:	19	1	20
PC-3	Heavy Oil Valves:	563	360	923
	Heavy Oil Connectors:	2,762	1,023	3,785
	Heavy Oil Flanges:	591	211	802
	Heavy Oil Open Ended Lines:	27	n/a	27
	Heavy Oil Pump Seals:	38	21	59
	Heavy Oil Other:	41	4	45
PC-4	Water/Oil Coolant Valves:	438	n/a	438
	Water/Oil Coolant Connectors:	3,540	n/a	3,540
	Water/Oil Coolant Flanges:	804	n/a	804
	Water/Oil Coolant Open Ended Lines:	30	n/a	30
	Water/Oil Coolant Pump Seals:	13	n/a	13
	Water/Oil Coolant Other:	12	n/a	12

Footnotes:

1. The equipment count listed above reflects an approximate count of the equipment as of the date of issuance of this permit but is not intended to limit the permittee to the exact numbers specified. The permittee may add or remove pipeline equipment without a permit revision as long as the equipment continues to comply with the applicable requirements listed below and the changes do not have a significant impact on emissions or potential to emit.

2. This component count represents an approximate count of the equipment which will be in place following completion of the TEM IV project. This includes new components installed during the project and some existing components which will be retained.

3. To be conservative, PTE and actual emissions are based on this sum of existing components and the estimated Post-TEM IV components prior to decommissioning of existing equipment. The permittee may add or remove pipeline equipment without a permit revision as long as the equipment continues to comply with the applicable requirements and the changes do not have a significant impact on emissions or potential to emit.

Emission Unit 07 (PC-1, PC-2, PC-3, PC-4) – Fugitive Emissions from Piping Components
Emission Unit 07 (GR-ST, GR-PL) – Station Gas Releases and Pipeline Gas Releases

Process Description:

Emission Unit 7 (GR-ST & GR-PL): Station Gas Releases and Pipeline Gas Releases

Periodically, blowdown and purges of natural gas lines and equipment are required because of normal operations, process startups/shutdowns, routine maintenance, and/or emergency venting. These gas releases are vented through a set of separator vessels. Flashing, working, and breathing losses from these vessels are accounted for under the vessel designation, while direct emissions of gases and vapors are accounted for under this emission unit. Emissions from GR-ST and GR-PL are not "fugitive emissions" as defined by 401 KAR 52:001, Section 1(38).

Applicable Regulation:

401 KAR 50:012, *General Application*. This regulation applies to all major air contaminant sources for which there is no standard specified in 401 KAR Chapters 50 through 65 for VOC emissions and requires that as a minimum, sources apply control procedures that are reasonable, available, and practical (RAP). The VOC emissions from GR-ST and GR-PL are not subject to any other standard specified in 401 KAR Chapters 50 through 65.

40 CFR 60, Subpart OOOOb, *Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification or Reconstruction Commenced After December 6, 2022*. This regulation will apply to the collection of fugitive emissions components upon modification of the compressor station as defined in 40 CFR 60.5365b(i)(3). This will include both existing fugitive emission components listed under "Current," and any fugitive emission components added as a part of the TEM IV project. This regulation does not apply to GR-ST and GR-PL.

State-Origin Requirements:

401 KAR 63:020, *Potentially hazardous matter or toxic substances.* This regulation is applicable to each facility which emits or may emit potentially hazardous matter or toxic substances, provided such emissions are not elsewhere subject to the provisions of the administrative regulations of the Division for Air Quality.

Comments:

The significant revision application (APE20250001) included separate counts for "current" fugitive emissions components which were in place prior to the TEM IV project. As a part of the TEM IV project, many existing fugitive emissions components will be removed, and new fugitive emissions components will be added. To simplify the accounting for fugitive emissions components, the application proposed to add new Process IDs under PC-1, PC-2, and PC-3 to account for new components being constructed as part of the TEM IV project. PTE includes existing components and components added under the new Process IDs. Following completion of the TEM IV project, the permittee may notify the Division of the removal of any existing components in order to update component counts for both PTE and actual emissions accounting.

Emission factors for valves, connectors, flanges, open ended lines, and "other" components are based on EPA 453/R-95-017, Table 2-4 and natural gas composition (for PC-1) and light oil composition (for PC-2). 100% VOC content is assumed for heavy oil (PC-3). 60% VOC is assumed for components in water/oil coolant service (PC-4). Emission factors for pump seals are based on EPA 453/R-95-017, Table 2-1 (average SOCMI for pumps in heavy oil service) as Table 2-4 does not include an emission factor for pump seals.

Emission Unit 07 (PC-1, PC-2, PC-3, PC-4) – Fugitive Emissions from Piping Components
Emission Unit 07 (GR-ST, GR-PL) – Station Gas Releases and Pipeline Gas Releases

Prior to modification of the compressor station, as defined in 40 CFR 60.5365b(i)(3), 40 CFR 60, Subpart OOOOb will not apply. In addition, 40 CFR 60, Subpart OOOO and Subpart OOOOa will not apply as the compressor station was constructed prior to August 23, 2011 and has not been modified prior to the TEM IV project. Pursuant to 40 CFR 60.5370b(a), the permittee must be in compliance with the standards of 40 CFR 60, Subpart OOOOb upon startup, where startup is defined in 40 CFR 60, Subpart A as the setting in operation of an affected facility for any purpose. From this, it is clear that the collection of fugitive emissions components are not an affected facility until modification, and that the permittee shall comply with the relevant requirements of 40 CFR 60, Subpart OOOOb following modification of the compressor station, as defined in 40 CFR 60.5365b(i)(3), and prior to the subsequent setting in operation of the collection of fugitive emission components for any purpose.

401 KAR 50:012, *General application*. This regulation applies to any VOC emissions at the source which are not subject to another regulation. The permittee must submit a Reasonable, Available, and Practical (RAP) control measures analysis within 90 days of issuance of permit V-26-017 as required in Section D of the permit.

Emission Units 08-10 (008-010) Solar Titan 130 Natural Gas Turbines

Pollutant	Emission Limit or Standard	Regulatory Basis for Emission Limit or Standard	Emission Factor Used and Basis	Compliance Method
NO_X	15 ppm at 15% O_2	40 CFR 60.4320a and Table 1 to 40 CFR 60, Subpart KKKKa	9 ppm volumetric dry basis at 15% O_2, vendor guarantee	Initial performance test (40 CFR 60.4333a(b)); Continuous compliance: 40 CFR 60.4340a
SO_2	110 ng/J (0.90 lb/MWh) gross energy output or 26 ng/J (0.060 lb/MMBtu) heat input	40 CFR 60.4330a(a)(1)-(2)	14.29 lb/MMscf, 5 gr/100 dscf pipeline total sulfur tariff, assuming all sulfur is converted to SO_2	Maintain records of a current tariff sheet specifying the maximum total sulfur content of the fuel

Initial Construction Date: Proposed July 2026

Description:

Fuel:	Natural Gas
Maximum rating:	159.2 MMBtu/hr (each)
Controls:	Oxidation Catalyst (OxCat) for CO, VOC, and HAPs

Applicable Regulation:
40 CFR 60, Subpart KKKKa, *Standards of Performance for Stationary Combustion Turbines*. This regulation applies to stationary combustion turbines that commenced construction, reconstruction, or modification after December 13, 2024, and that have a base load rating greater than 10 MMBtu/hr. Each of the Solar turbines meets both criteria.

