

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 October 10, 2018

Permit Number: **R30-05100002-2018**
Application Received: **December 12, 2019**
Plant Identification Number: **03-054-051-00002**
Permittee: **Eagle Natrium LLC**
Facility Name: **Natrium Plant**
Mailing Address: **P.O. Box 191, New Martinsville, WV 26155**

Permit Action Number: *MM01* Revised: *June 16, 2020*

Physical Location: New Martinsville, Marshall County, West Virginia
UTM Coordinates: 512.70 km Easting • 4,399.60 km Northing • Zone 17
Directions: WV State Route 2, 5 miles north of New Martinsville, WV.

Facility Description

Eagle Natrium LLC owns and operates a Chlor-Alkali and Derivatives Plant in Marshall County, West Virginia commonly known as the Natrium Plant. The plant employs approximately 500 people and operates 24 hours a day, 7 days a week. The facility is located five miles north of New Martinsville, thirty miles south of Wheeling, and is built 6,850 feet above salt deposits. In 1941 the U.S. Government purchased the current plant site and began to drill the salt bed to produce the brine needed to produce chlorine (Cl₂) and caustic soda (NaOH). In addition to producing Cl₂ and NaOH, the facility produces hydrogen gas (H₂), hydrochloric acid (HCl), and calcium hypochlorite [Ca(OCl)₂]. The facility is a Chemicals and Allied Products facility and operates under the following SIC Codes:

Primary 2812 – Alkalies and Chlorine
Secondary 2819 – Industrial Inorganic Chemicals, Not Elsewhere Classified

This modification incorporates changes covered by permit R13-3328A to restore the old Raw Brine Flare process [Gas Separator (SP007) and Raw Brine Flare (FL003)] as previously permitted before R13-3328; to allow backwashing and depressurization of all brine wells through the old Raw Brine Flare process; and to remove the Zero Discharge Collection Tank (V273, E418) and flare (FL002). With the construction and operation of the new Brine H₂S Stripper System, SO₂ emissions to the atmosphere were reduced by approximately 51 tons/yr in R13-3328. Modification permit R13-3328A allows the old Raw Brine Flare Process to continue to operate, adding back approximately 11.2 tons/yr of SO₂ emissions (with DAQ Approved Extended Outage Flaring) making the overall reduction in SO₂ emissions as a result of the changes made in R13-3328 and R13-3328A approximately equal to 39 tons/yr.

Emissions Summary

The change in potential emissions associated with the minor modification (MM01) is as follows:

Pollutants	Change in Potential Emissions, TPY
SO ₂	+11.2

Title V Program Applicability Basis

With the proposed changes associated with this modification, this facility maintains the potential to emit 693 tpy of CO; 1,290 tpy of NO_x; 615.5 tpy of PM₁₀; 8,535 tpy of SO₂; 132 tpy of VOC; 661 tpy of hydrochloric acid; and 38 tpy of hydrofluoric acid. Due to this facility's potential to emit over 100 tons per year of criteria pollutant, over 10 tons per year of a single HAP, and over 25 tons per year of aggregate HAPs, Eagle Natrium LLC – Natrium Plant 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:	45CSR6	Open burning prohibited.
	45CSR13	Construction/modification permits
	45CSR30	Operating permit requirement.
State Only:	45CSR4	No objectionable odors.

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>)
R13-3328A	March 17, 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 R13-3328A have been incorporated in the Title V permit. These changes include the following:

- Restore the ability to use the old Raw Brine Flare Process [the gas separator (SP007, E417) and raw brine flare (FL003, E417)] to separate and burn the dissolved H₂S found in the raw brine stream.
- Continue to allow as needed the depressurization and backwashing of individual brine wells through the old Raw Brine Flare Process.
- Remove from service the Zero Discharge Brine Collection Tank (V273, E418) and Flare (FL002).
- Emission Units Table was updated due to above changes in the permit
- Since this modification incorporates changes to restore the old Raw Brine Flare process [Gas Separator (SP007) and Raw Brine Flare (FL003)] as previously permitted before R13-3328; and to remove the Zero Discharge Collection Tank (V273, E418) and flare (FL002), conditions 6.1.1, 6.1.2, 6.1.3, 6.1.4, 6.1.5, 6.1.6, 6.1.8, 6.2.1, 6.3.1, 6.3.2, 6.3.4, 6.4.1, 6.4.3, 6.4.4 and 6.5.1 were updated in this permit. Recordkeeping requirement for Raw Brine Flare (FL003) was added as condition 6.4.5 of this permit.
- Emergency Equipment Outage provisions for the H₂S Stripper System were added to condition 9.1.7. Additionally, conditions 9.1.4, 9.1.5, 9.1.6, 9.2.2, 9.4.1, 9.4.4 and 9.4.5 were updated in this permit to match changes in R13-3328A.

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 • Fax: 304/926-0478
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.