

Commonwealth of Kentucky
Division for Air Quality
STATEMENT OF BASIS / SUMMARY

Conditional Major, Construction/Operating
Permit: F-26-011
Midwestern Gas Transmission Co - Hartford Compressor Station
102 Kirk Lane
Hartford, KY 42347

February 24, 2026
Dylan Buckingham, Reviewer

SOURCE ID:	21-183-00085
AGENCY INTEREST:	39508
ACTIVITY:	APE20250002

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SECTION 1 – SOURCE DESCRIPTION

SIC Code and description: 4922, Pipeline Transportation of Natural Gas

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: Ohio

Nonattainment Area N/A PM₁₀ PM_{2.5} CO NO_x SO₂ Ozone Lead
If yes, list Classification:

PTE* greater than 100 tpy for any criteria air pollutant Yes No

If yes, for what pollutant(s)?

PM₁₀ PM_{2.5} CO NO_x SO₂ VOC

PTE* greater than 250 tpy for any criteria air pollutant Yes No

If yes, for what pollutant(s)?

PM₁₀ PM_{2.5} CO NO_x SO₂ 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:

The facility uses compressors to increase the pressure of natural gas in transfer pipelines. The facility has two compressors powered by 2,500 HP spark ignition (SI) (ICE) internal combustion engines and two compressors powered by 5,000 HP SI ICE. The engines are fueled by natural gas. The facility also has an emergency generator powered by a SI ICE 1,468 HP engine.

The facility also has an Oil/Condensate Tank (TK-1). This unit is located in Section C of the permit (Insignificant Activities) along with the TK-1 Loading and Venting/Blowdown emissions

SECTION 2 – CURRENT APPLICATION AND EMISSION SUMMARY FORM

Permit Number: F-26-011

Activity: APE20250002

Application Received: August 20, 2025 Application Complete Date(s): February 24, 2026

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

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

Description of Action:

- Renewal of the permit
- Addition of fugitive components to account for the updated regulatory applicability of 40 CFR 60, Subpart OOOOa.

F-26-011 Emission Summary				
Pollutant	Actual (tpy)	PTE F-20-043	Change	PTE F-26-011 (tpy)
CO	NA	319.88/29.54	0.28/.01	320.16/29.55
NOx	NA	73.03	0.14	73.17
PT	NA	0.03	4.29	4.32
PM ₁₀	NA	4.32	0	4.32
PM _{2.5}	NA	4.32	0	4.32
SO ₂	NA	0.25	0	0.25
VOC	NA	42.28	-14.54	27.74
Lead	NA	0	0	0
Greenhouse Gases (GHGs)				
Carbon Dioxide	NA	61,582	48.87	61630.87
Methane	NA	576.3	1.76	578.06
Nitrous Oxide	NA	0.095	0.005	0.10
CO ₂ Equivalent (CO ₂ e)	NA	76,019	91.71	76110.71
Hazardous Air Pollutants (HAPs)				
Acetaldehyde	NA	3.61	0.01	3.62
Acrolein	NA	2.22	0	2.22
Benzene	NA	--	0.21	0.21
Formaldehyde	NA	22.82/6.89	0.00	22.82/6.89
Hexane; N-Hexane	NA	0.73	0.01	0.74
Methanol	NA	1.08	0	1.08
Toluene	NA	--	0.18	0.18
Xylenes (Total)	NA	--	0.08	0.08
Combined HAPs:	NA	30.94	15.93	15.01

Footnote: Emissions data survey was not completed.