40 CFR 60, Subpart OOOOb - *Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification or Reconstruction Commenced After December 6, 2022.* The

Emission Units 08-10 (008-010) Solar Titan 130 Natural Gas Turbines

centrifugal compressors associated with the Solar turbines are affected facilities where construction commenced after December 6, 2022, and are therefore subject to this regulation.

401 KAR 63:002, Section 2(4)(dddd), 40 C.F.R. 63.6080 through 63.6175, Tables 1 through 7 (**Subpart YYYY**), *National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines.* This regulation applies to stationary combustion turbines located at major sources of HAP emissions. This regulation will not apply upon reclassification of the facility to an area source of HAP emissions.

State-Origin Requirements:
401 KAR 63:020, *Potentially hazardous matter or toxic substances.* This regulation is applicable to each facility which emits or may emit potentially hazardous matter or toxic substances, provided such emissions are not elsewhere subject to the provisions of the administrative regulations of the Division for Air Quality. This regulation will apply upon reclassification of the facility to an area source of HAP emissions, as 40 CFR 63, Subpart YYYY will no longer apply at this time.

Comments:
EUs 08-10 are proposed to be added with APE20250001. OxCat control efficiencies are provided for CO, VOC, and certain HAPs (e.g. Formaldehyde at 95%, Acetaldehyde at 80%). Any other organic HAPs assume control efficiency of 50%.

Emission calculations are based primarily on vendor guaranteed emission rates for NO_X, CO, and total organic carbon (TOC) (also represented as unburned hydrocarbon (UHC) in the application), which are 9, 25, and 25 ppm_{vd}, respectively. Emission rates are converted to a lb/hr basis, then lb/MMscf using equations 2-1, 2-2, and 2-3 from the application. Parameter values for the average ambient temperature of 55.51 °F were provided based on a curve fit of vendor data. Parameter values for normal operation (process ID 01), startup (process ID 02), and shutdown (process ID 03) were based on the average ambient temperature. Parameters for Low Temperature (process ID 04) and Ultra Low Temperature (process ID 05) are based on 0°F and -20 °F, respectively. The vendor guaranteed emission rates are only valid for operation above 0 °F. Higher emission concentrations are provided for low temperature operation (process IDs 04 and 05) based on a vendor document. The application assumes 175 hours of operation in Low Temperature Mode and an additional 7 hours in Ultra Low Temperature based on local meteorological data.

SO_2 emissions are calculated assuming full conversion of 5 gr/100 dscf fuel sulfur to SO_2. SO_2 emissions are the same on a lb/MMscf basis for all process IDs. Total PM, PM_{10} and $PM_{2.5}$ are based on Table 3.1-2a of AP-42, assuming $PM_{2.5}$ is equal to total PM. VOC and speciated HAPs emission factors were determined based on the ratio to TOC in AP-42 Table 3.1-2a and Table 3.1-3 multiplied by the vendor guaranteed TOC emission rate.

Vendor data for emission rates for Ignition-Idle Phase (“Step 2”) and Loading/Thermal Stabilization Phase (“Step 3”) were provided in Table 2-3 of the application. Startup consists of 3 minutes of Step 2 operation followed by 6 minutes of Step 3 operation. Shutdown consists of 8.5 minutes of Step 3 operation. The same process outlined above is followed to find emission rates in lb/hr for each step for each pollutant. Factors for Startup and Shutdown are then calculated on a lb/event basis by multiplying the step time per event by the emission rate. The application estimates a maximum number of 208 startup/shutdown events per year per turbine. The OxCat control is considered ineffective during Startup due to not reaching proper operating conditions. Shutdown is assumed to be short enough that the OxCat will remain within the proper temperature range for control, and therefore normal control efficiencies are credited.

Emission Units 08-10 (008-010) Solar Titan 130 Natural Gas Turbines

Maximum uncontrolled PTE is calculated with the following process on a pollutant by pollutant basis:

(A) Normal operations annual emissions are divided by 8760 to obtain a lb/hr rate.
(B) Value (A) is multiplied by 8760 minus the assumed 82 total hours of low temperature operation
(C) Value (B) is added with the annual PTE of Low Temperature (04) and Ultra Low Temperature (05) to obtain the maximum annual PTE if no startup/shutdowns were to occur.
(D) Value (C) is divided by 8760, then multiplied by 8760 minus the hours required for 208 Startups and Shutdowns.
(E) Value (D) is added to the total annual PTE for Startups (02) and Shutdowns (03) to obtain the annual PTE if the if the maximum number of Startup/Shutdown events occurred.
(F) Value (C) is compared to value (E). The maximum value is taken as the maximum annual PTE.
(G) Value (F) is divided by 8760 to find an uncontrolled emission factor on a lb/hour basis.
(H) The same for (A)-(F) is followed for controlled emissions to find the maximum annual controlled PTE.
(I) The "effective" control efficiency is calculated by subtracting the ratio of maximum annual controlled PTE to maximum annual uncontrolled PTE from 100%.

This analysis is necessary due to a reduced fuel consumption rate during Startup/Shutdown, which results in lower emission rates for certain pollutants such as PM and SO_2. The "effective" control efficiency should only be seen as a mathematical tool to reconcile the maximum uncontrolled and controlled annual PTE due to controls being considered effective only during certain modes of operation.

40 CFR 63, Subpart YYYY will not be applicable upon project completion as HAPs PTE will be below major source thresholds. To preclude the applicability of HAP major source requirements, including 40 CFR 63, Subpart YYYY for EU 08 through 10, the permittee shall limit emissions of single HAP to 9 tpy and combined HAPs to 22.5 tpy upon startup of any of the turbines (EU 08 through 10). To preclude 401 KAR 51:017 by limiting the project emissions increase to less than the SER, the permittee has accepted a limit of 36 tpy of NO_x and 9 tpy of $PM_{2.5}$ on a twelve-month rolling basis from the new emission units added with the project, which includes emission units 08, 09, and 10. As specified in Section D of the permit, this limit no longer applies once the permittee notifies the Division that all of the Existing Emission Units (EUs 01 through 06) have been decommissioned and removed from service.

