KEEP PERMIT AT SITE **CONTROL NO. B- 05450**

State of Maryland

Larry Hogan
Governor

Ben Grumbles
Secretary

DEPARTMENT OF THE ENVIRONMENT

Air and Radiation Administration
1800 Washington Boulevard, Suite 720
Baltimore, MD 21230

[ ] Construction Permit

[X] Part 70 Operating Permit

PERMIT NO. 24-025-0005

DATE ISSUED February 1, 2020

PERMIT FEE To be paid in accordance with COMAR 26.11.02.19B

EXPIRATION DATE January 31, 2025

LEGAL OWNER & ADDRESS

Evonik Corporation
907 Revolution Street
Havre de Grace, MD 21078
Attn: Mr. Marco Delgado-Nava, Plant Manager

SITE

Evonik Corporation
907 Revolution Street
Havre de Grace, MD 21078
AI#2233

SOURCE DESCRIPTION

Renewal Part 70 Operating Permit for inorganic pigments production plant.

This source is subject to the conditions described on the attached pages.

Program Manager

Director, Air and Radiation Administration

EVONIK CORPORATION
907 REVOLUTION STREET
HAVRE DE GRACE, MARYLAND 21078
PART 70 OPERATING PERMIT NO. 24-025-0005

SECTION I SOURCE IDENTIFICATION

1. DESCRIPTION OF FACILITY

Evonik Corporation manufactures inorganic pigments. The facility produces inorganic, food grade silica pigments such as Sodium Aluminum Silicate, Calcium Silicate, and Synthetic Amorphous Silica. The facility is located in Harford County, which is part of the Baltimore City severe ozone non-attainment area. The primary SIC code for this facility is 2819.

2. FACILITY INVENTORY LIST

Emissions Unit Number	MDE/ARA Registration Number	Emissions Unit Description	Emissions Point ID	Emission Point Description	Date of Installation
EU-1	7-0064	Pneumatic Silica Flour Conveying and Storage	EP1	Sand Silo equipped with a bin vent baghouse. Sand Slurry Tank #3 & #4 located inside Sand Silo.	1977, 2006
			EP5	Caustic Tank with a vent	
EU-2	7-0028	Hydrous Sodium Silicate Process Line	EP6	Six (6) dissolvers vented to a York demister	1972
EU-3	7-0065	Synthetic Amorphous Silica Process line (#1 Plant Wet Processing)	EP7	Reactors #3, #4, #5 and #6, and two (2) digesters vented to a scrubber demister #1.	1978, modified in 1997
			EP9 (inside discharge)	Lime slurry tanks vented to a baghouse.	
EU-4	7-0131	Synthetic Amorphous Silica/ Sodium	EP8	Two (2) reactors, filter feed tank, acid, magnesium	1985

Emissions Unit Number	MDE/ARA Registration Number	Emissions Unit Description	Emissions Point ID	Emission Point Description	Date of Installation
		Alumino Silicate Process Line (#2 Plant Wet Processing)		hydroxide and aluminum sulfate tanks vented to scrubber demister #2.	
EU-5	7-0102	#1 Spray Dryer System	EP10	Spray Dryer #1 vented to #1 Plant baghouse.	1959, modified in 1980, 1989 and 2004
			EP12 (inside discharge)	#1 baghouse vented to subsequent baghouse.	
EU-6	7-0069	#2 Spray Dryer System	EP11	Spray Dryer #2 vented to #2 baghouse.	1963, modified in 1985, 2005 and 2009
			EP13 (inside discharge)	#2 baghouse vented to subsequent baghouse.	
			EP14 (inside discharge)	Silo exhaust baghouse.	
			EP25 (inside discharge)	Vacuum clean-up system.	
EU-7	7-0151	Product Milling and Storage Facility	EP15	#1 and #2 dryers conveyed to a common bunker.	1988, modified in 1993 and 2017
			EP17	#1 and #2 dryers vented to a baghouse. Two (2) attrition mills vented to baghouses #3 and #4.	

Emissions Unit Number	MDE/ARA Registration Number	Emissions Unit Description	Emissions Point ID	Emission Point Description	Date of Installation
			EP18	#2 Silo vented to a bin vent and baghouse.	
			EP19	#3 Silo vented to a bin vent and baghouse.	
			EP20	#4 Silo vented to a bin vent and baghouse.	
			EP21	#5 Silo vented to a bin vent and baghouse.	
			EP22	#6 Silo vented to a bin vent and baghouse.	
			EP23	Railcar loading baghouse.	
			EP24	Truck loading baghouse.	
			EP49	Bulk product area baghouse.	
EU-8	7-0132	Warehouse area, dry processing area, product milling and packing system, Air Milling process, and roll compaction system	EP26	#7 Silo equipped with a bin vent filter.	1985, modified in 1995, 1997, and 2003
			EP27	#8 Silo equipped with a bin vent filter.	
			EP28	Mill feed bunker baghouse.	
			EP29	Mills #1 and #2 baghouse.	
			EP30	Packing area baghouse.	
			EP31	Roll compaction system baghouse.	

Emissions Unit Number	MDE/ARA Registration Number	Emissions Unit Description	Emissions Point ID	Emission Point Description	Date of Installation
			EP32 (inside discharge)	Air milling process system baghouse.	
			EP33	Air milling process system baghouse.	
			EP34	Vacuum Clean-up System equipped with a baghouse.	
			EP48	#9 Silo vented to a baghouse.	
EU-9	7-0136	Sulfate Evaporator Plant and Sodium Sulfate Drying and Handling Process Line	EP35	Bag dump and precoat tank baghouse.	1985
			EP36	Sulfate evaporator plant boil out tank vent demister.	
			EP37	Sodium sulfate rotary dryer baghouse.	
			EP38	Cooled sodium sulfate baghouse.	
			EP39	SO_4 storage bunker baghouse.	
			EP40	Loading airveying system baghouse.	
EU-10	5-0032	Boiler	EP41	#1 Keeler Boiler (88 MMBtu/Hr)	1976
	5-0013	Boiler	EP42	#2 Keeler Boiler (47 MMBtu/Hr)	1962

Emissions Unit Number	MDE/ARA Registration Number	Emissions Unit Description	Emissions Point ID	Emission Point Description	Date of Installation
EU-11	7-0105	Pilot Plant	EP44	One (1) Spray Dryer vented to a baghouse.	1980, modified in 1983, and 2008
			EP47	One (1) 10-liter Henschel Mixer for silane coating equipped with one (1) carbon bed adsorber for VOC control. Adsorber emissions, along with other pilot plant pick up points, go through a demister and are vented to EP 47.	
	5-0125	Boiler	EP46	High Pressure Boiler (1.7 MMBtu/Hr)	1996

SECTION II GENERAL CONDITIONS

1. DEFINITIONS

[COMAR 26.11.01.01] and [COMAR 26.11.02.01]

The words or terms in this Part 70 permit shall have the meanings established under COMAR 26.11.01 and .02 unless otherwise stated in this permit.

