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WV DEP / DIV OF AIR QUALITY

Westlake Chemical

P.O. Box 191
New Martinsville, WV 26155
Tel 304-451-3797 ▪ Fax 304-455-2422
Tom.Horan@Westlake.com

October 23, 2017

Via Overnight Mail

William Durham, Director
WV Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304-2345

Dear Mr. Durham:

Subject: Permit No. R30-05100002-2013 (Issued April 13, 2013) Title V Permit Renewal Application, Eagle Natrium, LLC, Natrium Plant

Eagle Natrium, LLC hereby submits the attached Title V permit renewal application. Included as Appendix 1 to this application are proposed revisions to the referenced Title V permit. Eagle Natrium, LLC requests the opportunity to review and comment upon DAQ's pre-draft proposed Title V permit and Fact Sheet. Additionally, enclosed are one confidential copy and two redacted copies of the permit application.

If you have any questions regarding this information, please call me or Roni Williams at (304) 451-3797 or (304) 451-3573, respectively.

Sincerely,

J. Thomas Horan
Manager Environmental

Enclosures

cc: Jesse D. Adkins, Assistant Director
WV DEP, Division of Air Quality
601 57th Street, SE
Charleston, WV 25304

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Table of Contents

Document	Paper or Electronic Submittal
Title V Permit Renewal Application Form	Paper with Certification/ Electronic on CD without Certification
Attachment A: Site Location Map	Paper
Attachment B: Plot Plan	Paper
Attachment C1: Confidential Information Cover Page	Paper
Attachment C2: Confidential Process Flow Diagrams	Paper
Attachment C3: Redacted Process Flow Diagrams	Paper
Attachment D: Title V Equipment Table	Electronic on CD
Attachment E: Emission Unit Forms	Electronic on CD
Attachment G: Air Pollution Control Device Forms	Electronic on CD
Attachment H: Compliance Assurance Monitoring (CAM) Form	Electronic on CD
Appendix 1: Source-Proposed Revisions to Title V Permit	Electronic on CD

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF AIR QUALITY
601 57th Street SE
Charleston, WV 25304
Phone: (304) 926-0475
www.dep.wv.gov/daq

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INITIAL/RENEWAL TITLE V PERMIT APPLICATION - GENERAL FORMS

Section 1: General Information

1. **Name of Applicant (As registered with the WV Secretary of State's Office):** Eagle Natrium, LLC	2. **Facility Name or Location:** Natrium Plant
3. **DAQ Plant ID No.:** 0 5 1 — 0 0 0 0 2	4. **Federal Employer ID No. (FEIN):** 250730780

5. **Permit Application Type:**

- ☐ Initial Permit — When did operations commence? MM/DD/YYYY
- ☒ Permit Renewal — What is the expiration date of the existing permit? MM/DD/YYYY
- ☐ Update to Initial/Renewal Permit Application

6. **Type of Business Entity:** ☐ Corporation ☐ Governmental Agency ☒ LLC ☐ Partnership ☐ Limited Partnership	7. **Is the Applicant the:** ☐ Owner ☐ Operator ☐ Both
8. **Number of onsite employees:** Approximately 514	If the Applicant is not both the owner and operator, please provide the name and address of the other party. ____ ____ ____

9. **Governmental Code:**

- ☐ Privately owned and operated; 0
- ☐ Federally owned and operated; 1
- ☐ State government owned and operated; 2
- ☐ County government owned and operated; 3
- ☐ Municipality government owned and operated; 4
- ☐ District government owned and operated; 5

10. **Business Confidentiality Claims**

Does this application include confidential information (per 45CSR31)? ☒ Yes ☐ No

If yes, identify each segment of information on each page that is submitted as confidential, and provide justification for each segment claimed confidential, including the criteria under 45CSR§31-4.1, and in accordance with the DAQ's *"PRECAUTIONARY NOTICE-CLAIMS OF CONFIDENTIALITY"* guidance.

11. Mailing Address		
Street or P.O. Box: P O Box 191		
City: New Martinsville	**State:** WV	**Zip: 26155**
Telephone Number: (304) 455-2200	**Fax Number:** (304) 455-2422	

12. Facility Location		
Street: 15696 Energy Road	**City:** Proctor	**County:** Marshall
UTM Easting: 512.70 km	**UTM Northing:** 4,399.60 km	**Zone:** ☒ 17 or ☐ 18
Directions: The Eagle Natrium, LLC Natrium Plant is located on State Route 2 approximately five miles north of New Martinsville, WV.		
Portable Source? ☐ Yes ☒ No		
Is facility located within a nonattainment area? ☒ Yes ☐ No		**If yes, for what air pollutants?** PM2.5 (1997 Designated Nonattainment areas)
Is facility located within 50 miles of another state? ☒ Yes ☐ No		**If yes, name the affected state(s).** Ohio, Pennsylvania
Is facility located within 100 km of a Class I Area[1]? ☐ Yes ☒ No **If no, do emissions impact a Class I Area[1]?** ☐ Yes ☒ No		**If yes, name the area(s).**