Emission Unit 12 (012-1, 012-2, 012-3) - Natural Gas-Fired Indirect Heat Exchangers Emission Unit 14 (014) - BL1 Sellers 150 HP Boiler				
Pollutant	**Emission Limit or Standard**	**Regulatory Basis for Emission Limit or Standard**	**Emission Factor Used and Basis**	**Compliance Method**
PM	0.56 lb/MMBtu actual heat input	401 KAR 59:015, Section 4(1)(a)	7.6 lb/MMscf AP-42 Chapter 1.4.	Assumed based upon natural gas combustion
	20% opacity	401 KAR 59:015, Section 4(2)	N/A	Assumed based upon natural gas combustion
SO_2	3.0 lbs/MMBtu actual heat input	401 KAR 59:015, Section 5(1)(a)1.	14.29 lb/MMscf, 5 gr S/100 scf tariff	Assumed based upon natural gas combustion

Initial Construction Date: See below

Process Description:

Emission Unit 12 (012-1, 012-2, 012-3) - Natural Gas-Fired Indirect Heat Exchangers

Units 4T, 5T, and 6T Fuel Gas Heaters

Fuel:	Natural Gas
Maximum hourly capacity:	1.154 MMBtu/hr each
Construction commenced:	Proposed 2026
Controls:	None

Emission Unit 14 (014) – BL1 Sellers 150 HP Boiler

Fuel:	Natural Gas
Maximum hourly capacity:	6.28 MMBtu/hr each
Construction commenced:	2015
Controls:	None

Applicable Regulation:

401 KAR 59:015, *New indirect heat exchangers.* Applicable to indirect heat exchangers having a heat input capacity greater than one (1) million BTU per hour (MMBtu/hr) commenced on or after April 9, 1972.

401 KAR 63:002, Section 2(4)(iiii), 40 C.F.R. 63.7480 through 63.7575, Tables 1 through 13 (**Subpart DDDDD**), *National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters*. Applicable to boilers and process heaters at major sources of HAP emissions. Will apply to EU 12 and 14 prior to reclassification to an area source of HAP emissions.

State-Origin Requirements:

401 KAR 63:020, *Potentially hazardous matter or toxic substances.* This regulation is applicable to each facility which emits or may emit potentially hazardous matter or toxic substances, provided such emissions are not elsewhere subject to the provisions of the administrative regulations of the Division for Air Quality. This regulation will apply upon reclassification of the facility to an area source of HAP emissions, as 40 CFR 63, Subpart DDDDD will no longer apply at this time.

Comments:

The BL1 Sellers 150 HP Boiler (BL1 Boiler) was constructed and operated prior to the TEM IV project and was previously listed an Insignificant Activity #9 in Permit V-16-056 “due to insignificant emissions.” However, the BL1 Boiler is subject to both 401 KAR 59:015 and 40 CFR 63, Subpart

Emission Unit 12 (012-1, 012-2, 012-3) - Natural Gas-Fired Indirect Heat Exchangers
Emission Unit 14 (014) - BL1 Sellers 150 HP Boiler

DDDDD, which are not generally applicable requirements. The permittee recognized the applicability of 401 KAR 59:015 in the significant revision application (APE20250001) and requested the BL1 Boiler be included in EU 12 with the new fuel gas heaters proposed with the TEM IV project. However, due to the fact the BL1 Boiler is subject to 40 CFR 63, Subpart DDDDD and is not included in the group emission limitations to preclude 401 KAR 51:017, BL1 Boiler was moved to Section B of the permit and assigned to Emission Unit 14.

Emission Unit 13 – Pipeline Liquids Fixed Roof Storage Tank (TNK V05)

Pollutant	Emission Limit or Standard	Regulatory Basis for Emission Limit or Standard	Emission Factor Used and Basis	Compliance Method
VOC	6 tpy	To preclude 40 CFR 60, Subpart OOOOb	AP-42 Chapter 7 & TCEQ RG-166/01	Limit pipeline liquid throughput to less than 7,920 gal/yr

Initial Construction Date: Proposed 7/2026

Process Description:
Capacity: 2,640 gallons
Liquid Stored: Pipeline Liquids
Maximum Annual Throughput: 7,920 gal/yr

Applicable Regulation:
401 KAR 63:020, *Potentially hazardous matter or toxic substances* [State-Origin Requirement]

Precluded Regulations:
40 CFR 60, Subpart OOOOb, *Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification or Reconstruction Commenced After December 6, 2022*

Comments:
40 CFR 60, Subpart OOOOb: This regulation applies to each storage vessel affected facility, which is a tank battery that has the potential for emissions as specified in either 40 CFR 60.5365b(e)(1)(i) or (ii), which is VOC or methane emissions equal to or greater than 6 tpy or 20 tpy, respectively. Potential for emissions must be determined in accordance with 40 CFR 60.5365b(e)(2). 40 CFR 60.5365b(e)(2)(iii) requires the owner or operator of each tank battery located at a compressor station to determine the potential for VOC and methane emissions prior to startup of the compressor station for a new tank battery. The permittee has requested a legally and practically enforceable (LPE) limit on the throughput to the tank battery in order to determine the potential for VOC and methane emissions in lieu of determining the potential for emissions based on projected maximum average daily throughput. The Division has included an LPE limit on tank throughput in the permit which meets the criteria of 40 CFR 60.5365b(e)(2)(i)(A) through (F). Potential for VOC and methane emissions are both below their respective applicability thresholds for Subpart OOOOb based on the throughput limit. If the tank battery receives additional fluids which cumulatively exceeds the throughput used in the most recent determination of the potential for VOC or methane emissions or is otherwise "modified" according to the provisions of 40 CFR 60.5365b(e)(3)(ii)(A) through (D), the applicability of Subpart OOOOb must be reevaluated.

Emission Unit 13 – Pipeline Liquids Fixed Roof Storage Tank (TNK V05)
The Division evaluated the applicability of Subpart OOOOb to the other vessels proposed to be constructed in the TEM IV project which are listed as insignificant activities. The permittee provided additional information in the response to NOD#1 for the significant revision application (APE20250001) on October 31, 2025, which indicated that DANV SVV V01C01 through V01C03 and V02 are separator vessels acting as “knockout” pots. The definition for storage vessels under 40 CFR 60.5430b specifically excludes process vessels such as knockout vessels. A tank battery is the group of all storage vessels that are manifolded together for liquid transfer. Therefore, although these vessels are manifolded to the V05 vessel for liquid transfer, they are not part of the tank battery because they are not storage vessels.

SECTION 3 – EMISSIONS, LIMITATIONS AND BASIS (CONTINUED)

Testing Requirements\Results

Emission Unit(s)	Control Device	Parameter	Regulatory Basis	Frequency	Test Method	Permit Limit	Test Result	Throughput & Operating Parameter(s) Established During Test	Activity Graybar	Date of last Compliance Testing
05	N/A	CO	40 CFR 60.4243	Initial and once every 3 years	3A, 4, 7E, 10, 19, 25A	4.0 g/hp-hr (540 ppmvd @15 % O_2)	1.54 g/hp-hr (171.2 ppm @15% O_2)	1401 hp (110% limit > max rating)	CMN2012 0002	2/21/2012
		NO_x				2.0 g/hp-hr (160 ppmvd @15% O_2)	1.71 g/hp-hr (115.9 ppm @15% O_2)			
		VOC				2.0 g/hp-hr (86 ppmvd @15% O_2)	0.81 g/hp-hr (57.3 ppm @15% O_2)			
05	N/A	CO	40 CFR 60.4243	Every 3 years	3A, 4, 7E, 10, 19, 25A	4.0 g/hp-hr (540 ppmvd @15 % O_2)	1.63 g/hp-hr (171.2 ppm @15% O_2)	1403 hp (110% limit > max rating)	CMN2015 0001	3/5/2015
		NO_x				2.0 g/hp-hr (160 ppmvd @15% O_2)	1.13 g/hp-hr (77.5 ppm @15% O_2)			
		VOC				2.0 g/hp-hr (86 ppmvd @15% O_2)	0.36 g/hp-hr (25.4 ppm @15% O_2)			
02 (08)	Oxidation Catalyst	NO_x	401 KAR 52:020, Section 10	Initial (for each pollutant) and annual or biennial (for CO) See Note 1.	7E, 10, 25A, 323, ASTM D 6348-03	N/A	39.4 ppm @15% O_2	2,038.67 hp (110% limit = 2,242.54 hp)	CMN2018 0001	4/19/2018
		CO				280 lb/mmscf	60.1 lb/mmscf			
		VOC				189 lb/mmscf	82.9 lb/mmscf			
		CH_2O				N/A	11.7 ppm @15% O_2			