2. ACRONYMS

ARA	Air and Radiation Administration
BACT	Best Available Control Technology
Btu	British thermal unit
CAA	Clean Air Act
CAM	Compliance Assurance Monitoring
CEM	Continuous Emissions Monitor
CFR	Code of Federal Regulations
CO	Carbon Monoxide
COMAR	Code of Maryland Regulations
EPA	United States Environmental Protection Agency
FR	Federal Register
gr	grains
HAP	Hazardous Air Pollutant
MACT	Maximum Achievable Control Technology
MDE	Maryland Department of the Environment
MVAC	Motor Vehicle Air Conditioner
NESHAPS	National Emission Standards for Hazardous Air Pollutants
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standards
NSR	New Source Review
OTR	Ozone Transport Region
PM	Particulate Matter
PM10	Particulate Matter with Nominal Aerodynamic Diameter of 10 micrometers or less
ppm	parts per million
ppb	parts per billion
PSD	Prevention of Significant Deterioration
PTC	Permit to construct
PTO	Permit to operate (State)
SIC	Standard Industrial Classification
SO_2	Sulfur Dioxide

TAP	Toxic Air Pollutant
tpy	tons per year
VE	Visible Emissions
VOC	Volatile Organic Compounds

3. EFFECTIVE DATE

The effective date of the conditions in this Part 70 permit is the date of permit issuance, unless otherwise stated in the permit.

4. PERMIT EXPIRATION

[COMAR 26.11.03.13B(2)]

Upon expiration of this permit, the terms of the permit will automatically continue to remain in effect until a new Part 70 permit is issued for this facility provided that the Permittee has submitted a timely and complete application and has paid applicable fees under COMAR 26.11.02.16.

Otherwise, upon expiration of this permit the right of the Permittee to operate this facility is terminated.

5. PERMIT RENEWAL

[COMAR 26.11.03.02B(3)] and [COMAR 26.11.03.02E]

The Permittee shall submit to the Department a completed application for renewal of this Part 70 permit at least 12 months before the expiration of the permit. Upon submitting a completed application, the Permittee may continue to operate this facility pending final action by the Department on the renewal.

The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall submit such supplementary facts or corrected information no later than 10 days after becoming aware that this occurred. The Permittee shall also provide additional information as necessary to address any requirements that become applicable to the facility after the date a completed application was submitted, but prior to the release of a draft permit. This information shall be submitted to the Department no later than 20 days after a new requirement has been adopted.

6. CONFIDENTIAL INFORMATION

[COMAR 26.11.02.02G]

In accordance with the provisions of the State Government Article, Sec. 10-611 et seq., Annotated Code of Maryland, all information submitted in an application shall be considered part of the public record and available for inspection and copying, unless the Permittee claims that the information is confidential when it is submitted to the Department. At the time of the request for inspection or copying, the Department will make a determination with regard to the confidentiality of the information. The Permittee, when requesting confidentiality, shall identify the information in a manner specified by the Department and, when requested by the Department, promptly provide specific reasons supporting the claim of confidentiality. Information submitted to the Department without a request that the information be deemed confidential may be made available to the public. Subject to approval of the Department, the Permittee may provide a summary of confidential information that is suitable for public review. The content of this Part 70 permit is not subject to confidential treatment.

7. PERMIT ACTIONS

[COMAR 26.11.03.06E(3)] and [COMAR 26.11.03.20(A)]

This Part 70 permit may be revoked or reopened and revised for cause. The filing of an application by the Permittee for a permit revision or renewal; or a notification of termination, planned changes or anticipated noncompliance by the facility, does not stay a term or condition of this permit.

The Department shall reopen and revise, or revoke the Permittee's Part 70 permit under the following circumstances:

a. Additional requirements of the Clean Air Act become applicable to this facility and the remaining permit term is 3 years or more;

b. The Department or the EPA determines that this Part 70 permit contains a material mistake, or is based on false or inaccurate information supplied by or on behalf of the Permittee;

c. The Department or the EPA determines that this Part 70 permit must be revised or revoked to assure compliance with applicable requirements of the Clean Air Act; or

d. Additional requirements become applicable to an affected source under the Federal Acid Rain Program.

8. PERMIT AVAILABILITY

[COMAR 26.11.02.13G]

The Permittee shall maintain this Part 70 permit in the vicinity of the facility for which it was issued, unless it is not practical to do so, and make this permit immediately available to officials of the Department upon request.

9. REOPENING THE PART 70 PERMIT FOR CAUSE BY THE EPA

[COMAR 26.11.03.20B]

The EPA may terminate, modify, or revoke and reissue a permit for cause as prescribed in 40 CFR §70.7(g)

10. TRANSFER OF PERMIT

[COMAR 26.11.02.02E]

The Permittee shall not transfer this Part 70 permit except as provided in COMAR 26.11.03.15.

11. REVISION OF PART 70 PERMITS – GENERAL CONDITIONS

[COMAR 26.11.03.14] and [COMAR 26.11.03.06A(8)]

a. The Permittee shall submit an application to the Department to revise this Part 70 permit when required under COMAR 26.11.03.15 -.17.

b. When applying for a revision to a Part 70 permit, the Permittee shall comply with the requirements of COMAR 26.11.03.02 and .03 except that the application for a revision need include only information listed that is related to the proposed change to the source and revision to

the permit. This information shall be sufficient to evaluate the proposed change and to determine whether it will comply with all applicable requirements of the Clean Air Act.

c. The Permittee may not change any provision of a compliance plan or schedule in a Part 70 permit as an administrative permit amendment or as a minor permit modification unless the change has been approved by the Department in writing.

d. A permit revision is not required for a change that is provided for in this permit relating to approved economic incentives, marketable permits, emissions trading, and other similar programs.

12. SIGNIFICANT PART 70 OPERATING PERMIT MODIFICATIONS

[COMAR 26.11.03.17]

The Permittee may apply to the Department to make a significant modification to its Part 70 Permit as provided in COMAR 26.11.03.17 and in accordance with the following conditions:

a. A significant modification is a revision to the federally enforceable provisions in the permit that does not qualify as an administrative permit amendment under COMAR 26.11.03.15 or a minor permit modification as defined under COMAR 26.11.03.16.

b. This permit does not preclude the Permittee from making changes, consistent with the provisions of COMAR 26.11.03, that would make the permit or particular terms and conditions of the permit irrelevant, such as by shutting down or reducing the level of operation of a source or of an emissions unit within the source. Air pollution control equipment shall not be shut down or its level of operation reduced if doing so would violate any term of this permit.

c. Significant permit modifications are subject to all requirements of COMAR 26.11.03 as they apply to permit issuance and renewal, including the requirements for applications, public participation, and review by affected states and EPA, except:

(1) An application need include only information pertaining to the proposed change to the source and modification of this permit, including a description of the change and modification, and any

new applicable requirements of the Clean Air Act that will apply if the change occurs;

(2) Public participation, and review by affected states and EPA, is limited to only the application and those federally enforceable terms and conditions of the Part 70 permit that are affected by the significant permit modification.

d. As provided in COMAR 26.11.03.15B(5), an administrative permit amendment may be used to make a change that would otherwise require a significant permit modification if procedures for enhanced preconstruction review of the change are followed that satisfy the requirements of 40 CFR 70.7(d)(1)(v).

e. Before making a change that qualifies as a significant permit modification, the Permittee shall obtain all permits-to-construct and approvals required by COMAR 26.11.02.

f. The Permittee shall not make a significant permit modification that results in a violation of any applicable requirement of the Clean Air Act.

g. The permit shield in COMAR 26.11.03.23 applies to a final significant permit modification that has been issued by the Department, to the extent applicable under COMAR 26.11.03.23.