[1] *Class I areas include Dolly Sods and Otter Creek Wilderness Areas in West Virginia, and Shenandoah National Park and James River Face Wilderness Area in Virginia.*

13. Contact Information		
Responsible Official: Jerry Mullens		**Title:** Plant Manager
Street or P.O. Box: PO Box 191		
City: New Martinsville	**State:** WV	**Zip: 26155**
Telephone Number: (304) 455-6874	**Fax Number:** (304) 455-6927	
E-mail address: Jerry.Mullens@Westlake.com		
Environmental Contact: J. Thomas Horan		**Title:** Environmental Manager
Street or P.O. Box: PO Box 191		
City: New Martinsville	**State:** WV	**Zip: 26155**
Telephone Number: (304) 451-3797	**Fax Number:** (304) 455-2422	
E-mail address: Tom. Horan@Westlake.com		
Application Preparer: Roni Williams		**Title:** Specialist Sr. Environmental
Company: Eagle Natrium, LLC		
Street or P.O. Box: PO Box 191		
City: New Martinsville	**State:** WV	**Zip: 26155**
Telephone Number: (304) 451-3573	**Fax Number:** (304) 455-2422	
E-mail address: Roni.Williams@Westlake.com		

14. Facility Description

List all processes, products, NAICS and SIC codes for normal operation, in order of priority. Also list any process, products, NAICS and SIC codes associated with any alternative operating scenarios if different from those listed for normal operation.

Process	Products	NAICS	SIC
Power Department	NA	NA	NA
Brine Department	NA	NA	NA
HCl Department	Hydrochloric Acid	325188	2819 Industrial Inorganics Chemicals, Not Elsewhere Classified
Chlorine	Chlorine	325181	2812 Alkalies and Chlorine
Cal-Hypo	Calcium Hypochlorite	325188	2819 Industrial Inorganics Chemicals, Not Elsewhere Classified
Caustic	Caustic	325181	2812 Alkalies and Chlorine
PELS	Caustic Soda Beads	325181	2812 Alkalies and Chlorine
Plant Spray Booth	NA	NA	NA
Generators/Pumps	NA	NA	NA

Provide a general description of operations.

Eagle Natrium, LLC. owns and operates a Chlor-Alkali and Derivatives Plant in Marshall County, West Virginia. The facility is commonly known as the Natrium Plant. The facility is located five miles north of New Martinsville, thirty miles south of Wheeling, and is built above salt deposits. The facility manufactures chlorine, caustic, by-product hydrogen, hydrochloric acid, and calcium hypochlorite. The facility is a Chemicals and Allied Products facility and operates under the following SIC Codes: Primary 2812; Secondary 2819.

15. Provide an **Area Map** showing plant location as **ATTACHMENT A.** Enclosed

16. Provide a **Plot Plan(s)**, e.g. scaled map(s) and/or sketch(es) showing the location of the property on which the stationary source(s) is located as **ATTACHMENT B**. For instructions, refer to "Plot Plan - Guidelines."

    Enclosed

17. Provide a detailed **Process Flow Diagram(s)** showing each process or emissions unit as **ATTACHMENT C.** Process Flow Diagrams should show all emission units, control equipment, emission points, and their relationships. Enclosed

18. Applicable Requirements Summary	
Instructions: Mark all applicable requirements.	
☒ SIP	☐ FIP
☒ Minor source NSR (45CSR13)	☒ PSD (45CSR14)
☒ NESHAP (45CSR34)	☒ Nonattainment NSR (45CSR19)
☒ Section 111 NSPS	☒ Section 112(d) MACT standards
☐ Section 112(g) Case-by-case MACT	☒ 112(r) RMP
☐ Section 112(i) Early reduction of HAP	☐ Consumer/commercial prod. reqts., section 183(e)
☐ Section 129 Standards/Reqts.	☒ Stratospheric ozone (Title VI)
☐ Tank vessel reqt., section 183(f)	☐ Emissions cap 45CSR§30-2.6.1
☐ NAAQS, increments or visibility (temp. sources)	☒ 45CSR27 State enforceable only rule
☒ 45CSR4 State enforceable only rule	☐ Acid Rain (Title IV, 45CSR33)
☐ Emissions Trading and Banking (45CSR28)	☐ Compliance Assurance Monitoring (40CFR64)
☐ CAIR NO_x Annual Trading Program (45CSR39)	☒ CAIR NO_x Ozone Season Trading Program (45CSR40)
☐ CAIR SO_2 Trading Program (45CSR41)	

19. Non Applicability Determinations

List all requirements which the source has determined not applicable and for which a permit shield is requested. The listing shall also include the rule citation and the reason why the shield applies.

a. **45CSR3** – *To Prevent and Control Air Pollution from the Operation of Hot Mix Asphalt Plants*: This regulation is not applicable to this facility because the facility is not a hot mix asphalt plant.

b. **45CSR5** – *To Prevent and Control Air Pollution from the Operation of Coal Preparation Plants, Coal Handling Operations and Coal Refuse Disposal Areas*: The coal handling facilities are subject to 45CSR2 in lieu of 45CSR5.

c. **45CSR17** – *To Prevent and Control Particulate Air Matter Pollution from Materials Handling, Preparation, Storage and Other Sources of Fugitive Particulate Matter*: The facility is subject to 45CSR2 and 45CSR7 in lieu of 45CSR17.

d. **45CSR21** – *Regulation to Prevent and Control Air Pollution from the Emission of Volatile Organic Compounds*: This regulation is not applicable to this facility because the facility is not located in Putnam, Kanawha, Cabell, Wayne, or Wood counties.