Emission Unit(s)	Control Device	Parameter	Regulatory Basis	Frequency	Test Method	Permit Limit	Test Result	Throughput & Operating Parameter(s) Established During Test	Activity Graybar	Date of last Compliance Testing
02 (09)	Oxidation Catalyst	NO_x	401 KAR 52:020, Section 10	Initial (for each pollutant) and annual or biennial (for CO) See Note 1.	7E, 10, 25A, 323, ASTM D 6348-03	N/A	27.8 ppm @15% O_2	2,009.67 hp (110% limit = 2,210.64 hp)	CMN2018 0001	4/25/2018
		CO				280 lb/mmscf	60.7 lb/mmscf			
		VOC				189 lb/mmscf	97.7 lb/mmscf			
		CH_2O				N/A	2.9 ppmv @15% O_2			
02 (10)	Oxidation Catalyst	NO_x	401 KAR 52:020, Section 10	Initial (for each pollutant) and annual or biennial (for CO) See Note 1.	7E, 10, 25A, 323, ASTM D 6348-03	N/A	43.0 ppmv @15% O_2	2,023.67 hp (110% limit = 2,210.64 hp)		4/19/2018
		CO				280 lb/mmscf	77.5 lb/mmscf			
		VOC				189 lb/mmscf	85.1 lb/mmscf			
		CH_2O				N/A	9.1 ppmv @15% O_2			
03 (11)	Oxidation Catalyst and SCR	NO_x	401 KAR 52:020, Section 10	Initial (for each pollutant) and annual or biennial (for NO_x and CO) See Note 1.	1, 3A, 4, 7E, 10, 19, 25A, 323	25 ppmv @15% O_2	15.53 ppmv @15% O_2	6,907.67 hp (110% limit = 7,667.74 hp)		3/20/2018
		CO				12.5 ppmv @15% O_2	2.7 ppmv @15% O_2			
		VOC				13.28 lb/mmscf	1.4 lb/mmscf			
		CH_2O				N/A	0.024 ppm @15% O_2			

Footnotes:

1. If the emission results for NO_x or CO were less than 75% of their respective limit, for emission units 02, 03 or 04, the permittee may reduce the frequency of subsequent performance tests for that specific unit to once every 2 years (no more than 26 calendar months following the pervious performance test). If the results of any subsequent performance test exceed 75% of the respective limit, the permittee shall resume annual performance tests.

Emission Unit(s)	Control Device	Parameter	Regulatory Basis	Frequency	Test Method	Permit Limit	Test Result	Throughput & Operating Parameter(s) Established During Test	Activity Graybar	Date of last Compliance Testing
03 (12)	Oxidation Catalyst and SCR	NO_x	401 KAR 52:020, Section 10	Initial (for each pollutant) and annual or biennial (for NO_x and CO) See Note 1.	1, 3A, 4, 7E, 10, 19, 25A, 323	25 ppmv @15% O_2	20.61 ppmv @15% O_2	6,189.67 hp (110% limit = 6808.64 hp)		3/19/2018
		CO				12.5 ppmv @15% O_2	1.88 ppmv @15% O_2			
		VOC				13.28 lb/mmscf	1.63 lb/mmscf			
		CH_2O				N/A	0.056 ppmv @15% O_2			
04 (13)	Oxidation Catalyst	NO_x	401 KAR 52:020, Section 10	Initial (for each pollutant) and annual or biennial (for NO_x and CO) See Note 1.	1, 3A, 4, 7E, 10, 19, 25A, 323	N/A	100.8 ppmv @15% O_2	6,189.67 hp	CMN2018 0001	3/21/2018
		CO				12.5 ppmv @15% O_2	10.62 ppmv @15% O_2			
		VOC				10.36 lb/mmscf	1.81 lb/mmscf			
		CH_2O				N/A	0.023 ppmv @15% O_2			
		OxCat Temperature				TBD	Failed to monitor			
06	N/A	CO	40 CFR 60.4243	Initial and once every 3 years	3A, 4, 7E, 10, 19, 25A	4.0 g/hp-hr (540 ppmvd @15 % O_2)	1.7 g/hp-hr (208 ppm @15% O_2)	1016.33 hp (110% limit > max rating)		3/22/2018
		NO_x				2.0 g/hp-hr (160 ppmvd @15% O_2)	1.3 g/hp-hr (94 ppm @15% O_2)			
		VOC				2.0 g/hp-hr (86 ppmvd @15% O_2)	0.3 g/hp-hr (24 ppm @15% O_2)			

Emission Unit(s)	Control Device	Parameter	Regulatory Basis	Frequency	Test Method	Permit Limit	Test Result	Throughput & Operating Parameter(s) Established During Test	Activity Graybar	Date of last Compliance Testing
06	N/A	CO	40 CFR 60.4243	Initial and once every 3 years	3A, 4, 7E, 10, 19, 25A	4.0 g/hp-hr (540 ppmv @15 % O_2)	1.7 g/hp-hr (208 ppmv @15% O_2)	1016.33 hp (110% limit > max rating)	CMN2018 0001	3/22/2018
		NO_x				2.0 g/hp-hr (160 ppmv @15% O_2)	1.3 g/hp-hr (94 ppmv @15% O_2)			
		VOC				2.0 g/hp-hr (86 ppmv @15% O_2)	0.3 g/hp-hr (24 ppmv @15% O_2)			
05	N/A	CO	40 CFR 60.4243	Every 3 years	3A, 4, 7E, 10, 19, 25A	4.0 g/hp-hr (540 ppmv @15 % O_2)	1.0 g/hp-hr (163 ppmv @15% O_2)	1255 hp (110% limit = 1380.50 hp)		5/17/2018
		NO_x				2.0 g/hp-hr (160 ppmv @15% O_2)	0.4 g/hp-hr (39 ppmv @15% O_2)			
		VOC				2.0 g/hp-hr (86 ppmv @15% O_2)	0.3 g/hp-hr (26 ppmv @15% O_2)			
03 (12)	Oxidation Catalyst and SCR	NO_x	401 KAR 52:020, Section 10, & 40 CFR 64 See Note 2	Annual or Biennial (for NO_x and CO) See Note 1.	1, 3A, 4, 7E, 10, 19, 25A, ASTM D3648-03	25 ppmv @15% O_2	9.5 (low load) 19.4 (high load)	3812 hp (low load) 6555.67 hp (high load) See test report for detailed parameters	CMN2018 0002	12/6/2018
		CO				12.5 ppmv @15% O_2	6.8 (low load) 3.4 (high load)			
		VOC				13.28 lb/mmscf	1.9 (low load) 1.6 (high load)			
		CH_2O				N/A (ppmv @15% O_2)	0.26 (low load) 0.22 (high load)			

Footnotes:

2. The purpose of this test was both to demonstrate compliance with emission limitations and to establish the minimum SCR catalyst inlet temperature, ammonia flow injection rate, and compressor horsepower monitoring for CAM by testing at a range of load conditions and control parameters. Test results are in the same units as the corresponding permit limit. OxCat inlet and outlet temperatures were also monitored.

