West Virginia Department of Environmental Protection Division of Air Quality





# For Final Significant Modification Permitting Action Under 45CSR30 and Title V of the Clean Air Act

This Fact Sheet serves to address the changes specific to this Significant Modification and shall be considered a supplement to the Fact Sheet corresponding with the Title V operating permit issued on February 13, 2019.

Permit Number: **R30-03900044-2019** Application Received: **August 19, 2022** Plant Identification Number: **03-54-039-00044** Permittee: **Cranberry Pipeline Corporation** Facility Name: **Staten Run Compressor Station** Mailing Address: **101 McQuiston Drive, Jackson Center, PA 16133** 

Permit Action Number: SM01

Revised: February 6, 2023

Physical Location: UTM Coordinates: Directions: Montgomery, Kanawha County, West Virginia 471.779 km Easting • 4226.742 km Northing • Zone 17 Travel approximately 1.25 miles west of Smithers on U.S. Route 60 and the facility will be located on the right-hand side of the road.

# **Facility Description**

Staten Run Compressor Station is a natural gas production facility covered by Standard Industrial Classification (SIC) Code 1311. The station has the potential to operate twenty-four (24) hours per day, seven (7) days per week, fifty-two (52) weeks per year. The station consists of one (1) TEG dehydrator, one (1) dehydrator reboiler, two (2) 412 HP natural gas compressor engines, one (1) 375 HP natural gas compressor engine, one (1) 115 HP natural gas compressor engine, one (1) 60 HP natural gas emergency generator, and five (5) storage tanks of various sizes.

This significant modification is to address a change in equipment at the station by replacing Emission Unit #4, a 115 hp, 2SLB, Ajax DPC 120 compressor engine with Emission Unit #5, a relocated, existing 145 hp, 4SRB, Caterpillar G3306 NA compressor engine.

## **Emissions Summary**

This modification results in the following emission changes:

Pollutant	Change in Potential Emissions TPY
Carbon Monoxide (CO)	+ 0.63
Nitrogen Oxides (NO <sub>X</sub> )	+ 27.36
Particulate Matter (PM/PM <sub>10</sub> / PM <sub>2.5</sub> )	-0.13
Sulfur Dioxide (SO <sub>2</sub> )	0
Volatile Organic Compounds (VOC)	-0.41
Total HAPs	-0.07

# **Title V Program Applicability Basis**

With the proposed changes associated with this modification, this facility maintains the potential to emit 218.43 TPY of  $NO_x$ . Due to this facility's potential to emit over 100 tons per year of criteria pollutant Cranberry Pipeline Corporation's Staten Run Compressor Station is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

# Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

The modification to this facility has been found to be subject to the following applicable rules:

Federal and State:		
45CSR13	Permits For Construction, Modification, Relocation And	
	Operation Of Stationary Sources Of Air Pollutants,	
	Notification Requirements, Administrative Updates,	
	Temporary Permits, General Permits, And Procedures For	
	Evaluation	
45CSR30	Operating permit requirement.	
45CSR34	Emission Standards For Hazardous Air Pollutants	
40 CFR Part 63 Subpart ZZZZ	National Emissions Standards for Hazardous Air Pollutants for	
	Stationary Reciprocating Internal Combustion Engines	
State Only:	N/A	

Each State and Federally-enforceable condition of the Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

# Active Permits/Consent Orders

The active permits/consent orders affected by this modification are as follows:

Permit or	Date of	Permit Determinations or Amendments That
Consent Order Number	Issuance	Affect the Permit ( <i>if any</i> )
R13-2863C	November 9, 2022	

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table," which may be downloaded from DAQ's website.