☒ Permit Shield

19. Non Applicability Determinations *(Continued)* *- Attach additional pages as necessary.*

List all requirements which the source has determined not applicable and for which a permit shield is requested. The listing shall also include the rule citation and the reason why the shield applies.

e. **45CSR29** – *Rule Requiring the Submission of Emission Statements for Volatile Organic Compound Emissions and Oxides of Nitrogen Emissions*: This regulation is not applicable to this facility because the facility is not located in Putnam, Kanawha, Cabell, Wayne, Wood, or Greenbrier counties.

f. **40 C.F.R. 60, Subpart D** – *Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced After August 17, 1971:* The maximum design heat input of Boiler No. 5 is 1,125 mmBtu/hr which exceeds the applicable threshold of 250 mmBtu/hr. The application to modify permit R14-0027E to restart Boiler No. 4 will be submitted. The maximum design heat input of Boiler No. 4 will be 540 mmBtu/hr, which exceeds this subpart's applicability threshold of 250 mmBtu/hr. However, Boilers 4 and 5 are not subject to this subpart because they were constructed prior to August 17, 1971 and have not been modified since. The maximum design heat input of Boiler No. 6 is 182 mmBtu/hr which is less than the applicable threshold of 250 mmBtu/hr. The maximum design heat input of coal Boiler No. 3 is 243 mmBtu/hr which is less than the applicable threshold of 250 mmBtu/hr. Boiler No. 3 was permanently shut down in 2016.

g. **40 C.F.R. 60, Subpart Da** – *Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978:* Applies to Electric Utility Steam Generating Units only. Boilers 5 and 6 do not sell more than one-third of their potential electric output capacity and more than 25 MW electrical output to any utility power distribution system for sale. Boiler No. 4 will not sell any electrical output to any utility power distribution system. Boiler No. 3 was permanently shut down in 2016. Therefore, all the boilers are classified as non-electrical utility steam generating units and are not applicable to this part.

h. **40 C.F.R. 60, Subpart Db** – *Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units:* Boilers No. 3, 4, are shutdown. Boiler No. 5, is not subject to this subpart for the following reasons. Boiler 5 was constructed prior to June 19, 1984 and have not been modified based on this Subpart's definition.

i. **40 C.F.R. 60, Subpart Dc** – *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units:* None of the boilers have a thermal rating within the applicability range of 10 to 100 mmBtu/hr.

j. **40 C.F.R. 60, Subpart Y** – *Standards of Performance for Coal Preparation Plants:* The coal handling facilities were constructed prior to October 24, 1974. In 1975, E belt and E hopper were installed. However, this installation did not result in an increase in emissions so the installation would not be considered a modification under this subpart. Due to the conversion to natural gas the coal handling facilities are no longer in service are expected to be removed from the plant in 2018.

k. **40 C.F.R. 60, Subpart VV** – *Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry.*

☒ Permit Shield

19. Non Applicability Determinations *(Continued)* - *Attach additional pages as necessary.*

List all requirements which the source has determined not applicable and for which a permit shield is requested. The listing shall also include the rule citation and the reason why the shield applies.

40 C.F.R. 60, Subpart NNN – *Standards of Performance for Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations.* This regulation is not applicable to the facility because organic chemicals are no longer manufactured at this facility.

m. 40 C.F.R. 61, Subpart J – *National Emission Standard for Equipment Leaks (Fugitive Emission Sources) of Benzene.* This regulation is not applicable to the facility because benzene no longer utilized at this facility.

n. 40 C.F.R. 61, Subpart V – *National Emission Standard for Equipment Leaks (Fugitive Emission Sources).* No equipment covered by this Subpart is in use at this facility.

o. 40 C.F.R. Part 61, Subpart Y – *National Emission Standard for Benzene Emissions From Benzene Storage Vessels.* This regulation is not applicable to the facility because benzene is no longer utilized at this facility.

p. 40 C.F.R. Part 61, Subpart FF – *National Emission Standard for Benzene Waste Operations.* This regulation is not applicable to the facility because benzene is no longer utilized at this facility.

q. 40 C.F.R. 63, Subpart Q – *National Emission Standards for Hazardous Air Pollutants for Ind78ustrial Process Cooling Towers:* This regulation is not applicable to the facility because no chromium-based water treatment chemicals are used to condition the recirculation water in the cooling tower.

r. The facility is not subject to Title IV of the Clean Air Act, therefore requirements of Section 2.25., "Acid Deposition Control" are not applicable and PPG is not required to certify compliance with them.

s. 45CSR26 – *NOx Budget Trading Program as a Means of Control and Reduction of Nitrogen Oxides from Electric Generating Units.* The coal-fired boilers No. 3 (243 MMBtu/hr), No. 4 (496 MMBtu/hr), and No. 5 (878 MMBtu/hr) are not classified as electric generating units (non-EGUs) in accordance with the definition of a electric generating unit in 40 C.F.R. §60.2. Further, these boilers do not serve a generator producing electricity for sale under a firm contract to the electric grid. Therefore, 45CSR26 is not applicable to these boilers.