Emission Unit(s)	Control Device	Parameter	Regulatory Basis	Frequency	Test Method	Permit Limit	Test Result	Throughput & Operating Parameter(s) Established During Test	Activity Graybar	Date of last Compliance Testing
03 (11)	Oxidation Catalyst and SCR	NO_x	401 KAR 52:020, Section 10	Annual or biennial (for NO_x and CO) See Note 1.	1, 3A, 4, 7E, 10, 19, 25A	25 ppmv @15% O_2	16 ppmv @15% O_2	5606 hp (110% limit = 6166.6 hp) See test report for detailed parameters	CMN2020 0001	2/4/2020
		CO				12.5 ppmv @15% O_2	0.6 ppmv @15% O_2			
03 (12)	Oxidation Catalyst and SCR	NO_x	401 KAR 52:020, Section 10	Annual or biennial (for NO_x and CO) See Note 1.	1, 3A, 4, 7E, 10, 19, 25A	25 ppmv @15% O_2	16 ppmv @15% O_2	5593 hp (110% limit = 6152.3 hp) See test report for detailed parameters		
		CO				12.5 ppmv @15% O_2	0.6 ppmv @15% O_2			
04 (13)	Oxidation Catalyst	CO	401 KAR 52:020, Section 10	Annual or biennial See Note 1.	1, 3A, 7E, 10, 19	12.5 ppmv @15% O_2	2.2 ppmv @15% O_2	13676 hp (110% limit = 15043.6 hp)	CMN2020 0002	3/25/2020
		OxCat Temp				N/A	T1: 615 °F T2: 605 °F			
02 (09)	Oxidation Catalyst	CO	401 KAR 52:020, Section 10	Annual or biennial (for CO) See Note 1.	3A, 7E, 10, 19, 25A, ASTM D 6348-03	280 lb/mmscf	36.0 lb/mmscf	1993 hp (110% limit > max rating)		3/24/2020
		VOC				189 lb/mmscf	31.4 lb/mmscf			
02 (10)	Oxidation Catalyst	CO	401 KAR 52:020, Section 10	Annual or biennial (for CO) See Note 1.	3A, 7E, 10, 19, 25A, ASTM D 6348-03	280 lb/mmscf	45.5 lb/mmscf	1902 hp (110% limit > max rating)		
		VOC				189 lb/mmscf	30.3 lb/mmscf			
02 (08)	Oxidation Catalyst	CO	401 KAR 52:020, Section 10	Annual or biennial (for CO) See Note 1.	3A, 7E, 10, 19, 25A, ASTM D 6348-03	280 lb/mmscf	18.1 lb/mmscf	2014 hp (110% limit > max rating)	CMN2020 0003	8/18/2020
		VOC				189 lb/mmscf	13.2 lb/mmscf			

Emission Unit(s)	Control Device	Parameter	Regulatory Basis	Frequency	Test Method	Permit Limit	Test Result	Throughput & Operating Parameter(s) Established During Test	Activity Graybar	Date of last Compliance Testing
05	N/A	CO	40 CFR 60.4243	Every 3 years	3A, 4, 7E, 10, 19, 25A	4.0 g/hp-hr (540 ppmv @15 % O_2)	1.6 g/hp-hr (207 ppmv @15% O_2)	1131 hp (110% limit = 1244 hp)	CMN2021 0001	3/3/2021
		NO_x				2.0 g/hp-hr (160 ppmv @15% O_2)	1.2 g/hp-hr (90 ppmv @15% O_2)			
		VOC				2.0 g/hp-hr (86 ppmv @15% O_2)	0.2 g/hp-hr (26 ppmv @15% O_2)			
06	N/A	CO	40 CFR 60.4243	Every 3 years	3A, 4, 7E, 10, 19, 25A	4.0 g/hp-hr (540 ppmv @15 % O_2)	1.9 g/hp-hr (221 ppmv @15% O_2)	815 hp (110% limit = 896 hp)		
		NO_x				2.0 g/hp-hr (160 ppmv @15% O_2)	1.5 g/hp-hr (109 ppmv @15% O_2)			
		VOC				2.0 g/hp-hr (86 ppmv @15% O_2)	0.2 g/hp-hr (13 ppmv @15% O_2)			
03 (11)	Oxidation Catalyst and SCR	NO_x	40 CFR 60 See Note 3.	N/A	3A, 7E	N/A	9.06% RA	N/A	CMN2021 0002	4/28/2021
		O_2				N/A	4.30% RA			
03 (12)	Oxidation Catalyst and SCR	NO_x	40 CFR 60 See Note 3.	N/A	3A, 7E	N/A	4.85% RA	N/A	CMN2021 0003	4/28/2021
		O_2				N/A	3.31% RA			

Footnotes:

3. The purpose of this test was to perform a relative accuracy test audit (RATA) for the CEMS proposed to continuously monitor NO_x for EU 03 (11 & 12) in permit action APE20190001. At the time of testing, the use of CEMS for emissions monitoring and/or compliance determinations had not been approved by the Division. No Division personnel were present for the testing.

Emission Unit(s)	Control Device	Parameter	Regulatory Basis	Frequency	Test Method	Permit Limit	Test Result	Throughput & Operating Parameter(s) Established During Test	Activity Graybar	Date of last Compliance Testing
03 (11)	Oxidation Catalyst and SCR	NO_x	401 KAR 52:020, Section 10	Annual or biennial (for NO_x and CO) See Note 1.	3A, 4, 7E, 10, 19, 25A	25 ppmv @15% O_2	18.9 ppmv @15% O_2	7530 hp (110% limit > max rating)	CMN2022 0001	1/21/2022
		CO				12.5 ppmv @15% O_2	3.34 ppmv @15% O_2			
		VOC				13.3 lb/mmscf	9.7 lb/mmscf			
		OxCat Temp				N/A	531, 498 (Pre, Post, °F)			
		SCR Temp				N/A	495 (Post, °F)			
03 (12)	Oxidation Catalyst and SCR	NO_x	401 KAR 52:020, Section 10	Annual or biennial (for NO_x and CO) See Note 1.	3A, 4, 7E, 10, 19, 25A	25 ppmv @15% O_2	24.67 ppmv @15% O_2	7021 hp (110% limit = 7723 hp)		
		CO				12.5 ppmv @15% O_2	4.47 ppmv @15% O_2			
		VOC				13.3 lb/mmscf	11.4 lb/mmscf			
		OxCat Temp				N/A	546, 507 (Pre, Post, °F)			
		SCR Temp				N/A	500 (Post, °F)			
02 (08)	Oxidation Catalyst	CO	401 KAR 52:020, Section 10	Annual or biennial (for CO) See Note 1.	3A, 7E, 10, 19, 25A, ASTM D 6348-03	280 lb/mmscf	76.5 lb/mmscf	2044 hp (110% limit > max rating)		3/24/2022
		VOC				189 lb/mmscf	20.5 lb/mmscf			
		OxCat Temp				N/A	679, 681 (Pre, Post, °F)			
02 (09)	Oxidation Catalyst	CO	401 KAR 52:020, Section 10	Annual or biennial (for CO) See Note 1.	3A, 7E, 10, 19, 25A, ASTM D 6348-03	280 lb/mmscf	55.5 lb/mmscf	2098 hp (110% limit > max rating)	CMN2022 0002	3/25/2022
		VOC				189 lb/mmscf	12.9 lb/mmscf			
		OxCat Temp				N/A	669, 671 (Pre, Post, °F)			
02 (10)	Oxidation Catalyst	CO	401 KAR 52:020, Section 10	Annual or biennial (for CO) See Note 1.	3A, 7E, 10, 19, 25A, ASTM D 6348-03	280 lb/mmscf	55.5 lb/mmscf	2008 hp (110% limit > max rating)		3/24/2022
		VOC				189 lb/mmscf	12.9 lb/mmscf			
		OxCat Temp				N/A	669, 671 (Pre, Post, °F)			