13. MINOR PERMIT MODIFICATIONS

[COMAR 26.11.03.16]

The Permittee may apply to the Department to make a minor modification to the federally enforceable provisions of this Part 70 permit as provided in COMAR 26.11.03.16 and in accordance with the following conditions:

a. A minor permit modification is a Part 70 permit revision that:

(1) Does not result in a violation of any applicable requirement of the Clean Air Act;

(2) Does not significantly revise existing federally enforceable monitoring, including test methods, reporting, record keeping, or compliance certification requirements except by:

(a) Adding new requirements,

(b) Eliminating the requirements if they are rendered meaningless because the emissions to which the requirements apply will no longer occur, or

(c) Changing from one approved test method for a pollutant and source category to another;

(3) Does not require or modify a:

(a) Case-by-case determination of a federally enforceable emissions standard,

(b) Source specific determination for temporary sources of ambient impacts, or

(c) Visibility or increment analysis;

(4) Does not seek to establish or modify a federally enforceable permit term or condition for which there is no corresponding underlying applicable requirement of the Clean Air Act, but that the Permittee has assumed to avoid an applicable requirement to which the source would otherwise be subject, including:

(a) A federally enforceable emissions standard applied to the source pursuant to COMAR 26.11.02.03 to avoid classification as a Title I modification; and

(b) An alternative emissions standard applied to an emissions unit pursuant to regulations promulgated under Section 112(i)(5) of the Clean Air Act

(5) Is not a Title I modification; and

(6) Is not required under COMAR 26.11.03.17 to be processed as a significant modification to this Part 70 permit.

b. Application for a Minor Permit Modification

The Permittee shall submit to the Department an application for a minor permit modification that satisfies the requirements of COMAR 26.11.03.03 which includes the following:

(1) A description of the proposed change, the emissions resulting from the change, and any new applicable requirements that will apply if the change is made;

(2) The proposed minor permit modification;

(3) Certification by a responsible official, in accordance with COMAR 26.11.02.02F, that:

(a) The proposed change meets the criteria for a minor permit modification, and

(b) The Permittee has obtained or applied for all required permits-to-construct required by COMAR 26.11.03.16 with respect to the proposed change;

(4) Completed forms for the Department to use to notify the EPA and affected states, as required by COMAR 26.11.03.07-.12.

c. Permittee's Ability to Make Change

(1) For changes proposed as minor permit modifications to this permit that will require the applicant to obtain a permit to construct, the permit to construct must be issued prior to the new change.

(2) During the period of time after the Permittee applies for a minor modification but before the Department acts in accordance with COMAR 26.11.03.16F(2):

(a) The Permittee shall comply with applicable requirements of the Clean Air Act related to the change and the permit terms and conditions described in the application for the minor modification.

(b) The Permittee is not required to comply with the terms and conditions in the permit it seeks to modify. If the Permittee fails to comply with the terms and conditions in the application during this time, the terms and conditions of both this permit and the application for modification may be enforced against it.

d. The Permittee is subject to enforcement action if it is determined at any time that a change made under COMAR 26.11.03.16 is not within the scope of this regulation.

e. Minor permit modification procedures may be used for Part 70 permit modifications involving the use of economic incentives, marketable permits, emissions trading, and other similar approaches, but only to the extent that the minor permit modification procedures are explicitly provided for in regulations approved by the EPA as part of the Maryland SIP or in other applicable requirements of the Clean Air Act.

14. ADMINISTRATIVE PART 70 OPERATING PERMIT AMENDMENTS

[COMAR 26.11.03.15]

The Permittee may apply to the department to make an administrative permit amendment as provided in COMAR 26.11.03.15 and in accordance with the following conditions:

a. An application for an administrative permit amendment shall:

(1) Be in writing;
(2) Include a statement certified by a responsible official that the proposed amendment meets the criteria in COMAR 26.11.03.15 for an administrative permit amendment, and

(3) Identify those provisions of this part 70 permit for which the amendment is requested, including the basis for the request.

b. An administrative permit amendment:

(1) Is a correction of a typographical error;

(2) Identifies a change in the name, address, or phone number of a person identified in this permit, or a similar administrative change involving the Permittee or other matters which are not directly related to the control of air pollution;

(3) requires more frequent monitoring or reporting by the Permittee;

(4) Allows for a change in ownership or operational control of a source for which the Department determines that no other

revision to the permit is necessary and is documented as per COMAR 26.11.03.15B(4);

(5) Incorporates into this permit the requirements from preconstruction review permits or approvals issued by the Department in accordance with COMAR 26.11.03.15B(5), but only if it satisfies 40 CFR 70.7(d)(1)(v);

(6) Incorporates any other type of change, as approved by the EPA, which is similar to those in COMAR 26.11.03.15B(1)—(4);

(7) Notwithstanding COMAR 26.11.03.15B(1)—(6), all modifications to acid rain control provisions included in this Part 70 permit are governed by applicable requirements promulgated under Title IV of the Clean Air Act; or

(8) Incorporates any change to a term or condition specified as State-only enforceable, if the Permittee has obtained all necessary permits-to-construct and approvals that apply to the change.

c. The Permittee may make the change addressed in the application for an administrative amendment upon receipt by the Department of the application, if all permits-to-construct or approvals otherwise required by COMAR 26.11.02 prior to making the change have first been obtained from the Department.

d. The permit shield in COMAR 26.11.03.23 applies to administrative permit amendments made under Section B(5) of COMAR 26.11.03.15 , but only after the Department takes final action to revise the permit.

e. The Permittee is subject to enforcement action if it is determined at any time that a change made under COMAR 26.11.03.15 is not within the scope of this regulation.

15. OFF-PERMIT CHANGES TO THIS SOURCE

[COMAR 26.11.03.19]

The Permittee may make off-permit changes to this facility as provided in COMAR 26.11.03.19 and in accordance with the following conditions:

a. The Permittee may make a change to this permitted facility that is not addressed or prohibited by the federally enforceable conditions of this Part 70 permit without obtaining a Part 70 permit revision if:

(1) The Permittee has obtained all permits and approvals required by COMAR 26.11.02 and .03;

(2) The change is not subject to any requirements under Title IV of the Clean Air Act;

(3) The change is not a Title I modification; and

(4) The change does not violate an applicable requirement of the Clean Air Act or a federally enforceable term or condition of the permit.

b. For a change that qualifies under COMAR 26.11.03.19, the Permittee shall provide contemporaneous written notice to the Department and the EPA, except for a change to an emissions unit or activity that is exempt from the Part 70 permit application, as provided in COMAR 26.11.03.04. This written notice shall describe the change, including the date it was made, any change in emissions, including the pollutants emitted, and any new applicable requirements of the Clean Air Act that apply as a result of the change.

c. Upon satisfying the requirements of COMAR 26.11.03.19, the Permittee may make the proposed change.

d. The Permittee shall keep a record describing:

(1) Changes made at the facility that result in emissions of a regulated air pollutant subject to an applicable requirement of the Clean Air Act , but not otherwise regulated under this permit; and

(2) The emissions resulting from those changes.

e. Changes that qualify under COMAR 26.11.03.19 are not subject to the requirements for Part 70 revisions.

f. The Permittee shall include each off-permit change under COMAR 26.11.03.19 in the application for renewal of the part 70 permit.

g. The permit shield in COMAR 26.11.03.23 does not apply to off-permit changes made under COMAR 26.11.03.19.

h. The Permittee is subject to enforcement action if it is determined that an off-permit change made under COMAR 26.11.03.19 is not within the scope of this regulation.