SECTION 3 – EMISSIONS, LIMITATIONS AND BASIS

Emission Unit C-1: Compressor Engine 1 Emission Unit C-2: Compressor Engine 2 Emission Unit C-3: Compressor Engine 3 Emission Unit C-4: Compressor Engine 4				
Pollutant	Emission Limit or Standard	Regulatory Basis for Emission Limit or Standard	Emission Factor Used and Basis	Compliance Method
NOx	1.0 g/HP-hr (82 ppmvd at 15% O2)	40 CFR 60.4233(e)	For C-1 and C-2: 170.513 lb/MMscf, For C-3 and C-4: 172.3 lb/MMscf Manufacturer's Specs	Performance testing and operation/maintenance of the control device
CO	2.0 g/HP-hr (270 ppmvd at 15% O2)		For C-1 and C-2: 750.3 lb/MMscf, For C-3 and C-4: 758.0 lb/MMscf; Manufacturer's Specs	
VOC	0.7 g/HP-hr (60 ppmvd at 15% O2)		For C-1 and C-2: 88.7 lb/MMscf For C-3 and C-4: 86.1 lb/MMscf Manufacturer's Specs	
Initial Construction Date: For each; July 2020 Process Description: Emission Unit C-1 Compressor Engine 1 Caterpillar G3608 A4, 2,500 Hp Engine Type: 4 stroke, Lean burn Primary Fuel: Natural gas Max Operating Rate: 0.0161 MMscf/hr Control Device: Oxidation Catalyst (CAT-1) Emission Unit C-2 Compressor Engine 2 Caterpillar G3608 A4, 2,500 Hp Engine Type: 4 stroke, Lean burn Primary Fuel: Natural gas Max Operating Rate: 0.0161 MMscf/hr Control Device: Oxidation Catalyst (CAT-2) Emission Unit C-3 Compressor Engine 3 Caterpillar G3616 A4, 5,000 Hp Engine Type: 4 stroke, Lean burn Primary Fuel: Natural gas Max Operating Rate: 0.032 MMscf/hr Control Device: Oxidation Catalyst (CAT-3)				

Emission Unit C-1: Compressor Engine 1
Emission Unit C-2: Compressor Engine 2
Emission Unit C-3: Compressor Engine 3
Emission Unit C-4: Compressor Engine 4

Emission Unit C-4 Compressor Engine 4

Caterpillar G3616 A4, 5,000 Hp
 Engine Type: 4 stroke, Lean burn
 Primary Fuel: Natural gas:
 Max Operating Rate: 0.032 MMscf/hr
 Control Device: Oxidation Catalyst (CAT-4)

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 Combustion Engines*.

Comments:

These engines are not certified by EPA, an OxCat system is required to meet the applicable standards from 40 CFR 60, Subpart JJJJ. Emission factors for NO_x, CO, VOC, and CO₂ are based on engine manufacturer's specifications and OxCat manufacturer's guarantee, formaldehyde emission factors are based on AP-42 Chapter 3.2 and OxCat manufacturer's guarantee, and the remainder of emissions factors are from AP-42 Chapter 3.2.

Emission Unit C-5: Emergency Generator Engine 1

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% O ₂	40 CFR 60.4233(e)	318.7 lb/MMscf EPA certification	Purchasing a certified engine
CO	4.0 g/HP-hr, or 540 ppmvd at 15% O ₂		637.4 lb/MMscf EPA certification	
VOC	1.0 g/HP-hr, or 86 ppmvd at 15% O ₂		223.1 lb/MMscf EPA certification	

Initial Construction Date: August 2020

Process Description:

Emission Unit C-5 Emergency Generator Engine 1
 Caterpillar G3512 A4, 1,468 HP (Certified)
 Engine Type: 4 stroke, Lean burn
 Primary Fuel: Natural gas
 Max Operating Rate: 0.0095 MMscf/hr
 Control Device: None

Emission Unit C-5: Emergency Generator Engine 1

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 Combustion Engines*.

Comments:

The engine is certified to the standards of a non-emergency engine. The EPA certification and manufacturer's specifications were provided with the initial application. Emission factors for NOX, CO, VOC are based on the EPA certification. All other emission factors are based on AP-42 Chapter 3.2.