# **Determinations and Justifications**

Below are the revisions contained in R30-03900044-2019 (SM01) and a regulatory discussion associated with this modification:

- 1) **Permittee Mailing Address (page 1)** The mailing address has been updated.
- 2) UTM Coordinates (page 1) The UTM coordinates have been updated.
- 3) Table of Contents The Table of Contents has been updated as follows:
  - Section 6.0 has been updated for the new compressor engine.
  - Section 11.0 for the "Facility-Wide Fugitive Emissions" has been added.
- 4) Title V Boilerplate changes
  - **Condition 3.5.3.** The contact information for the USEPA has been updated.
- 5) Condition 1.1. Emission Units Table
  - Removed Emission Unit #4 "Ajax DPC 120 Compressor Engine; 2 Stroke Lean Burn."
  - > Added Emission Unit #5 "Caterpillar G3306 NA 4SRB Compressor Engine."
  - Updated the Design Capacity and Installation Date for Emission Unit CE-BD "Compressor Engine Blowdown Venting Emissions."
  - Updated footnote 2 to identify the manufacture date of the Caterpillar compressor engine (Emission Unit #5) as March 19, 1998.
- 6) Condition 1.2., Active R13, R14, and R19 Permits Updated R13-2863 to the "C" version and the date of issue.
- 7) Language revisions Throughout Sections 5.0., 6.0., 8.0., 9.0. and 10.0. there have been revisions to the language that corresponds to language revisions in R13-2863C. These revisions are not substantive in nature and do not necessarily correspond to the compressor engine replacement nor do they change the applicable requirement. Examples of the revisions include the addition of "permit condition;" the replacement of "section" or "sections" and "table" with "permit condition" and/or "permit conditions;" and the deletion of "of this permit." No subsequent references will be made to these revisions.

- 8) Section 6.0 Title Replaced "AJAX DPC-120" with "Caterpillar G3306 NA" and revised the emission point ID from "001-005" to "001-006" in the section title.
- 9) Conditions 6.1.1 and 6.1.2 The requirements of these conditions were revised to reflect the revised requirements in R13-2863C.
- **10**) Section 7.0 Title Revised the Unit #5 compressor engine emission point ID from "001-005" to "001-006" in the section title
- **11) Condition 7.1.1.b.** Removed emission point ID "001-005" from Item 6 in the table and added 001-006 to Item 10. Replaced "001-005" with "001-006" in the citation of authority. Also added "and 7.1.3" to the citation of authority because the requirement in 7.1.1.c. was changed from condition 7.1.1.c. in R13-2863B to condition 7.1.3. in R13-2863C.
- **12**) **Condition 7.1.6.** Added "; 45CSR13, R13-2863, Condition 7.1.2." to the citation of authority. The requirements in this condition (from Table 6 of Subpart ZZZZ) were not included R13-2863B but were added as condition 7.1.2. in R13-2863C.
- **13**) **Conditions 7.1.8. and 7.4.1.c.** Although not included in the significant modification application, the requirements in these conditions were updated to reflect the revised requirements in 40 CFR Subpart ZZZZ for emergency stationary RICE.
- 14) Condition 10.1.1. This condition was revised to reflect the changes in R13-2863C which replaced "at the facility" with "for Emission Unit #5; increased the number of blowdowns from 48 to 52 per year; and increased the annual gas released from blowdowns from less than 34,416 to less than 52,000.
- **15**) **Condition 10.2.1.** This condition was revised to reflect the changes in R13-2863C which revised the language by replacing "will further" to "shall" in the last sentence.
- 16) Section 11.0 Facility-Wide Fugitive Emissions This Section of the permit has been added and contains the requirements from 40 CFR §60.5397a for the collection of fugitive emissions at a compressor station. However, since the requirements of §60.5397a are not applicable to the facility, and the facility has voluntarily agreed to these requirements, the citation of authority for all the requirements in this section will be 45CSR§30-12.7. See the discussion under the "Response to Comments (Statement of Basis)" section below.

# **REGULATORY DISCUSSION:**

# 40 CFR 60 Subpart OOOOa -Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015

- The compressor associated with Emission Unit #5 is a screw compressor and therefore will not be subject to the rod packing standards of 40 CFR §60.5385a.
- As a result of a determination during the draft comment period, the replacement of Emission Unit #4, a 115 hp, 2SLB, Ajax DPC 120 compressor engine with Emission Unit #5, a 145 hp, 4SRB, Caterpillar G3306 NA compressor engine did not constitute a "modification" to a compressor station pursuant to §60.5365a(j) since the screw compressor is not an affected facility under Subpart OOOOa. See the discussion under the "Response to Comments (Statement of Basis)" section below.