16. ON-PERMIT CHANGES TO SOURCES

[COMAR 26.11.03.18]

The Permittee may make on-permit changes that are allowed under Section 502(b)(10) of the Clean Air Act as provided in COMAR 26.11.03.18 and in accordance with the following conditions:

a. The Permittee may make a change to this facility without obtaining a revision to this Part 70 permit if:

(1) The change is not a Title I modification;

(2) The change does not result in emissions in excess of those expressly allowed under the federally enforceable provisions of the Part 70 permit for the permitted facility or for an emissions unit within the facility, whether expressed as a rate of emissions or in terms of total emissions;

(3) The Permittee has obtained all permits and approvals required by COMAR 26.11.02 and .03;

(4) The change does not violate an applicable requirement of the Clean Air Act;

(5) The change does not violate a federally enforceable permit term or condition related to monitoring, including test methods, record keeping, reporting, or compliance certification requirements;

(6) The change does not violate a federally enforceable permit term or condition limiting hours of operation, work practices, fuel usage, raw material usage, or production levels if the term or condition has been established to limit emissions allowable under this permit;

(7) If applicable, the change does not modify a federally enforceable provision of a compliance plan or schedule in this Part 70 permit unless the Department has approved the change in writing; and

(8) This permit does not expressly prohibit the change under COMAR 26.11.03.18.

b. The Permittee shall notify the Department and the EPA in writing of a proposed on-permit change under COMAR 26.11.03.18 not later than 7 days before the change is made. The written information shall include the following information:

(1) A description of the proposed change;

(2) The date on which the change is proposed to be made;

(3) Any change in emissions resulting from the change, including the pollutants emitted;

(4) Any new applicable requirement of the Clean Air Act; and

(5) Any permit term or condition that would no longer apply.

c. The responsible official of this facility shall certify in accordance with COMAR 26.11.02.02F that the proposed change meets the criteria for the use of on-permit changes under COMAR 26.11.03.18.

d. The Permittee shall attach a copy of each notice required by condition b. above to this Part 70 permit.

e. On-permit changes that qualify under COMAR 26.11.03.18 are not subject to the requirements for part 70 permit revisions.

f. Upon satisfying the requirements under COMAR 26.11.03.18, the Permittee may make the proposed change.

g. The permit shield in COMAR 26.11.03.23 does not apply to on-permit changes under COMAR 26.11.03.18.

h. The Permittee is subject to enforcement action if it is determined that an on-permit change made under COMAR 26.11.03.18 is not within the scope of the regulation or violates any requirement of the State air pollution control law.

17. FEE PAYMENT

[COMAR 26.11.02.16A(2) & (5)(b)]

a. The fee for this Part 70 permit is as prescribed in Regulation .19 of COMAR 26.11.02.

b. The fee is due on and shall be paid on or before each 12-month anniversary date of the permit.

c. Failure to pay the annual permit fee constitutes cause for revocation of the permit by the Department.

18. REQUIREMENTS FOR PERMITS-TO-CONSTRUCT AND APPROVALS

[COMAR 26.11.02.09.]

The Permittee may not construct or modify or cause to be constructed or modified any of the following sources without first obtaining, and having in current effect, the specified permits-to-construct and approvals:

a. New Source Review source, as defined in COMAR 26.11.01.01, approval required, except for generating stations constructed by electric companies;

b. Prevention of Significant Deterioration source, as defined in COMAR 26.11.01.01, approval required, except for generating stations constructed by electric companies;

c. New Source Performance Standard source, as defined in COMAR 26.11.01.01, permit to construct required, except for generating stations constructed by electric companies;

d. National Emission Standards for Hazardous Air Pollutants source, as defined in COMAR 26.11.01.01, permit to construct required, except for generating stations constructed by electric companies;

e. A stationary source of lead that discharges one ton per year or more of lead or lead compounds measured as elemental lead, permit to construct required, except for generating stations constructed by electric companies;

f. All stationary sources of air pollution, including installations and air pollution control equipment, except as listed in COMAR 26.11.02.10, permit to construct required;

g. In the event of a conflict between the applicability of (a.— e.) above and an exemption listed in COMAR 26.11.02.10, the provision that requires a permit applies.

h. Approval of a PSD or NSR source by the Department does not relieve the Permittee obtaining an approval from also obtaining all permits-to-construct required b y (c.— g.) above.

19. CONSOLIDATION OF PROCEDURES FOR PUBLIC PARTICIPATION

[COMAR 26.11.02.11C] and [COMAR 26.11.03.01K]

The Permittee may request the Department to authorize special procedures for the Permittee to apply simultaneously, to the extent possible, for a permit to construct and a revision to this permit.

These procedures may provide for combined public notices, informational meetings, and public hearings for both permits but shall not adversely affect the rights of a person, including EPA and affected states, to obtain information about the application for a permit, to comment on an application, or to challenge a permit that is issued.

These procedures shall not alter any existing permit procedures or time frames.

20. PROPERTY RIGHTS

[COMAR 26.11.03.06E(4)]

This Part 70 permit does not convey any property rights of any sort, or any exclusive privileges.

21. SEVERABILITY

[COMAR 26.11.03.06A(5)]

If any portion of this Part 70 permit is challenged, or any term or condition deemed unenforceable, the remainder of the requirements of the permit continues to be valid.

22. INSPECTION AND ENTRY

[COMAR 26.11.03.06G(3)]

The Permittee shall allow employees and authorized representatives of the Department, the EPA, and local environmental health agencies, upon presentation of credentials or other documents as may be required by law, to:

a. Enter at a reasonable time without delay and without prior notification the Permittee's property where a Part 70 source is located, emissions-related activity is conducted, or records required by this permit are kept;

b. Have access to and make copies of records required by the permit;

c. Inspect all emissions units within the facility subject to the permit and all related monitoring systems, air pollution control equipment, and practices or operations regulated or required by the permit; and

d. Sample or monitor any substances or parameters at or related to the emissions units at the facility for the purpose of determining compliance with the permit.

23. DUTY TO PROVIDE INFORMATION

[COMAR 26.11.03.06E(5)]

The Permittee shall furnish to the Department, within a reasonable time specified by the Department, information requested in writing by the Department in order to determine whether the Permittee is in compliance with the federally enforceable conditions of this Part 70 permit, or whether cause exists for revising or revoking the permit. Upon request, the

Permittee shall also furnish to the Department records required to be kept under the permit.

For information claimed by the Permittee to be confidential and therefore potentially not discloseable to the public, the Department may require the Permittee to provide a copy of the records directly to the EPA along with a claim of confidentiality.

The Permittee shall also furnish to the Department, within a reasonable time specified by the Department, information or records requested in writing by the Department in order to determine if the Permittee is in compliance with the State-only enforceable conditions of this permit.

24. COMPLIANCE REQUIREMENTS

[COMAR 26.11.03.06E(1)] and [COMAR 26.11.03.06A(11)] and [COMAR 26.11.02.05]

The Permittee shall comply with the conditions of this Part 70 permit. Noncompliance with the permit constitutes a violation of the Clean Air Act, and/or the Environment Article Title 2 of the Annotated Code of Maryland and may subject the Permittee to:

a. Enforcement action,

b. Permit revocation or revision,

c. Denial of the renewal of a Part 70 permit, or

d. Any combination of these actions.

The conditions in this Part 70 permit are enforceable by EPA and citizens under the Clean Air Act except for the State-only enforceable conditions.

Under Environment Article Section 2-609, Annotated Code of Maryland, the Department may seek immediate injunctive relief against a person who violates this permit in such a manner as to cause a threat to human health or the environment.

25. CREDIBLE EVIDENCE

Nothing in this permit shall be interpreted to preclude the use of credible evidence to demonstrate noncompliance with any term of this permit.

26. NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE

[COMAR 26.11.03.06E(2)]

The need to halt or reduce activity in order to comply with the conditions of this permit may not be used as a defense in an enforcement action.

27. CIRCUMVENTION

[COMAR 26.11.01.06]

The Permittee may not install or use any article, machine, equipment or other contrivance, the use of which, without resulting in a reduction in the total weight of emissions, conceals or dilutes emissions which would otherwise constitute a violation of any applicable air pollution control regulation.