40 C.F.R. Part 63, Subpart NNNNN – *National Emission Standards for Hazardous Air Pollutants for Hydrochloric Acid Production.* Eagle Natrium does have a hydrochloric acid production area that is subject to this Standard. However, #1, #2, and #3 HCl Synthesis Unit (SU004) and the associated equipment installed for the unit are not subject to the MACT. This process is exempted in 40 CFR 63.8985(d) as it produces HCl through the Direct synthesis of hydrogen and chlorine and is part of a chlor-alkali facility.

☒ Permit Shield

20. Facility-Wide Applicable Requirements

List all facility-wide applicable requirements. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*).

45CSR6-3.1. & 3.2. Open burning & open burning exemptions.

40CFR61 Subpart M - 61.145, 61.148, and 61.150 Asbestos.

45CSR4-3.1. [State-Enforceable only.] Odors.

45CSR13-10.5. [State-Enforceable only.] Permanent shutdown.

45CSR11-5.2. Standby plan for reducing emissions.

WV Code § 22-5-4(a)(14) Emission inventory.

40 CFR Part 82, Subpart F Ozone-depleting substances.

40 CFR Part 68 Risk Management Plan.

45CSR§§1-6.1.b. and 20.1. NOX Budget Trading Program.

CO-SIP-C-2003-27 § IV.2. SO2 Consent Order.

45CSR§§40-6.1.b. and 20.1. CAIR NOx Ozone Season Trading Program.

45CSR7-5.2. Fugitive Haulroad Emissions.

45CSR§42-3.1. [State-Enforceable only.] Greenhouse Gases Emissions Reporting.

45CSR7-9.1. Variance for unavoidable malfunction of equipment

WV Code § 22-5-4(a)(15) and 45CSR13 Stack testing.

45CSR§30-5.1.c.2.A. Monitoring information.

45CSR§30-5.1.c.2.B. Retention of records.

45CSR§§30-4.4. and 5.1.c.3.D. Responsible official.

45CSR31, 45CSR§30-5.1.c.3.E. Confidential business information.

45CSR§30-8. Certified emissions statement.

45CSR§30-5.3.e. Compliance certification.

45CSR§30-5.1.c.3.A. Semi-annual monitoring reports.

45CSR§30-5.7 Emergencies.

45CSR§30-5.1.c.3. Deviations.

45CSR30-4.3.h.1.B. New applicable requirements.

45CSR16-4.1.New applicable requirements

45CSR60.44b NOx limit

☒ Permit Shield

For all facility-wide applicable requirements listed above, provide monitoring/testing / recordkeeping / reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number and/or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

45CSR6-3.1. & 3.2. Open burning & open burning exemptions – Compliance is demonstrated by Condition Numbers 3.1.1 & 3.1.2.

40CFR61 Subpart M - 61.145, 61.148, and 61.150 Asbestos – Compliance is demonstrated by Condition Number 3.1.3.

45CSR4-3.1.; 45CSR§30-5.1.c. Odors – Compliance is demonstrated by Condition Numbers 3.1.4 & 3.4.3.

45CSR13-10.5. Permanent shutdown – Compliance would be demonstrated by submittal of written notification to WVDAQ of any permanent shutdown of the permitted facility.

45CSR11-5.2. Standby plan for reducing emissions – Compliance is demonstrated by Condition Number 3.1.5.

WV Code § 22-5-4(a)(14) Emission inventory – Compliance is demonstrated by Condition Number 3.1.6.

40 CFR Part 82, Subpart F Ozone-depleting substances – Compliance is demonstrated by Condition Number 3.1.7.

40 CFR Part 68 Risk Management Plan – Compliance is demonstrated by Condition Number 3.1.8.

45CSR§§1-6.1.b. and 20.1. NOX Budget Trading Program. – Compliance is demonstrated by Condition Number 3.1.9.

CO-SIP-C-2003-27 § IV.2. SO2 Consent Order. – Compliance is demonstrated by Condition Number 3.1.10.

45CSR§§40-6.1.b. and 20.1. CAIR NOx Ozone Season Trading Program. – Compliance is demonstrated by Condition Number 3.1.11.

45CSR7-5.2. Fugitive Haulroad Emissions. – Compliance is demonstrated by Condition Number 3.1.12.