Emission Unit(s)	Control Device	Parameter	Regulatory Basis	Frequency	Test Method	Permit Limit	Test Result	Throughput & Operating Parameter(s) Established During Test	Activity Graybar	Date of last Compliance Testing
04 (13)	Oxidation Catalyst	CO	401 KAR 52:020, Section 10	Annual or biennial See Note 1.	1, 3A, 7E, 10, 19	12.5 ppmv @15% O_2	2.2 ppmv @15% O_2	14231 hp (110% limit = 15654 hp)	CMN20220003	3/24/2022
		OxCat Temp				N/A	653, 620 (Pre, Post, °F)			
04 (13)	Oxidation Catalyst	CO	CAA Section 114 ICR See Note 4.	N/A	1, 2, 3A, 4, 5, 10, 29, ASTM D6348-12	12.5 ppmv @ 15% O_2	1.74 ppmv @ 15% O_2	N/A	CMN20220004	12/1/2022
		CO_2				N/A	1.8% (dry)			
		Total Particulate					2.51 lb/mmscf			
		Metals					See report			
03 (11)	Oxidation Catalyst and SCR	NO_x	401 KAR 52:020, Section 10	Annual or biennial (for NO_x and CO) See Note 1.	3A, 4, 7E, 10, 19, 25A	25 ppmv @15% O_2	18.1 ppmv @15% O_2	6886 hp (110% limit = 7575 hp)	CMN20230001	3/21/2023
		CO				12.5 ppmv @15% O_2	6.40 ppmv @15% O_2			
		VOC				13.3 lb/mmscf	1.24 lb/mmscf			
		OxCat Temp				N/A	541, 514 (Pre, Post, °F)			
		SCR Temp				N/A	515 (Post, °F)			

Footnotes:

4. This test was performed to comply with the US EPA's CAA Section 114 information collection request (ICR) relating to Docket ID EPA-HQ-OAR-2020-0408. The permittee submitted a test protocol to the Division which was approved on October 6, 2022, and testing was observed by Division personnel. Results listed here were obtained from the stack test report submitted to the US EPA (Document ID EPA-HQ-OAR-2020-0408-0032) and have not been reviewed for accuracy by the Division. Of the seven runs completed, runs 1, 3, and 7 were voided as discussed in the DAQST 11-30-22 Observation Cover Sheet. Results presented are the average of the remaining runs. CH2O, HF, and HCl were also sampled but were below detection limits.

Emission Unit(s)	Control Device	Parameter	Regulatory Basis	Frequency	Test Method	Permit Limit	Test Result	Throughput & Operating Parameter(s) Established During Test	Activity Graybar	Date of last Compliance Testing
03 (12)	Oxidation Catalyst and SCR	NO_x	401 KAR 52:020, Section 10	Annual or biennial (for NO_x and CO) See Note 1.	3A, 4, 7E, 10, 19, 25A	25 ppmv @15% O_2	18.8 ppmv @15% O_2	5960 hp (110% limit = 6556 hp)	CMN2023 0001	3/21/2023
		CO				12.5 ppmv @15% O_2	0.98 ppmv @15% O_2			
		VOC				13.3 lb/mmscf	1.26 lb/mmscf			
		OxCat Temp				N/A	556, 520 (Pre, Post, °F)			
		SCR Temp				N/A	510 (Post, °F)			
02 (08)	Oxidation Catalyst	CO	401 KAR 52:020, Section 10	Annual or biennial (for CO) See Note 1.	3A, 7E, 10, 19, 25A, ASTM D 6348-03	280 lb/mmscf	86 lb/mmscf	1865 hp (110% limit > max rating)	CMN2024 0001	2/27/2024
		VOC				189 lb/mmscf	32 lb/mmscf			
		OxCat Temp				N/A	Not reported			
02 (09)	Oxidation Catalyst	CO	401 KAR 52:020, Section 10	Annual or biennial (for CO) See Note 1.	3A, 7E, 10, 19, 25A, ASTM D 6348-03	280 lb/mmscf	24 lb/mmscf	1860 hp (110% limit > max rating)		
		VOC				189 lb/mmscf	20 lb/mmscf			
		OxCat Temp				N/A	Not reported			
02 (10)	Oxidation Catalyst	CO	401 KAR 52:020, Section 10	Annual or biennial (for CO) See Note 1.	3A, 7E, 10, 19, 25A, ASTM D 6348-03	280 lb/mmscf	205 lb/mmscf	1863 hp (110% limit > max rating)		
		VOC				189 lb/mmscf	56 lb/mmscf			
		OxCat Temp				N/A	Not reported			
05	N/A	CO	40 CFR 60.4243	Every 3 years	3A, 4, 7E, 10, 19, 25A	4.0 g/hp-hr (540 ppmv @15 % O_2)	1.8 g/hp-hr (189 ppmv @15% O_2)	1032 hp (110% limit = 1135 hp)	CMN2024 0002	2/29/2024
		NO_x				2.0 g/hp-hr (160 ppmv @15% O_2)	0.9 g/hp-hr (57 ppmv @15% O_2)			
		VOC				2.0 g/hp-hr (86 ppmv @15% O_2)	0.2 g/hp-hr (11.8 ppmv @15% O_2)			