28. PERMIT SHIELD

[COMAR 26.11.03.23]

A permit shield as described in COMAR 26.11.03.23 shall apply only to terms and conditions in this Part 70 permit that have been specifically identified as covered by the permit shield. Neither this permit nor COMAR 26.11.03.23 alters the following:

a. The emergency order provisions in Section 303 of the Clean Air Act, including the authority of EPA under that section;

b. The liability of the Permittee for a violation of an applicable requirement of the Clean Air Act before or when this permit is issued or for a violation that continues after issuance;

c. The requirements of the Acid Rain Program, consistent with Section 408(a) of the Clean Air Act;

d. The ability of the Department or EPA to obtain information from a source pursuant to Maryland law and Section 114 of the Clean Air Act; or

e. The authority of the Department to enforce an applicable requirement of the State air pollution control law that is not an applicable requirement of the Clean Air Act.

29. ALTERNATE OPERATING SCENARIOS

[COMAR 26.11.03.06A(9)]

For all alternate operating scenarios approved by the Department and contained within this permit, the Permittee, while changing from one approved scenario to another, shall contemporaneously record in a log maintained at the facility each scenario under which the emissions unit is operating and the date and time the scenario started and ended.

SECTION III PLANT WIDE CONDITIONS

1. PARTICULATE MATTER FROM CONSTRUCTION AND DEMOLITION

[COMAR 26.11.06.03D]

The Permittee shall not cause or permit any building, its appurtenances, or a road to be used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne.

2. OPEN BURNING

[COMAR 26.11.07]

Except as provided in COMAR 26.11.07.04, the Permittee shall not cause or permit an open fire from June 1 through August 31 of any calendar year. Prior to any open burning, the Permittee shall request and receive approval from the Department.

3. AIR POLLUTION EPISODE

[COMAR 26.11.05.04]

When requested by the Department, the Permittee shall prepare in writing standby emissions reduction plans, consistent with good industrial practice and safe operating procedures, for reducing emissions creating air pollution during periods of Alert, Warning, and Emergency of an air pollution episode.

4. REPORT OF EXCESS EMISSIONS AND DEVIATIONS

[COMAR 26.11.01.07] and [COMAR 26.11.03.06C(7)]

The Permittee shall comply with the following conditions for occurrences of excess emissions and deviations from requirements of this permit, including those in Section VI – State-only Enforceable Conditions:

a. Report any deviation from permit requirements that could endanger human health or the environment, by orally notifying the Department immediately upon discovery of the deviation;

b. Promptly report all occurrences of excess emissions that are expected to last for one hour or longer by orally notifying the Department of the onset and termination of the occurrence;

c. When requested by the Department the Permittee shall report all deviations from permit conditions, including those attributed to malfunctions as defined in COMAR 26.11.01.07A, within 5 days of the request by submitting a written description of the deviation to the Department. The written report shall include the cause, dates and times of the onset and termination of the deviation, and an account of all actions planned or taken to reduce, eliminate, and prevent recurrence of the deviation;

d. The Permittee shall submit to the Department semi-annual monitoring reports that confirm that all required monitoring was performed, and that provide accounts of all deviations from permit requirements that occurred during the reporting periods. Reporting periods shall be January 1 through June 30 and July 1 through December 31, and reports shall be submitted within 30 days of the end of each reporting period. Each account of deviation shall include a description of the deviation, the dates and times of onset and termination, identification of the person who observed or discovered the deviation, causes and corrective actions taken, and actions taken to prevent recurrence. If no deviations from permit conditions occurred during a reporting period, the Permittee shall submit a written report that so states.

e. When requested by the Department, the Permittee shall submit a written report to the Department within 10 days of receiving the request concerning an occurrence of excess emissions. The report shall contain the information required in COMAR 26.11.01.07D(2).

5. ACCIDENTAL RELEASE PROVISIONS

[COMAR 26.11.03.03B(23)] and [40 CFR 68]

Should the Permittee become subject to 40 CFR 68 during the term of this permit, the Permittee shall submit risk management plans by the date specified in 40 CFR 68.150 and shall certify compliance with the requirements of 40 CFR 68 as part of the annual compliance certification as required by 40 CFR 70.

The Permittee shall initiate a permit revision or reopening according to the procedures of 40 CFR 70.7 to incorporate appropriate permit conditions into the Permittee's Part 70 permit.

6. GENERAL TESTING REQUIREMENTS

[COMAR 26.11.01.04]

The Department may require the Permittee to conduct, or have conducted, testing to determine compliance with this Part 70 permit. The Department, at its option, may witness or conduct these tests. This testing shall be done at a reasonable time, and all information gathered during a testing operation shall be provided to the Department.

7. EMISSIONS TEST METHODS

[COMAR 26.11.01.04]

Compliance with the emissions standards and limitations in this Part 70 permit shall be determined by the test methods designated and described below or other test methods submitted to and approved by the Department.

Reference documents of the test methods approved by the Department include the following:

a. 40 CFR 60, appendix A

b. 40 CFR 51, appendix M

c. The Department's Technical Memorandum 91-01 "Test Methods and Equipment Specifications for Stationary Sources", (January 1991), as amended through Supplement 3, (October 1, 1997)

8. EMISSIONS CERTIFICATION REPORT

[COMAR 26.11.01.05-1] and [COMAR 26.11.02.19C] and [COMAR 26.11.02.19D]

The Permittee shall certify actual annual emissions of regulated pollutants from the facility on a calendar year basis.

a. The certification shall be on forms obtained from the Department and submitted to the Department not later than April 1 of the year following the year for which the certification is required;

b. The individual making the certification shall certify that the information is accurate to the individual's best knowledge. The individual shall be:

(1) Familiar with each source for which the certifications forms are submitted, and

(2) Responsible for the accuracy of the emissions information;

c. The Permittee shall maintain records necessary to support the emissions certification including the following information if applicable:

(1) The total amount of actual emissions of each regulated pollutant and the total of all regulated pollutants;

(2) An explanation of the methods used to quantify the emissions and the operating schedules and production data that were used to determine emissions, including significant assumptions made;

(3) Amounts, types and analyses of all fuels used;

(4) Emissions data from continuous emissions monitors that are required by this permit, including monitor calibration and malfunction information;

(5) Identification, description, and use records of all air pollution control equipment and compliance monitoring equipment including:

(a) Significant maintenance performed,
(b) Malfunctions and downtime, and
(c) Episodes of reduced efficiency of all equipment;

(6) Limitations on source operation or any work practice standards that significantly affect emissions; and

(7) Other relevant information as required by the Department.

9. COMPLIANCE CERTIFICATION REPORT

[COMAR 26.11.03.06G(6) and (7)]

The Permittee shall submit to the Department and EPA Region III a report certifying compliance with each term of this Part 70 permit including each applicable standard, emissions limitation, and work practice for the previous calendar year by April 1 of each year.

a. The compliance certification shall include:

(1) The identification of each term or condition of this permit which is the basis of the certification;

(2) The compliance status;

(3) Whether the compliance was continuous or intermittent;

(4) The methods used for determining the compliance status of each source, currently and over the reporting period; and

(5) Any other information required to be reported to the Department that is necessary to determine the compliance status of the Permittee with this permit.

b. The Permittee shall submit the compliance certification reports to the Department and EPA simultaneously.

10. CERTIFICATION BY RESPONSIBLE OFFICIAL

[COMAR 26.11.02.02F]

All application forms, reports, and compliance certifications submitted pursuant to this permit shall be certified by a responsible official as to truth, accuracy, and completeness. The Permittee shall expeditiously notify the Department of an appointment of a new responsible official.