45CSR§42-3.1. [State-Enforceable only.] Greenhouse Gases Emissions Reporting. – Compliance is demonstrated by Condition Numbers 3.1.13; 3.5.10.

45CSR7-9.1. Variance for unavoidable malfunction of equipment – Compliance would be demonstrated by submitting the proper written requests to WVDAQ in accordance with 45CSR7-9.1.

WV Code § 22-5-4(a)(15) Stack testing – Compliance is demonstrated by Condition Number 3.3.1.

45CSR§30-5.1.c.2.A. Monitoring information – Compliance is demonstrated by Condition Number 3.4.1.

45CSR§30-5.1.c.2.B. Retention of records – Compliance is demonstrated by Condition Number 3.4.2.

45CSR§§30-4.4. and 5.1.c.3.D. Responsible official – Compliance is demonstrated by Condition Number 3.5.1.

45CSR31, 45CSR§30-5.1.c.3.E. Confidential business information– Compliance is demonstrated by Condition Number 3.5.2.

45CSR§30-8. Certified emissions statement – Compliance is demonstrated by Condition Number 3.5.4.

45CSR§30-5.3.e. Compliance certification – Compliance is demonstrated by Condition Number 3.5.5.

45CSR§30-5.1.c.3.A. Semi-annual monitoring reports – Compliance is demonstrated by Condition Number 3.5.6.

45CSR§30-5.7 Emergencies – Compliance is demonstrated by Condition Number 3.5.7.

45CSR§30-5.1.c.3. Deviations – Compliance is demonstrated by Condition Number 3.5.8.

45CSR30-4.3.h.1.B. New applicable requirements – Compliance is demonstrated by Condition Number 3.5.9.

45CSR60-44B.

Are you in compliance with all facility-wide applicable requirements? ☒ Yes ☐ No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F.**

20. Facility-Wide Applicable Requirements *(Continued)* - *Attach additional pages as necessary.*

List all facility-wide applicable requirements. For each applicable requirement, include the rule citation and/or permit with the condition number.

New Applicable Requirements:

40 CFR Part 63, Subpart DDDDD, Industrial, Commercial, And Institutional Boilers And Process Heaters (Boiler MACT).

40 CFR Part 63, Subpart ZZZZ, Reciprocating Internal Combustion Engines NESHAP (RICE).

40 CFR Part 98 Mandatory Greenhouse Gas Reporting

☒ Permit Shield

For all facility-wide applicable requirements listed above, provide monitoring/testing/recordkeeping/ reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number and/or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

New Applicable Requirements:

40 CFR Part 63, Subpart DDDDD, Boiler MACT – Compliance is demonstrated for the existing boilers and process heaters by a new permit Condition(s) to be developed by DAQ. Per §63.7495(b): *If you have an existing boiler or process heater, you must comply with this subpart no later than March 21, 2014.* PPG-Natrium will comply with all applicable Subpart DDDDD requirements by the compliance deadline. NOTE: The Subpart DDDDD, Boiler MACT rule is currently under additional review by EPA and the courts. Therfeore the March 21, 2014 compliance deadline stated above, as well as other provisions of the Boiler MACT rule, are subject to change.

40 CFR Part 63, Subpart ZZZZ, RICE NESHAP – Compliance is demonstrated by a new permit Condition(s) to be developed by DAQ. Per §63.6595(a)(1): *...an existing stationary CI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions...must comply with the applicable emission limitations and operating limitations no later than May 3, 2013.* PPG-Natrium will comply with all applicable Subpart ZZZZ requirements by the compliance deadline.

40 CFR Part 98 Mandatory Greenhouse Gas Reporting – Compliance is demonstrated by a new permit Condition(s) to be developed by DAQ. PPG-Natrium will submit its initial Part 98 GHG emissions report to EPA by September 30, 2011for calendar year 2010 emissions.

Are you in compliance with all facility-wide applicable requirements? ☒ Yes ☐ No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

21. Active Permits/Consent Orders		
Permit or Consent Order Number	Date of Issuance MM/DD/YYYY	List any Permit Determinations that Affect the Permit *(if any)*
R30-05100002-2013	04/23/2013	
R13-1664	12/20/1993	
R13-3328	11/28/2016	
R13-1637A	11/17/2004	
R13-2046D	09/20/2010	
R14-027E	04/20/2017	
CO-R27-91-18	06/25/1991	
CO-SIP-C-2003-27	07/29/2003	
CAIR Permit Application	06/28/2007	
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22. Inactive Permits/Obsolete Permit Conditions		
Permit Number	Date of Issuance	Permit Condition Number
R13-1527	12/15/1992	
R13-1637A	11/17/2004	
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23. Facility-Wide Emissions Summary [Tons per Year]	
Criteria Pollutants	Potential Emissions
Carbon Monoxide (CO)	693.02
Nitrogen Oxides (NO_X)	1,290
Lead (Pb)	0
Particulate Matter ($PM_{2.5}$)[1]	615.5
Particulate Matter (PM_{10})[1]	615.5
Total Particulate Matter (TSP)	615.5
Sulfur Dioxide (SO_2)	8,524
Volatile Organic Compounds (VOC)	132.4
Hazardous Air Pollutants[2]	Potential Emissions
Chlorine	1.1
Mercury	1.1
Hydrochloric Acid	661
Hydrofluoric Acid	38
Regulated Pollutants other than Criteria and HAP	Potential Emissions
Ammonia	46
Reduced Sulfur Compounds (TRS)	90

[1] $PM_{2.5}$ and PM_{10} are components of TSP.
[2] For HAPs that are also considered PM or VOCs, emissions should be included in both the HAPs section and the Criteria Pollutants section.