Emission Unit EU06 Fugitive Piping Components

Initial Construction Date: 10/2021

Process Description:

Emission Unit EP06 Fugitive Piping Components

Pipe Component	Number of Components
Valves	150
Connectors	803
Pressure Relief Valves	14
Open-ended Lines	22
Compressor Seals	8

Applicable Regulation:

401 KAR 60:005, Section 2(2)(iii), 40 C.F.R. 60.5360a through 60.5432a, Tables 1 through 3 (**Subpart OOOOa**), *Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015*. Pursuant to 40 CFR 60.5365a(j), The collection of fugitive emissions components at a compressor station, as defined in 40 CFR 60.5430a, is an affected facility for which construction, modification, or reconstruction commenced after September 18, 2015, and on or before December 6, 2022 is an affected facility for 40 CFR 60, Subpart OOOOa. The collection of fugitive emissions components at the Hartford Compressor Station commenced construction after September 18, 2015. Therefore, the collection of fugitive emissions components at the facility are subject to the requirements of 40 CFR 60, Subpart OOOOa.

State-Origin Requirements:

401 KAR 63:020, *Potentially hazardous matter or toxic substances* applies to each affected facility which emits or may emit potentially hazardous matter or toxic substances, provided that such emissions are not elsewhere subject to the administrative regulations of the Division.

Emission Unit EU06 Fugitive Piping Components

Comments:

NOTE - The pipeline equipment count listed above reflects an estimated 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 cause a significant increase of emissions or potential to emit.

Emission Factors are from EPA Document EPA-453/R-95/017 and natural gas speciated emissions including VOC, Methane, and CO₂.

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	Thruput and Operating Parameter(s) Established During Test	Activity Graybar	Date of last Compliance Testing
C-1	Oxidation Catalyst	NO _x	40 CFR 60.4244	Initial and subsequent every three years or 8760 hours, whichever comes first	ASTM D6348-03	1.0 g/HP-hr	0.18 g/HP-hr	2353 Hp	CMN2022 0001	1/05/22
		CO				2.0 g/HP-hr	0.031 g/HP-hr			
		VOC				0.7 g/HP-hr	0.06 g/HP-hr			
C-2		NO _x			ASTM D6348-03	1.0 g/HP-hr	0.19 g/HP-hr	2304 Hp		
		CO				2.0 g/HP-hr	0.04 g/HP-hr			
		VOC				0.7 g/HP-hr	0.08 g/HP-hr			
C-3		NO _x			ASTM D6348-03	1.0 g/HP-hr	0.38 g/HP-hr	4642 Hp		
		CO				2.0 g/HP-hr	0.09 g/HP-hr			
		VOC				0.7 g/HP-hr	0.11 g/HP-hr			
C-4		NO _x			ASTM D6348-03	1.0 g/HP-hr	0.38 g/HP-hr	4642 Hp		
		CO				2.0 g/HP-hr	0.09 g/HP-hr			
		VOC				0.7 g/HP-hr	0.11 g/HP-hr			

Emission Unit(s)	Control Device	Parameter	Regulatory Basis	Frequency	Test Method	Permit Limit	Test Result	Thruput and Operating Parameter(s) Established During Test	Activity Graybar	Date of last Compliance Testing
C-1	Oxidation Catalyst	NO _x	40 CFR 60.4244	Every three years or 8760 hours, whichever comes first	320/ MKS 2030 FTIR	1.0 g/HP-hr	0.23 g/HP-hr	2290 HP	CMN2024 0001	12/17/24
		CO				2.0 g/HP-hr	0.3 g/HP-hr			
		VOC				0.7 g/HP-hr	0.09 g/HP-hr			
C-2		NO _x			320/ MKS 2030 FTIR	1.0 g/HP-hr	0.19 g/HP-hr	1470 Hp		
		CO				2.0 g/HP-hr	0.16 g/HP-hr			
		VOC				0.7 g/HP-hr	0.05 g/HP-hr			
C-3		NO _x			320/ MKS 2030 FTIR	1.0 g/HP-hr	0.76 g/HP-hr	4290 Hp		
		CO				2.0 g/HP-hr	0.22 g/HP-hr			
		VOC				0.7 g/HP-hr	0.12 g/HP-hr			
C-4		NO _x			320/ MKS 2030 FTIR	1.0 g/HP-hr	0.39 g/HP-hr	4910 Hp		
		CO				2.0 g/HP-hr	0.14 g/HP-hr			
		VOC				0.7 g/HP-hr	0.10 g/HP-hr			
C-1, C-2, C-3, C-4	Oxidation Catalyst	Formaldehyde	To preclude 401 KAR 52:020	Initial	Method 320 or 323	≤ 9.0 tpy sourcewide	TBD	TBD	TBD	TBD