The certification shall be in the following form:
"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

11. SAMPLING AND EMISSIONS TESTING RECORD KEEPING

[COMAR 26.11.03.06C(5)]

The Permittee shall gather and retain the following information when sampling and testing for compliance demonstrations:

a. The location as specified in this permit, and the date and time that samples and measurements are taken;

b. All pertinent operating conditions existing at the time that samples and measurements are taken;

c. The date that each analysis of a sample or emissions test is performed and the name of the person taking the sample or performing the emissions test;

d. The identity of the Permittee, individual, or other entity that performed the analysis;

e. The analytical techniques and methods used; and

f. The results of each analysis.

12. GENERAL RECORDKEEPING

[COMAR 26.11.03.06C(6)]

The Permittee shall retain records of all monitoring data and information that support the compliance certification for a period of five (5) years from the date that the monitoring, sample measurement, application, report or emissions test was completed or submitted to the Department.

These records and support information shall include:

a. All calibration and maintenance records;

b. All original data collected from continuous monitoring instrumentation;

c. Records which support the annual emissions certification; and

d. Copies of all reports required by this permit.

13. GENERAL CONFORMITY

[COMAR 26.11.26.09]

The Permittee shall comply with the general conformity requirements of 40 CFR 93, Subpart B and COMAR 26.11.26.09.

14. ASBESTOS PROVISIONS

[40 CFR 61, Subpart M]

The Permittee shall comply with 40 CFR 61, Subpart M when conducting any renovation or demolition activities at the facility.

15. OZONE DEPLETING REGULATIONS

[40 CFR 82, Subpart F]

The Permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for MVACs in subpart B:

a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the prohibitions and required practices pursuant to 40 CFR 82.154 and 82.156.

b. Equipment used during the maintenance, service, repair or disposal of appliances shall comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

c. Persons performing maintenance, service, repairs or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.

d. Persons performing maintenance, service, repairs or disposal of appliances shall certify with the Administrator pursuant to 40 CFR 82.162.

e. Persons disposing of small appliances, MVACS, and MVAC-like appliances as defined in 40 CFR 82.152, shall comply with record keeping requirements pursuant to 40 CFR 82.166.

f. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.

g. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.

16. ACID RAIN PERMIT

Not applicable

SECTION IV PLANT SPECIFIC CONDITIONS

This section provides tables that include the emissions standards, emissions limitations, and work practices applicable to each emissions unit located at this facility. The Permittee shall comply with all applicable emissions standards, emissions limitations and work practices included herein.

The tables also include testing, monitoring, record keeping and reporting requirements specific to each emissions unit. In addition to the requirements included here in **Section IV**, the Permittee is also subject to the general testing, monitoring, record keeping and reporting requirements included in **Section III – Plant Wide Conditions** of this permit.

Unless otherwise provided in the specific requirements for an emissions unit, the Permittee shall maintain at the facility for at least five (5) years, and shall make available to the Department upon request, all records that the Permittee is required under this section to establish. [Authority: COMAR 26.11.03.06C(5)(g)]

Index to Table IV		
Table IV – 1	EU – 1, EU – 7, and EU – 8	Storage / Warehouse
Table IV – 2	EU – 2, EU – 3, and EU – 4	#1 and #2 Plant Wet Processing Hydrous Sodium Silicate Plant
Table IV – 3	EU – 5 and EU – 6	#1 and #2 Spray Dryers Baghouses
Table IV – 4	EU – 9	Sulfate Plant / Drying / Handling
Table IV – 5	EU – 10	Boilers
Table IV – 6	EU – 11	Pilot Plant

Table IV – 1	
1.0	**Emissions Unit Number(s)** EU-1: Pneumatic Silica Flour Conveying and Storage EU-7: Bulk Milling, Storage, and Loading EU-8: Warehouse area, dry processing area, product milling and packing system, Air Milling Process, and roll compaction system
1.1	**Applicable Standards/Limits:** A. Visible Emissions Limitations COMAR 26.11.06.02C(2) which prohibits visible emissions other than water in an uncombined form. Exceptions. COMAR 26.11.06.02A(2) establishes that Section C does not apply to emissions during start-up, and process modifications or adjustments, or occasional cleaning of control equipment, if: (a) the visible emissions are not greater than 40 percent opacity; and (b) the visible emissions do not occur for more than 6 consecutive minutes in any 60 minute period. B. Control of Particulate 1. COMAR 26.11.06.03B(2) which limits particulate matter emissions to 0.03 grains per standard cubic foot of dry exhaust gas. 2. COMAR 26.11.06.03D which requires that reasonable precautions be taken to prevent any particulate matter from becoming airborne as a result of material being handled, transported, or stored.
1.2	**Testing Requirements:** A. Visible Emissions Limitations & B. Control of Particulate See Monitoring, Record Keeping and Reporting Requirements.
1.3	**Monitoring Requirements:** A. Visible Emissions Limitations - EP 1, 5, 17, 23, 26, 27, 29, 30, 31, 33, 34, and 48

Table IV – 1

The Permittee shall conduct a visible emissions observation of the exhaust gases from each emission point at least monthly and shall record the results of each observation. If the emissions in the exhaust gases are visible, the Permittee shall perform the following:

(a) Inspect all process and/or control equipment that may affect visible emissions;

(b) Perform all necessary repairs and/or adjustments to processes or control equipment within 48 hours, so that visible emissions in the exhaust gases are eliminated;

(c) Document, in writing, the results of the inspections and the repairs and/or adjustments made to the processes and/or control equipment; and

(d) If visible emissions have not been eliminated within 48 hours, the Permittee shall perform a Method 9 observation once daily for an 18 minute period until corrective actions have eliminated the visible emissions.
[Authority: COMAR 26.11.03.06C]

B. Control of Particulate - EP 1, 5, 17, 23, 26, 27, 29, 30, 31, 33, 34, and 48

The Permittee shall develop and maintain a preventative maintenance plan for each baghouse that describes the maintenance activity and time schedule for completing each activity. The Permittee shall perform maintenance activities within the timeframes established in the plan and shall maintain a log with records of the dates that maintenance was performed.
[Authority: COMAR 26.11.03.06C]

EP 31 and 33 only

The Permittee shall continuously measure the pressure drop across each bag-house when the equipment is operating.
[Authority: Permit to Construct #025-6-0240 N issued June 28, 1995 and Permit to Construct #025-7-0132 M issued August 26, 1997]

1.4	**Record Keeping Requirements:**

Table IV – 1	
	A. Visible Emissions Limitations - EP 1, 5, 17, 23, 26, 27, 29, 30, 31, 33, 34, and 48 The Permittee shall maintain a record of each visible emission check required in 1.3 of this table on site for a period of no less than five (5) years. Said record shall include the date, time, name of emission point, the applicable visible emissions requirement, the results of the check, what action(s), if any, was/were taken, and the name of the observer. B. Control of Particulate - EP 1, 5, 17, 23, 26, 27, 29, 30, 31, 33, 34, and 48 The Permittee shall keep a log of the maintenance activities on-site for at least five years and make them available to the Department upon request. EP 31 and 33 only The Permittee shall record the pressure drop across each bag-house at least once a day when the equipment is operating and keep records on site for at least fives years and make them available to the Department upon request. **[Authority: COMAR 26.11.03.06C]**
1.5	**Reporting Requirements:** A. Visible Emissions Limitations – EP 1, 5, 17, 23, 26, 27, 29, 30, 31, 33, 34, and 48 & B. Control of Particulate – EP 31 and 33 The Permittee shall report excess emissions and deviations in accordance with Section III, Condition 4 “Report of Excess Emissions and Deviations”. **[Authority: COMAR 26.11.03.06C]**

A permit shield shall cover the applicable requirements identified for the emissions unit(s) listed in the table above.