24. Insignificant Activities (Check all that apply)		
☒	1.	Air compressors and pneumatically operated equipment, including hand tools.
☒	2.	Air contaminant detectors or recorders, combustion controllers or shutoffs.
☒	3.	Any consumer product used in the same manner as in normal consumer use, provided the use results in a duration and frequency of exposure which are not greater than those experienced by consumer, and which may include, but not be limited to, personal use items; janitorial cleaning supplies, office supplies and supplies to maintain copying equipment.
☒	4.	Bathroom/toilet vent emissions.
☒	5.	Batteries and battery charging stations, except at battery manufacturing plants.
☒	6.	Bench-scale laboratory equipment used for physical or chemical analysis, but not lab fume hoods or vents. Many lab fume hoods or vents might qualify for treatment as insignificant (depending on the applicable SIP) or be grouped together for purposes of description.
☐	7.	Blacksmith forges.
☒	8.	Boiler water treatment operations, not including cooling towers.
☒	9.	Brazing, soldering or welding equipment used as an auxiliary to the principal equipment at the source.
☐	10.	CO_2 lasers, used only on metals and other materials which do not emit HAP in the process.
☒	11.	Combustion emissions from propulsion of mobile sources, except for vessel emissions from Outer Continental Shelf sources.
☒	12.	Combustion units designed and used exclusively for comfort heating that use liquid petroleum gas or natural gas as fuel.
☒	13.	Comfort air conditioning or ventilation systems not used to remove air contaminants generated by or released from specific units of equipment.
☒	14.	Demineralized water tanks and demineralizer vents.
☐	15.	Drop hammers or hydraulic presses for forging or metalworking.
☒	16.	Electric or steam-heated drying ovens and autoclaves, but not the emissions from the articles or substances being processed in the ovens or autoclaves or the boilers delivering the steam.
☐	17.	Emergency (backup) electrical generators at residential locations.
☒	18.	Emergency road flares.
☐	19.	Emission units which do not have any applicable requirements and which emit criteria pollutants (CO, NO_x, SO_2, VOC and PM) into the atmosphere at a rate of less than 1 pound per hour and less than 10,000 pounds per year aggregate total for each criteria pollutant from all emission units. Please specify all emission units for which this exemption applies along with the quantity of criteria pollutants emitted on an hourly and annual basis: _____ _____ _____ _____ _____ _____ _____ _____ _____

24. Insignificant Activities (Check all that apply)		
☐	20.	Emission units which do not have any applicable requirements and which emit hazardous air pollutants into the atmosphere at a rate of less than 0.1 pounds per hour and less than 1,000 pounds per year aggregate total for all HAPs from all emission sources. This limitation cannot be used for any source which emits dioxin/furans nor for toxic air pollutants as per 45CSR27. Please specify all emission units for which this exemption applies along with the quantity of hazardous air pollutants emitted on an hourly and annual basis: _____ _____ _____ _____ _____
☒	21.	Environmental chambers not using hazardous air pollutant (HAP) gases.
☒	22.	Equipment on the premises of industrial and manufacturing operations used solely for the purpose of preparing food for human consumption.
☐	23.	Equipment used exclusively to slaughter animals, but not including other equipment at slaughterhouses, such as rendering cookers, boilers, heating plants, incinerators, and electrical power generating equipment.
☒	24.	Equipment used for quality control/assurance or inspection purposes, including sampling equipment used to withdraw materials for analysis.
☒	25.	Equipment used for surface coating, painting, dipping or spray operations, except those that will emit VOC or HAP.
☐	26.	Fire suppression systems.
☐	27.	Firefighting equipment and the equipment used to train firefighters.
☐	28.	Flares used solely to indicate danger to the public.
☐	29.	Fugitive emission related to movement of passenger vehicle provided the emissions are not counted for applicability purposes and any required fugitive dust control plan or its equivalent is submitted.
☐	30.	Hand-held applicator equipment for hot melt adhesives with no VOC in the adhesive formulation.
☐	31.	Hand-held equipment for buffing, polishing, cutting, drilling, sawing, grinding, turning or machining wood, metal or plastic.
☐	32.	Humidity chambers.
☐	33.	Hydraulic and hydrostatic testing equipment.
☐	34.	Indoor or outdoor kerosene heaters.
☐	35.	Internal combustion engines used for landscaping purposes.
☐	36.	Laser trimmers using dust collection to prevent fugitive emissions.
☐	37.	Laundry activities, except for dry-cleaning and steam boilers.
☐	38.	Natural gas pressure regulator vents, excluding venting at oil and gas production facilities.
☐	39.	Oxygen scavenging (de-aeration) of water.
☐	40.	Ozone generators.