# 40 CFR 63 Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

Emission Unit #5, a 145 hp Caterpillar G3306 NA 4SRB RICE compressor engine is a stationary RICE located at an area source of HAP emission that commenced construction before June 12, 2006. Therefore, pursuant to 40 CFR §63.6590(a)(1)(iii), it is considered an existing RICE subject to this subpart. The unit will maintain compliance with the rule in accordance with §63.6640, Table 2d (Line 10) and Table 6 (Line 9) of Subpart ZZZZ. (see Items 12 and 13 above)

Table 2d, Line 10

- Change oil and filter every 1,440 hours of operation or annually, whichever comes first;
- Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first, and replace as necessary; and
- Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.

# Table 6, Line 9

- Work or Management practices;
- Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or
- Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
- ➢ 40 CFR §63.6640(f) for Emergency Stationary RICE was revised in August 2022. Therefore, the corresponding requirements for the emergency generator EG-1 in condition 7.1.8. were revised as discussed in Item 14 above.

# **Non-Applicability Determinations**

The following requirements have been determined not to be applicable to the subject facility due to the following:

# 40 CFR 60 Subpart JJJJ Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

Emission Unit #5 was manufactured on March 19, 1998, which predates the June 12, 2006 applicability date specified in §60.4230(a)(4). Therefore, it is not subject to this subpart

# 40 CFR 60 Subpart OOOOa – Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification, or Reconstruction Commenced after September 18, 2015

See the discussion under the "Response to Comments (Statement of Basis)" section below

# 40 CFR Part 64 - Compliance Assurance Monitoring

Emission Unit #5 does not use a control device to achieve compliance with an emission limit or standard. Therefore, since it does not meet the applicability requirements of §64.2 it is not subject to this subpart. Furthermore, Emission Unit #5 is subject to 40 CFR 63 Subpart ZZZZ and is exempt from CAM per §64.2(b)(1)(i).

# **Request for Variances or Alternatives**

None.

#### **Insignificant Activities**

Insignificant emission unit(s) and activities are identified in the Title V application.

#### **Comment Period**

Beginning Date:	December 20, 2022
Ending Date:	January 19, 2023

#### **Point of Contact**

All written comments should be addressed to the following individual and office:

Frederick Tipane West Virginia Department of Environmental Protection Division of Air Quality 601 57<sup>th</sup> Street SE Charleston, WV 25304 304/926-0499 ext. 41910 frederick.tipane@wv.gov

# **Procedure for Requesting Public Hearing**

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

#### **Response to Comments (Statement of Basis)**

During the "Draft" public comment period, it was discovered that since the replacement compressor is a screw type compressor, it is not an affected facility for the purposes of 40 CFR 60 Subpart OOOOa. As such, the modification criteria under 40 CFR §60.5365a(j) is not met and therefore the facility is not subject to the 40 CFR §60.5397a LDAR requirements which were included in Section 11.0 of the Draft permit. However, through correspondence with the facility through their consultant, Cranberry Pipeline Corporation has agreed to leave the requirements of §60.5397a in the permit "on a voluntary basis until further guidance can be obtained from EPA." As a result, the following revisions have been made to the Draft Permit:

- The Section 11 Title has been revised to "Facility-Wide Fugitive Emissions" This revision has also been made in the table of contents section of the permit.
- ♦ The 40 CFR §60.5397a citations of authority in Section 11.0 of the permit have been removed.
- ✤ A note has been added below the Section 11.0 title stating that the §60.5397a requirements are not applicable but contain references to sections of §60.5397a.
- A statement that the citation of authority for all the requirements in Section 11 is 45CSR§30-12.7.
- Resulting from this non-applicability discovery, 40 CFR 60 Subpart OOOOa has been added back to the non-applicable permit shield section of the permit as condition 3.7.2.h. and the subsequent subsections renumbered to the original numbering.
- With the removal of the §60.5397a citations of authority in Section 11.0, the total number of pages of the permit has been changed from "49" to "48."

Please note: This discovery of non-applicability was not a result of comments received during the "Draft" comment period but rather through internal DAQ discussions and through verification from Karen Marsh of USEPA via correspondence with a WVDAQ enforcement staff member.