

Fact Sheet



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

This Fact Sheet serves to address the changes specific to this Minor Modification, and shall be considered a supplement to the Fact Sheet corresponding with the Title V operating permit issued on April 14, 2020.

Permit Number: **R30-05100142-2020**

Application Received: **August 13, 2020**

Plant Identification Number: **051-00142**

Permittee: **Blue Racer Midstream, LLC**

Facility Name: **Natrium Extraction and Fractionation Processing Plant (NPP)**

Mailing Address: **5949 Sherry Lane, Suite 1700; Dallas, TX 75225**

Permit Action Number: *MM01* Revised: *April 20, 2021*

Physical Location:	Proctor, Marshall County, West Virginia
UTM Coordinates:	512.1 km Easting • 4,400.8 km Northing • Zone 17
Directions:	Facility is located North of New Martinsville, WV off State Route 2 at 14786 Energy Road, Proctor, WV 26055

Facility Description

The Natrium Extraction and Fractionation Processing Plant (SIC Code: 1321) is a natural gas processing plant with natural gas liquids (NGL) processing capability (utilizing seven (7) permitted cryogenic plants) located approximately four (4) miles northwest of Proctor, Marshall County, WV along the east bank of the Ohio River. The facility has the capability to both process large amounts of raw natural gas (by separating out the liquids, drying it, and removing impurities) and to fractionate NGLs into usable components. NGLs are generally defined to be the lighter liquid components entrained in the gas stream as opposed to "condensate" which is the heavier, pentane plus (C5+) fraction of higher boiling point components that are separated at the well-head under standard conditions. NGLs - both after separation from gas pipelined to the site, as well as NGLs sent to the site via pipeline, truck, railcar, or barge - are separated (or "fractionated") into their constituent organic compounds. The compounds ethane, propane, butane, i-butane, and natural gasoline are produced by the fractionation process.

This modification incorporates changes from R13-2896I (issued 10/27/20). R13-2896I is to permit an additional 3,000 horsepower (hp) of diesel-fueled fire pump engines (S058). This modification also incorporates additional changes from R13 administrative amendment, R13-2896H which was issued on 8/13/2020. Due to the timing and successive issuances of permits R13-2896H and R13-2896I, the changes resulting from both permitting actions were considered in this minor modification of the Title V permit. R13-2896H is to remove units that have not been constructed and to recalculate the HAP potential-to-emit (PTE) of the natural gas-fired heaters. It includes reduction of the maximum permitted allowable number of condensate unloading disconnect events (S055) from 54,750 events/yr to 40,150 events/yr and the revision of n-hexane (hexane) emission factors on all natural gas-fired heaters.

Emissions Summary

This modification results in the following emission changes:

Pollutant	Change in Potential Emissions (+ or -), TPY
NO _x	-6.61
CO	-14.02
VOC	-15.03
PM	-0.23
SO ₂	-0.02
HAPs	-7.65

Title V Program Applicability Basis

With the proposed changes associated with this modification, this facility maintains the potential to emit 219.72 TPY of CO, 203.83 TPY of NO_x, and 373.79 TPY of VOC. Due to this facility's potential to emit over 100 tons per year of criteria pollutant, Blue Racer Midstream, LLC 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	NSR permitting
	45CSR16	New stationary sources
	45CSR30	Operating permit requirement.
	45CSR34	Emission Standards for Hazardous Air
		Pollutants for Source Categories Pursuant to
		40 CFR, Part 63
	40 C.F.R. Part 60, Subpart IIII	CI RICE NSPS
	40 C.F.R. Part 63, Subpart ZZZZ	RICE MACT
State Only:	None	

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 Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (<i>if any</i>)
R13-2896H	August 13, 2020	
R13-2896I	October 27, 2020	

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

Changes from R13-2896H have been incorporated in the Title V permit. These changes include the following:

- Emission Unit IDs- Emergency Generators (S057), one Glycol Dehydration Unit (S032), one Glycol Reboiler (S029), and the associated Vapor Combustor (V003) were removed from the permit (these units were never constructed).
- Section 8 was removed from the permit.
- Conditions 9.1.1, 9.1.2, 9.1.3, 9.1.4, 9.2.1, 9.2.2 and 9.2.3 were updated.
- Conditions 9.1.6, 9.1.7, 9.1.8, 9.2.4, 9.3.2, 9.3.3, 9.4.1, 9.4.2, 9.4.3, 9.4.4 and section 9.5 were removed from the permit.
- Conditions 12.1.2, 13.1.1, 14.1.3, 14.1.4 and 14.2.3 were updated.

Changes from R13-2896I have been incorporated in the Title V permit. These changes include the following:

- The new diesel-fired fire pumps (S058) were added to the Emission Units Table 1.0 and section 7 was updated.
- **40 CFR Part 60 Subpart IIII** - According to 40 CFR §60.4200(a)(4), compression ignition internal combustion engines commencing construction after July 11, 2005 are subject to these standards. Blue Racer Midstream has proposed the use of up to 3,000 hp of emergency fire pump engines (each with a potential power of greater than 750 hp and an engine displacement of less than 30 liters per cylinder). Based on the 40 CFR §60.4205(c), the standards for owner/operators of emergency fire pump CI ICE are given under Table 4:

Table 2: 40 CFR Part 60 Subpart IIII Standards

Duty	Size (kW _m)	Displacement (L/cyl)	Source	Emission Standards - g/kW-hr (g/hp-hr)				
				NO _x	HC	NMHC + NO _x	CO	PM
Emergency Fire Pump	kW>750	<30	40 CFR Part 60 Subpart IIII, Table 4 ⁽¹⁾	n/a	n/a	6.4 (4.8)	3.5 (2.6)	0.20 (0.15)

(1) Logic train is as follows: §60.4205(c) → Table 4.

Blue Racer Midstream is required, pursuant to 40 CFR §60.4211(c), to comply with the emission standards given above by purchasing an engine certified to the emission standards.

- The proposed fire pump engine(s) (EU# S058) will be manufacturer certified as compliant with 40 CFR Part 60 Subpart IIII. Applicable operating requirements and emission limits for the new diesel-fired fire pumps were added under conditions 7.1.8, 7.1.9, and 7.1.10 of this permit.
- Conditions 7.1.3 and 7.1.5 were updated due to changes from R13-2896I and condition 7.1.4 was changed due to updates to 40 CFR 60 Subpart IIII on December 4, 2020.
- Condition 7.1.6 (c) was updated due to change in 40 CFR Part 60 Subpart IIII. These sections have been vacated.
- Language was added under 7.2.2. clarifying that compliance with the maximum annual operation limits under condition 7.1.3 will be used to determine compliance with the annual fuel usage limitations under conditions 7.1.1 and 7.1.8.
- Requirements of 40 CFR §60.4214(d) were added in condition 7.5.1.
- **40CFR63, Subpart ZZZZ:** as specified in 40CFR§63.6590(c), compliance with 40CFR63, Subpart ZZZZ is achieved through compliance with 40CFR60, Subpart IIII for a new stationary RICE located at an area source of HAPs.

Non-Applicability Determinations

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

None

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: N/A
 Ending Date: N/A

Point of Contact

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

Beena Modi

West Virginia Department of Environmental Protection

Division of Air Quality

601 57th Street SE

Charleston, WV 25304

Phone: 304/926-0499 ext. 41283

Beena.j.modi@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)

Not applicable.