24. Insignificant Activities (Check all that apply)		
☐	41.	Plant maintenance and upkeep activities (e.g., grounds-keeping, general repairs, cleaning, painting, welding, plumbing, re-tarring roofs, installing insulation, and paving parking lots) provided these activities are not conducted as part of a manufacturing process, are not related to the source's primary business activity, and not otherwise triggering a permit modification. (Cleaning and painting activities qualify if they are not subject to VOC or HAP control requirements. Asphalt batch plant owners/operators must still get a permit if otherwise requested.)
☐	42.	Portable electrical generators that can be moved by hand from one location to another. "Moved by Hand" means that it can be moved without the assistance of any motorized or non-motorized vehicle, conveyance, or device.
☐	43.	Process water filtration systems and demineralizers.
☐	44.	Repair or maintenance shop activities not related to the source's primary business activity, not including emissions from surface coating or de-greasing (solvent metal cleaning) activities, and not otherwise triggering a permit modification.
☐	45.	Repairs or maintenance where no structural repairs are made and where no new air pollutant emitting facilities are installed or modified.
☐	46.	Routing calibration and maintenance of laboratory equipment or other analytical instruments.
☐	47.	Salt baths using nonvolatile salts that do not result in emissions of any regulated air pollutants. Shock chambers.
☐	48.	Shock chambers.
☐	49.	Solar simulators.
☐	50.	Space heaters operating by direct heat transfer.
☐	51.	Steam cleaning operations.
☐	52.	Steam leaks.
☐	53.	Steam sterilizers.
☐	54.	Steam vents and safety relief valves.
☐	55.	Storage tanks, reservoirs, and pumping and handling equipment of any size containing soaps, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions, provided appropriate lids and covers are utilized.
☐	56.	Storage tanks, vessels, and containers holding or storing liquid substances that will not emit any VOC or HAP. Exemptions for storage tanks containing petroleum liquids or other volatile organic liquids should be based on size limits such as storage tank capacity and vapor pressure of liquids stored and are not appropriate for this list.
☐	57.	Such other sources or activities as the Director may determine.
☐	58.	Tobacco smoking rooms and areas.
☐	59.	Vents from continuous emissions monitors and other analyzers.

25. Equipment Table
Fill out the **Title V Equipment Table** and provide it as **ATTACHMENT D.**
26. Emission Units
For each emission unit listed in the **Title V Equipment Table**, fill out and provide an **Emission Unit Form** as **ATTACHMENT E.**
For each emission unit not in compliance with an applicable requirement, fill out a **Schedule of Compliance Form** as **ATTACHMENT F.**
27. Control Devices
For each control device listed in the **Title V Equipment Table**, fill out and provide an **Air Pollution Control Device Form** as **ATTACHMENT G.**
For any control device that is required on an emission unit in order to meet a standard or limitation for which the potential pre-control device emissions of an applicable regulated air pollutant is greater than or equal to the Title V Major Source Threshold Level, refer to the **Compliance Assurance Monitoring (CAM) Form(s)** for CAM applicability. Fill out and provide these forms, if applicable, for each Pollutant Specific Emission Unit (PSEU) as **ATTACHMENT H.**

Section 6: Certification of Information

28. Certification of Truth, Accuracy and Completeness and Certification of Compliance

*Note: This Certification must be signed by a responsible official. The **original**, signed in **blue ink**, must be submitted with the application. Applications without an **original** signed certification will be considered as incomplete.*

a. Certification of Truth, Accuracy and Completeness

I certify that I am a responsible official (as defined at 45CSR§30-2.38) and am accordingly authorized to make this submission on behalf of the owners or operators of the source described in this document and its attachments. I certify under penalty of law that I have personally examined and am familiar with the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine and/or imprisonment.

b. Compliance Certification

Except for requirements identified in the Title V Application for which compliance is not achieved, I, the undersigned hereby certify that, based on information and belief formed after reasonable inquiry, all air contaminant sources identified in this application are in compliance with all applicable requirements.

Responsible official (type or print)

Name: JERRY MULLENS	Title: PLANT MANAGER

Responsible official's signature:

Signature: _____ Signature Date: 10/23/17

(Must be signed and dated in blue ink)

Note: Please check all applicable attachments included with this permit application:

☒	ATTACHMENT A: Area Map
☒	ATTACHMENT B: Plot Plan(s)
☒	ATTACHMENT C: Process Flow Diagram(s)
☒	ATTACHMENT D: Equipment Table
☒	ATTACHMENT E: Emission Unit Form(s)
☐	ATTACHMENT F: Schedule of Compliance Form(s)
☒	ATTACHMENT G: Air Pollution Control Device Form(s)
☒	ATTACHMENT H: Compliance Assurance Monitoring (CAM) Form(s)

All of the required forms and additional information can be found and downloaded from, the DEP website at www.dep.wv.gov/daq, requested by phone (304) 926-0475, and/or obtained through the mail.