Table IV – 2	
2.0	**Emissions Unit Number(s)** EU-2: Hydrous Sodium Silicate Process Line EU-3: Synthetic Amorphous Silica Process line (#1 Plant Wet Processing) EU-4: Synthetic Amorphous Silica/ Sodium Alumino Silicate Process Line (#2 Plant Wet Processing)
2.1	**Applicable Standards/Limits:** A. Visible Emissions Limitations COMAR 26.11.06.02C(2), which prohibits visible emissions other than water in an uncombined form. Exceptions. COMAR 26.11.06.02A(2) establishes that Section C does not apply to emissions during start-up, and process modifications or adjustments, or occasional cleaning of control equipment, if: (a) the visible emissions are not greater than 40 percent opacity; and (b) the visible emissions do not occur for more than 6 consecutive minutes in any 60 minute period. B. Control of Particulate COMAR 26.11.06.03B(2), which limits particulate matter emissions to 0.03 grains per standard cubic foot of dry exhaust gas.
2.2	**Testing Requirements:** A. Visible Emissions Limitations & B. Control of Particulate See Monitoring, Record Keeping and Reporting Requirements.
2.3	**Monitoring Requirements:** A. Visible Emissions Limitations – EP 6, 7, and 8

Table IV – 2	
	The Permittee shall conduct a visible emissions observation of the exhaust gases from each emission point at least monthly and shall record the results of each observation. If the emissions in the exhaust gases are visible, the Permittee shall perform the following: (1) Inspect all process and/or control equipment that may affect visible emissions; (2) Perform all necessary repairs and/or adjustments to processes or control equipment within 48 hours, so that visible emissions in the exhaust gases are eliminated; and (3) Document, in writing, the results of the inspections and the repairs and/or adjustments made to the processes and/or control equipment. **(4)** If visible emissions have not been eliminated within 48 hours, the Permittee shall perform a Method 9 observation once daily for an 18 minute period until corrective actions have eliminated the visible emissions. **[Authority: COMAR 26.11.03.06C]** B. Control of Particulate – EP 6, 7, and 8 The Permittee shall develop and maintain a preventative maintenance plan for each demister and baghouse that describes the maintenance activity and time schedule for completing each activity. The Permittee shall perform maintenance activities within the timeframes established in the plan and shall maintain a log with records of the dates that maintenance was performed. **[Authority: COMAR 26.11.03.06C]**
2.4	**Record Keeping Requirements:** A. Visible Emissions Limitations - EP 6, 7, and 8 The Permittee shall maintain a record of each visible emission check required in 2.3 of this table on site for a period of no less than five (5) years. Said record shall include the date, time, name of emission point, the applicable visible emissions requirement, the results of the check, what action(s), if any, was/were taken, and the name of the observer. **[Authority: COMAR 26.11.03.06C]** B. Control of Particulate - EP 6, 7, and 8

Table IV – 2	
	The Permittee shall keep a log of the maintenance activities on-site for at least five years and make them available to the Department upon request. **[Authority: COMAR 26.11.03.06C]**
2.5	**Reporting Requirements:** A. Visible Emissions Limitations - EP 6, 7, and 8 & B. Control of Particulate – EP 6, 7, and 8 The Permittee shall report excess emissions and deviations in accordance with Section III, Condition 4 "Report of Excess Emissions and Deviations". **[Authority: COMAR 26.11.03.06C]**

A permit shield shall cover the applicable requirements identified for the emissions unit(s) listed in the table above.

Table IV – 3	
3.0	**Emissions Unit Number(s)** EU-5: #1 Spray Dryer System EU-6: #2 Spray Dryer System
3.1	**Applicable Standards/Limits:** A. Visible Emissions Limitations COMAR 26.11.06.02C(2) which prohibits visible emissions other than water in an uncombined form. Exceptions. COMAR 26.11.06.02A(2) establishes that Section C does not apply to emissions during start-up, and process modifications or adjustments, or occasional cleaning of control equipment, if: (a) the visible emissions are not greater than 40 percent opacity; and (b) the visible emissions do not occur for more than 6 consecutive minutes in any 60 minute period. B. Control of Particulate COMAR 26.11.06.03B(2) which limits particulate matter emissions to 0.03 grains per standard cubic foot of dry exhaust gas.

Table IV – 3	
	C. Control of NOx The Permittee shall: (a) maintain good operating practices as recommended by the equipment vendor to minimize NOx emissions. **[Authority: COMAR 26.11.09.08J(1)]** (b) prepare and implement a written in-house training program for all operators of these installations that include instruction on good operating and maintenance practices for the particular installation. **[Authority: COMAR 26.11.09.08J(2)]** (c) burn only natural gas in each installation, where gas is available, during the period of May 1 through September 30 of each year. **[Authority COMAR 26.11.09.08J(4)]** D. Operational Requirements The Permittee shall use natural gas as the primary fuel with No.2 fuel oil as back-up on interruptions for both spray dryers unless the Permittee requests and receives an approval or permit from the Department to burn an alternate fuel. **[Authority: COMAR 26.11.02.09A]**
3.2	**Testing Requirements:** A. – D. See Monitoring, Record Keeping and Reporting Requirements.
3.3	**Monitoring Requirements:** A. Visible Emissions Limitations – EP 10 and 11 The Permittee shall conduct a visible emissions observation of the exhaust gases from each emission point at least monthly and shall record the results of each observation. If the emissions in the exhaust gases are visible, the Permittee shall perform the following: (a) Inspect all process and/or control equipment that may affect visible emissions;

Table IV – 3	
	(b) Perform all necessary repairs and/or adjustments to processes or control equipment within 48 hours, so that visible emissions in the exhaust gases are eliminated; and (c) Document, in writing, the results of the inspections and the repairs and/or adjustments made to the processes and/or control equipment. (d) If visible emissions have not been eliminated within 48 hours, the Permittee shall perform a Method 9 observation once daily for an 18 minute period until corrective actions have eliminated the visible emissions. **[Authority: COMAR 26.11.03.06C]** B. Control of Particulate – EP 10 and 11 The Permittee shall develop and maintain a preventative maintenance plan for each baghouse that describes the maintenance activity and time schedule for completing each activity. The Permittee shall perform maintenance activities within the timeframes established in the plan and shall maintain a log with records of the dates that maintenance was performed. **[Authority: COMAR 26.11.03.06C]** EP 10 only The Permittee shall continuously measure the particulate matter using the dual dust monitors from this emission point and record the values at least once a day when the equipment is operating. **[Authority: Permit to Construct # 025-7-0102 M issued December 1, 1989].** C. Control of NOx See Record Keeping and Reporting Requirements. D. Operational Requirements See Record Keeping and Reporting Requirements.
3.4	**Record Keeping Requirements:** A. Visible Emissions Limitations – EP 10 and 11 The Permittee shall maintain a record of each visible emission check required in 3.3 of this section on site for a period of no less than five

Table IV – 3	
	(5) years. Said record shall include the date, time, name of emission point, the applicable visible emissions requirement, the results of the check, what action(s), if any, was/were taken, and the name of the observer. **[Authority: COMAR 26.11.03.06C]** B. Control of Particulate – EP 10 and 11 The Permittee shall keep a log of the maintenance activities on-site for at least five years and make them available to the Department upon request. EP 10 only The Permittee shall keep daily records of the PM emissions on site for at least five years. **[Authority: COMAR 26.11.03.06C]** C. Control of NOx – EP 10 and 11 D. Operational Requirements EP 10 and 11 The Permittee shall: (a) maintain and make available to the Department, upon request, the written in-house operator training program. **[Authority: COMAR 26.11.09.08J(3)]** (b) maintain operator training attendance records for each operator of these installations at the site for at least 2 years and make these records available to the Department upon request. **[Authority: COMAR 26.11.09.08J(5)]** (c) maintain records of the quantity and types of fuel burned for at least 5 years and make these records available to the Department upon request. **[Authority: COMAR 26.11.02.19C(1)(c)]**