Emission Unit(s)	Control Device	Parameter	Regulatory Basis	Frequency	Test Method	Permit Limit	Test Result	Throughput & Operating Parameter(s) Established During Test	Activity Graybar	Date of last Compliance Testing
06	N/A	CO	40 CFR 60.4243	Every 3 years	3A, 4, 7E, 10, 19, 25A	4.0 g/hp-hr (540 ppmv @15 % O_2)	1.9 g/hp-hr (228 ppmv @15% O_2)	778 hp (110% limit = 856 hp)	CMN2024 0002	2/28/2024
		NO_x				2.0 g/hp-hr (160 ppmv @15% O_2)	1.4 g/hp-hr (102 ppmv @15% O_2)			
		VOC				2.0 g/hp-hr (86 ppmv @15% O_2)	0.2 g/hp-hr (13.5 ppmv @15% O_2)			
03 (11)	Oxidation Catalyst and SCR	NO_x	401 KAR 52:020, Section 10	Annual or biennial (for NO_x and CO) See Note 1.	3A, 4, 7E, 10, 19, 25A	25 ppmv @15% O_2	23.82 ppmv @15% O_2	6170 hp (110% limit = 6787 hp) NH_3 injection: 97 lb/hr	CMN2024 0003	3/4/2024
		CO				12.5 ppmv @15% O_2	1.18 ppmv @15% O_2			
		VOC				13.3 lb/mmscf	2.70 lb/mmscf			
		OxCat Temp				N/A	591, 572 (Pre, Post, °F)			
		SCR Temp				N/A	568 (Post, °F)			
03 (12)	Oxidation Catalyst and SCR	NO_x	401 KAR 52:020, Section 10	Annual or biennial (for NO_x and CO) See Note 1.	3A, 4, 7E, 10, 19, 25A	25 ppmv @15% O_2	21.4 ppmv @15% O_2	6886 hp (110% limit = 7575 hp) NH_3 injection: 102 lb/hr		3/1/2024
		CO				12.5 ppmv @15% O_2	0.15 ppmv @15% O_2			
		VOC				13.3 lb/mmscf	1.68 lb/mmscf			
		OxCat Temp				N/A	596, 556 (Pre, Post, °F)			
		SCR Temp				N/A	547 (Post, °F)			
04 (13)	Oxidation Catalyst	CO	401 KAR 52:020, Section 10	Annual or biennial See Note 1.	1, 3A, 7E, 10, 19	12.5 ppmv @15% O_2	1.56 ppmv @15% O_2	12844 hp (110% limit = 14128 hp)	CMN2024 0004	3/5/2024
		VOC				10.36 lb/mmscf	3.39 lb/mmscf			
		OxCat Temp				N/A	619, 612 (Pre, Post, °F)			

Emission Unit(s)	Control Device	Parameter	Regulatory Basis	Frequency	Test Method	Permit Limit	Test Result	Throughput & Operating Parameter(s) Established During Test	Activity Graybar	Date of last Compliance Testing
04 (13)	Oxidation Catalyst	CO	401 KAR 52:020, Section 10	Annual or biennial See Note 1.	1, 3A, 7E, 10, 19	12.5 ppmv @15% O_2	0.99 ppmv @ 15% O_2	13,064 hp (110% limit = 14,371 hp)	CMN20260001 See Note 6.	2/19/2026
		VOC				10.36 lb/mmscf	3.73 lb/mmscf			
		OxCat Temp				N/A	647, 642 (pre, post, °F)			
03 (11)	Oxidation Catalyst and SCR	NO_x	401 KAR 52:020, Section 10	Annual or biennial (for NO_x and CO) See Note 1.	7E, 10, 25A	25 ppmv @15% O_2	TBD	TBD	CMN20260002 See Note 5.	
		CO				12.5 ppmv @15% O_2	TBD			
		VOC				13.3 lb/mmscf	TBD			
		OxCat Temp				N/A	TBD			
		SCR Temp				N/A	TBD			
03 (12)	Oxidation Catalyst and SCR	NO_x	401 KAR 52:020, Section 10	Annual or biennial (for NO_x and CO) See Note 1.	7E, 10, 25A	25 ppmv @15% O_2	TBD	TBD		
		CO				12.5 ppmv @15% O_2	TBD			
		VOC				13.3 lb/mmscf	TBD			
		OxCat Temp				N/A	TBD			
		SCR Temp				N/A	TBD			

Footnotes:

5. Emission Unit 03 (11 & 12) was last tested March 4 and March 1, 2024, respectively. The CO emission rate was less than 75% of the 280 lb/mmscf limit to reduce frequency of testing provided by Permit V-16-056, Condition 3. c. for EU 03. Condition 3. a. allows reduced frequency of testing if the NO_x emission result from the performance test is less than or equal to 75 percent of the NO_x emission limit for the turbine. The previous NO_x emission results were greater than 75 percent of the NO_x emission limit for both turbines. However, the Compliance Demonstration Method for Condition 2. a. for EU 03 requires demonstrating continuous compliance by complying with either Condition 3. a. or Conditions 4. a. and b. The permittee appears to be complying the continuous parameter monitoring system requirements of Conditions 4. a. and b. based on Semi-Annual Monitoring Reports.
6. Test results shown are based on the test report submitted by the permittee. Approval of the tests is pending review by the Division.

Emission Unit(s)	Control Device	Parameter	Regulatory Basis	Frequency	Test Method	Permit Limit	Test Result	Throughput & Operating Parameter(s) Established During Test	Activity Graybar	Date of last Compliance Testing
02 (08)	Oxidation Catalyst	CO	401 KAR 52:020, Section 10	Annual or biennial (for CO) See Note 1.	320	280 lb/mmscf	44.6 lb/mmscf	1,907 hp (110% limit > max rating)	CMN20260003 See Note 6.	2/20/2026
		VOC				189 lb/mmscf	15.1 lb/mmscf			
		NO_x				N/A	0.76 g/hp-hr			
02 (09)	Oxidation Catalyst	CO	401 KAR 52:020, Section 10	Annual or biennial (for CO) See Note 1.	320	280 lb/mmscf	67.4 lb/mmscf	1,933 hp (110% limit > max rating)		
		VOC				189 lb/mmscf	16.5 lb/mmscf			
		NO_x				N/A	1.38 g/hp-hr			
02 (10)	Oxidation Catalyst	CO	401 KAR 52:020, Section 10	Annual or biennial (for CO) See Note 1.	320	280 lb/mmscf	132.2 lb/mmscf	1,920 hp (110% limit > max rating)		
		VOC				189 lb/mmscf	33.0 lb/mmscf			
		NO_x				N/A	1.40 g/hp-hr			

SECTION 4 – SOURCE INFORMATION AND REQUIREMENTS

Table A - Group Requirements:

Emission and Operating Limit	Regulation	Emission Unit
36 tpy of combined NOx emissions from listed units	401 KAR 52:020, Section 10 – to preclude 401 KAR 51:017	08, 09, 10, 11, 12
9.0 tpy of combined $PM_{2.5}$ emissions from listed units	401 KAR 52:020, Section 10 – to preclude 401 KAR 51:017	08, 09, 10, 11, 12
9.0 tpy of individual HAP emissions	401 KAR 52:020, Section 10 – To preclude major source status for HAP – effective upon startup of any one of EU 08, 09, 10, 11, or 12	Source-wide
22.5 tpy of combined HAP emissions	401 KAR 52:020, Section 10 – To preclude major source status for HAP upon startup of any one of EU 08, 09, 10, 11, or 12	Source-wide
Decommission and remove from service listed units	401 KAR 52:020, Section 10 – to preclude 401 KAR 51:017	01, 02, 03, 04, 05, 06

Table B - Summary of Applicable Regulations:

Applicable Regulations	Emission Unit
401 KAR 50:012, *General application*	07
401 KAR 59:015, *New indirect heat exchangers*	12 & 14
401 KAR 60:005 Section 2(2)(eeee), 40 C.F.R. 60.4230 through 60.4248, Tables 1 through 4 (**Subpart JJJJ**), *Standards of Performance for Stationary Spark Ignition Internal Combustion Engines*	05, 06, 11
40 CFR 60.4300a through 60.4420a, Tables 1 through 3 (**Subpart KKKKa**), *Standards of Performance for Stationary Combustion Turbines*	08, 09, 10
40 CFR 60.5360b through 60.5432b, (**Subpart OOOOb**), Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification or Reconstruction Commenced After December 6, 2022	07, 08, 09, 10
401 KAR 63:020, *Potentially hazardous matter or toxic substances*	03, 04, 07, 08, 09, 10, 11
401 KAR 63:002, Section 2(4)(dddd), 40 C.F.R. 63.6080 through 63.6175, Tables 1 through 7 (**Subpart YYYY**), *National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines*	03, 04, 08, 09, 10
401 KAR 63:002 Section 2(4)(eeee), 40 C.F.R. 63.6580 through 63.6675, Tables 1a through 8, and Appendix A (**Subpart ZZZZ**), *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*	02, 05, 06, 11

Applicable Regulations	Emission Unit
401 KAR 63:002 Section 2(4)(iiii), 40 C.F.R 63.7480 through 63.7575, Tables 1 through 13 (**Subpart DDDDD**), *National Emission Standards for Hazardous Air , Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters*	12, 14
40 CFR Part 64, *Compliance Assurance Monitoring* (CAM)	03 & 04

Table C - Summary of Precluded Regulations:

Precluded Regulations	Emission Unit
40 CFR 60.5360b through 60.5432b, (**Subpart OOOOb**), Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification or Reconstruction Commenced After December 6, 2022	13

Table D - Summary of Non Applicable Regulations:
N/A

Air Toxic Analysis

401 KAR 63:020, *Potentially Hazardous Matter or Toxic Substances*
The Division for Air Quality (Division) has performed modeling using SCREEN View on March 4, 2026, of potentially hazardous matter or toxic substances (Benzene, Ethyl benzene, Hexane, Toluene, Xylenes) that may be emitted by the facility based upon the process rates, material formulations, stack heights and other pertinent information provided by the applicant. Based upon this information, the Division has determined that the conditions outlined in this permit will assure compliance with the requirements of 401 KAR 63:020.

Single Source Determination
N/A

SECTION 5 – COMPLIANCE ASSURANCE MONITORING

40 CFR 64, *Compliance assurance monitoring* (CAM) applies to a pollutant-specific emissions unit at a major source that is required to obtain a part 70 or 71 permit if the unit satisfies all of the following criteria:

(1) The unit is subject to an emission limitation or standard for the applicable regulated air pollutant (or a surrogate thereof), other than an emission limitation or standard that is exempt under 40 CFR 64.2(b)(1);

(2) The unit uses a control device to achieve compliance with any such emission limitation or standard; and

(3) The unit has potential pre-control device emissions of the applicable regulated air pollutant that are equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source.

Emission Unit	Criteria 1 (Y/N)	Criteria 2 (Y/N)	Criteria 3 (Y/N)	Does CAM apply? If Y for criteria 1, 2, AND 3, then Yes, Otherwise, No.
01	N	N	N	No
02**	Y/N	Y/Y	N/Y	No
03	Y	Y	Y	Yes
04	Y	Y	Y	Yes
05, 06, 11	N	N	N	No
07	N	N	N	No
08, 09, 10	N	N	N	No
12, 14	Y	N	N	No
13	N	N	N	No

* If Yes, CAM applies for any of the emission units above, then see further clarification for each listed emission unit in **Section 3**.

** See further clarification for EU 02 in **Section 3**.

SECTION 6 – PERMITTING HISTORY

Permit	Permit Type	Activity #	Complete Date	Issuance Date	Summary of Action	PSD/Syn Minor
V-97-016	Initial	Log #E784	1/21/1997	11/24/1997	Initial Operating Permit	N/A
V-97-016	Admin Amend	APE20010001	12/8/2001	9/23/2004	Permittee name change	N/A
V-05-044	Renewal	APE20050001	6/6/2005	3/20/2006	Renewal	N/A
V-11-036	Renewal	APE20100002	4/14/2011	11/16/2011	Renewal, addition of EU 05	N/A
V-16-056	Renewal	APE20160002	7/21/2016	4/3/2017	Renewal, addition of controls for EU 02, 03, 04, addition of EU 06 and 07	Syn Minor
	Significant Revision	APE2016001				

SECTION 7 – PERMIT APPLICATION HISTORY

None

APPENDIX A – ABBREVIATIONS AND ACRONYMS

2SLB – Two Stroke Lean Burn
AAQS – Ambient Air Quality Standards
BACT – Best Available Control Technology
Btu – British thermal unit
CAM – Compliance Assurance Monitoring
CEMS – Continuous Emission Monitoring Systems
CH2O – Formaldehyde
CO – Carbon Monoxide
Division – Kentucky Division for Air Quality
ESP – Electrostatic Precipitator
GHG – Greenhouse Gas
HAP – Hazardous Air Pollutant
HF – Hydrogen Fluoride (Gaseous)
LPE – Legally and Practically Enforceable
MSDS – Material Safety Data Sheets
mmHg – Millimeter of mercury column height
NAAQS – National Ambient Air Quality Standards
NESHAP – National Emissions Standards for Hazardous Air Pollutants
NO_x – Nitrogen Oxides
NSR – New Source Review
O_2 – Oxygen
OxCat – Oxidation Catalyst
PEI – Project Emissions Increase
PM – Particulate Matter
PM_{10} – Particulate Matter equal to or smaller than 10 micrometers
$PM_{2.5}$ – Particulate Matter equal to or smaller than 2.5 micrometers
PSD – Prevention of Significant Deterioration
PSEU – Pollutant-Specific Emissions Unit
PTE – Potential to Emit
RICE – Reciprocating Internal Combustion Engine
SCR – Selective Catalytic Reduction
SER – Significant Emission Rate
SO_2 – Sulfur Dioxide
TF – Total Fluoride (Particulate & Gaseous)
US EPA – United States Environmental Protection Agency
VOC – Volatile Organic Compounds

APPENDIX B – INDIRECT HEAT EXCHANGER EMISSIONS LIMITATIONS

EU	Fuel	Capacity (MMBtu/hr)	Construction Date	Notes/ Removal Date	Basis for PM Limit	Total Heat Input Capacity for PM Limit (MMBtu/hr)	Basis for SO_2 Limit	Total Heat Input Capacity for SO_2 Limit (MMBtu/hr)
014	Natural Gas	6.28	2015	N/A	401 KAR 59:015, Section 4(1)(a)	6.28	401 KAR 59:015, Section 5(1)(a)1.	6.28
012-1	Natural Gas	1.154	7/2026 (Proposed)	N/A		9.742		9.742
012-2	Natural Gas	1.154		N/A				
012-3	Natural Gas	1.154		N/A				