ATTACHMENT A – SITE LOCATION MAP
Eagle Natrium, LLC
New Martinsville/Natrium, West Virginia

USGS Map Name: New Martinsville, WV Map MRC: 39080F7
UTM Zone: 17N Datum: NAD27 Zoom: 8m/pixel

N

Natrium Plant
Plot Plan

RECEIVED
OCT 24 2017
WV DEP / DIV OF AIR QUALITY

ATTACHMENT C1
Cover Document
Confidential Information

Company Name	PPG Industries, Inc.	**Responsible Official**		James D. Rock
Mailing Address	PO Box 191 New Martinsville, WV 26155	**Confidential Information Designee in State of WV**	**Name**	J. Thomas Horan
			Title	Manager, Environmental Control
Person/Title *Submitting* Confidential Information	J. Thomas Horan/ Manager, Environmental Control		**Mailing Address**	PO Box 191 New Martinsville, WV 26155
			Phone	(304) 455-2200 extension 3310
			Fax	(304) 455-2422

Reason for Submittal of Confidential Information:
To accompany the Title V Permit No. R30-05100002-2013 renewal application.

Identification of Confidential Information	Rationale for Confidential Claim	Confidential Treatment Time Period
Attachment C2: Confidential Process Flow Diagrams, pages 2-26 (printed on colored paper)	This process flow information is available on a need-to-know basis to those Eagle Natrium, LLC operators and employees in the particular production department. To the best of Eagle Natrium LLC's knowledge, this information has not been publicly disclosed, and Eagle Natrium, LLC has no intention to do so in the future. If this type of information were to be publicly disclosed, it would result in substantial harm to Eagle Natrium, LLC's competitive situation. Specifically, if a Eagle Natrium, LLC competitor were to obtain these flow diagrams, they could determine how Eagle Natrium, LLC makes its products, what equipment is involved and potentially other proprietary information, which would substantially jeopardize Eagle Natrium, LLC's competitive position in the industry. For all of the reasons stated above, Eagle Natrium, LLC believes that the enclosed diagrams labeled "claimed confidential" constitute confidential information under 45 CSR 31.	permanent

Responsible Official Signature:	
Responsible Official Title:	Plant Manager
Date Signed:	10/23/17

NOTE: Must be signed and dated in **BLUE INK.**

Attachment C2
Confidential Process Flow Diagrams
(Pages 2-26)

Attachment C2
Confidential Process Flow Diagrams -Redacted
(Pages 2-26)

4.0 Power Department

Boilers and Associated Equipment

REDACTED COPY

5.0 Power Department

Coal Handling

REDACTED COPY

5.0 Power Department

Flyash Handling System

REDACTED COPY

6.0 Brine Department

REDACTED COPY

6.0 Brine Department

Drinking Water System

Sewage Treatment System

REDACTED COPY

7 .0 HCl Department #1, #2, & #3 HCl Synthesis Units

REDACTED COPY

8.0 Chlorine Department

Diaphragm Cells

Diaphragm Brine Treatment

REDACTED COPY

8.0 Chlorine Department

Cell Liquor Collection

Diaphragm Circuit Hydrogen Processing

REDACTED COPY

8.0 Chlorine Department

No. 8 Diaphragm Cell Renewal

REDACTED COPY

8.0 Chlorine Department

No. 6 Circuit Diaphragm Cell Renewal

Wastewater Treatment

REDACTED COPY

8.0 Chlorine Department

No. 5 Diaphragm Cell Renewal

REDACTED COPY

8.0 Chlorine Department

Mercury Cells

Mercury Brine Treatment

50% Caustic

REDACTED COPY

8.0 Chlorine Department

Mercury Hydrogen Processing
(Hydrogen Purification)

Mercury Cell End Boxes
(Chlorine Degas)

Mercury Cell Inlet Boxes
(Hydrogen Degas)

Mercury Collection

Wastewater

REDACTED COPY

8.0 Chlorine Department

Chlorine Processing

Emergency Scrubbing

REDACTED COPY

8.0 Chlorine Department

Sulfur Chloride

Sniff System

REDACTED COPY

9.0 Cal-Hypo Department

Wetside

REDACTED COPY

9.0 Cal-Hypo Department

Dryside

REDACTED COPY

9.0 Cal-Hypo Department

Reagent Prep

Repackaging

REDACTED COPY

9.0 Cal-Hypo Department

NaHS Storage Tanks and Transfer Operation

REDACTED COPY

10.0 Caustic Department

Evaporation

REDACTED COPY

10.0 Caustic Department

Salt Recovery

REDACTED COPY

10.0 Caustic Department

Caustic Cooling & ET Grades

MC Grades

REDACTED COPY

10.0 Caustic Department

DH Process

REDACTED COPY

11.0 PELS® Department

REDACTED COPY

12.0 Maintenance and General Plant