Footnotes:

Formaldehyde has not been tested yet.

SECTION 4 – SOURCE INFORMATION AND REQUIREMENTS

Table A - Group Requirements:

Emission and Operating Limit	Regulation	Emission Unit
90 tpy of CO emissions	401 KAR 52:030, to preclude 401 KAR 52:020 and 401 KAR 51:017	Source-wide
9.0 tpy of individual HAP emissions	401 KAR 52:030, to preclude 401 KAR 52:020	
22.5 tpy of combined HAP emissions		

Table B - Summary of Applicable Regulations:

Applicable Regulations	Emission Unit
401 KAR 60:005, Section 2(2)(eeee) 40 C.F.R. 60.4230 through 60.4248, Tables 1 through 4 (Subpart JJJJ), <i>Standards of Performance for Stationary Spark Ignition Internal Combustion Engines.</i>	C-1, C-2, C-3, C-4 and C-5
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) <i>National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.</i>	
401 KAR 60:005, Section 2(2)(iiii), 40 C.F.R. 60.5360a to 60.5432a, Tables 1 through 3 (Subpart OOOOa), <i>Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015</i>	EU06

Table C - Summary of Precluded Regulations:

Precluded Regulations	Emission Unit
401 KAR 52:020, Title V permits.	Source-wide
401 KAR 51:017, Prevention of significant deterioration of air quality	

SECTION 4 – SOURCE INFORMATION AND REQUIREMENTS (CONTINUED)

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 SCREEN View on January 7, 2021 of potentially hazardous matter or toxic substances (Hexane, Benzene, Ethylbenzene, Toluene, Xylene) 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 – PERMITTING HISTORY

Permit	Permit type	Activity#	Complete Date	Issuance Date	Summary of Action	PSD/Syn Minor
G-04-001 R1	Initial	APE20040001	6/26/06	5/5/02	Initial G-Permit	N/A
G-09-002	Renewal	APE20090001	2/11/10	10/4/10	Renewal	N/A
V-15-028	Renewal	APE20150001	8/26/15	1/12/16	Renewal Title V Permit, previously part of the General permit	N/A
F-20-043	Cond Mjr/Syn Mnr-Initial	APE20200001	10/01/20	01/19/21	Initial Cond Mjr/ Syn Mnr-Initial	Syn Minor
F-20-043 R1	Admin Amendment	APE20250001	12/8/2005	2/8/25-	Added second process line, EP20 – EP23	Syn Minor

SECTION 6 – PERMIT APPLICATION HISTORY

None

APPENDIX A – ABBREVIATIONS AND ACRONYMS

AAQS	– Ambient Air Quality Standards
BACT	– Best Available Control Technology
Btu	– British thermal unit
CAM	– Compliance Assurance Monitoring
CO	– Carbon Monoxide
Division	– Kentucky Division for Air Quality
ESP	– Electrostatic Precipitator
GHG	– Greenhouse Gas
HAP	– Hazardous Air Pollutant
HF	– Hydrogen Fluoride (Gaseous)
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
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
PTE	– Potential to Emit
SO ₂	– Sulfur Dioxide
TF	– Total Fluoride (Particulate & Gaseous)
VOC	– Volatile Organic Compounds