Table IV – 3	
3.5	**Reporting Requirements:** A. Visible Emissions Limitations – EP 10 and 11& B. Control of NOx – EP 10 and 11 The Permittee shall report excess emissions in accordance with Section III, Condition 4 "Report of Excess Emissions and Deviations". **[Authority: COMAR 26.11.03.06C]** C. Control of NOx – EP 10 and 11 & D. Operational Requirements EP 10 and 11 The Permittee shall make available to the Department upon request any records that the Permittee is required to maintain. **[Authority: COMAR 26.11.03.06C]**

A permit shield shall cover the applicable requirements identified for the emissions unit(s) listed in the table above.

Table IV – 4	
4.0	**Emissions Unit Number(s)** EU-9: Sulfate Evaporate Plant and Sodium Sulfate Drying and Handling Process Line
4.1	**Applicable Standards/Limits:** A. Visible Emissions Limitations - EP 36, 37, 38, 39, and 40 COMAR 26.11.06.02C(2), which prohibits visible emissions other than water in an uncombined form. Exceptions. COMAR 26.11.06.02A(2) establishes that Section C does not apply to emissions during start-up, and process modifications or adjustments, or occasional cleaning of control equipment, if: (a) the visible emissions are not greater than 40 percent opacity; and (b) the visible emissions do not occur for more than 6 consecutive minutes in any 60 minute period. B. Control of Particulate - EP 36, 37, 38, 39, and 40

Table IV – 4	
	COMAR 26.11.06.03B(2), which limits particulate matter emissions to 0.03 grains per standard cubic foot of dry exhaust gas. C. Operational Requirements - EP 37 The Permittee shall only burn natural gas in the Rotary Dryer. **[Authority: Permit to Construct #025-7-0136 N issued Oct. 28, 1985]**
4.2	**Testing Requirements:** A. – C. See Monitoring, Record Keeping and Reporting Requirements.
4.3	**Monitoring Requirements:** A. Visible Emissions Limitations - EP 36, 37, 38, 39, and 40 The Permittee shall conduct a visible emissions observation of the exhaust gases from each emission point at least monthly and shall record the results of each observation. If the emissions in the exhaust gases are visible, the Permittee shall perform the following: (1) Inspect all process and/or control equipment that may affect visible emissions; (2) Perform all necessary repairs and/or adjustments to processes or control equipment within 48 hours, so that visible emissions in the exhaust gases are eliminated; (3) Document, in writing, the results of the inspections and the repairs and/or adjustments made to the processes and/or control equipment; and (4) If visible emissions have not been eliminated within 48 hours, the Permittee shall perform a Method 9 observation once daily for an 18 minute period until corrective actions have eliminated the visible emissions. **[Authority: COMAR 26.11.03.06C]** B. Control of Particulate - EP 36, 37, 38, 39, and 40

Table IV – 4	
	The Permittee shall develop and maintain a preventative maintenance plan for each dust collector (baghouse or demister) that describes the maintenance activity and time schedule for completing each activity. The Permittee shall perform maintenance activities within the timeframes established in the plan and shall maintain a log with records of the dates that maintenance was performed. C. Operational Requirements - EP 37 See Record Keeping and Reporting Requirements.
4.4	**Record Keeping Requirements:** A. Visible Emissions Limitations - EP 36, 37, 38, 39, and 40 The Permittee shall maintain a record of each visible emission check required in 4.3 of this table on site for a period of no less than five (5) years. Said record shall include the date, time, name of emission point, the applicable visible emissions requirement, the results of the check, what action(s), if any, was/were taken, and the name of the observer. **[Authority: COMAR 26.11.03.06C]** B. Control of Particulate - EP 36, 37, 38, 39, and 40 The Permittee shall keep a log of the maintenance activities on-site for at least five years and make them available to the Department upon request. **[Authority: COMAR 26.11.03.06C]** C. Operational Requirements - EP 37 The Permittee shall maintain records of the quantity and types of fuel burned in the rotary dryer for at least 5 years and make these records available to the Department upon request. **[Authority: COMAR 26.11.02.19C(1)(c)]**
4.5	**Reporting Requirements:** A. Visible Emissions Limitations - EP 36, 37, 38, 39, and 40

Table IV – 4	
	The Permittee shall report excess emissions and deviations in accordance with Section III, Condition 4 "Report of Excess Emissions and Deviations". **[Authority: COMAR 26.11.03.06C]** B. Control of Particulate - EP 36, 37, 38, 39, and 40 & C. Operational Requirements - EP 37 The Permittee shall make available to the Department upon request any records that the Permittee is required to maintain. **[Authority: COMAR 26.11.03.06C]**

A permit shield shall cover the applicable requirements identified for the emissions unit(s) listed in the table above.

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5.0	**Emissions Unit Number(s)** EU-10: Boilers EP41: #1 boiler (natural gas/propane/No. 2 fuel oil) rated at 88 MMBTU per hour EP42: #2 boiler (natural gas/propane/No. 2 fuel oil) rated at 47 MMBTU per hour
5.1	**Applicable Standards/Limits:** A. Visible Emissions Limitations COMAR 26.11.09.05A(2), which prohibits visible emissions other than water in an uncombined form. Exceptions. COMAR 26.11.09.05A(3) establishes that Section A(2) does not apply to emissions during load changing, soot blowing, start-up, or adjustments or occasional cleaning of control equipment if: (a) the visible emissions are not greater than 40 percent opacity; and (b) the visible emissions do not occur for more than 6 consecutive minutes in any sixty minutes. B. Control of Sulfur Oxides COMAR 26.11.09.07A(2), which limits the sulfur content in distillate fuel oil to 0.3 percent by weight.

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C. Control of Nitrogen Oxides

COMAR 26.11.09.08E, which requires that a person who operates fuel burning equipment with a rated heat input capacity of 100 MMBTU per hour or less:

(1) submit to the Department an identification of each affected installation, the rate heat input capacity of each installation, and the type of fuel burned in each installation;

(2) perform a combustion analysis for each affected installation at least once each year and optimize combustion based on the analysis; and

(3) at least once every 3 years require each operator of the installation to attend an operator training program on combustion optimization that is sponsored by the Department, the EPA or equipment vendors. In accordance with COMAR 16.11.09.08B(5)(a), the equipment operator to be trained may be the person who maintains the equipment and makes the necessary adjustments for efficient operation.

D. Operational Limitation

(1) The Permittee shall burn only natural gas, propane (as a start-up fuel), or No. 2 fuel oil in each of the two (2) boilers unless the Permittee obtains an approval from the Department to burn alternate fuels. No. 2 fuel oil may only be burned during periods of gas curtailment, gas supply interruption, startups, or periodic testing on liquid fuel. Periodic testing on liquid fuel may not exceed 48 hours during any calendar year for each boiler.

Period of gas curtailment or supply interruption means a period of time during which the supply of gaseous fuel to an affected boiler is restricted or halted for reasons beyond the control of the facility. The act of entering into a contractual agreement with a supplier of natural gas established for curtailment purposes does not constitute a reason that is under the control of the facility for the purposes of this definition. An increase in the cost or unit price of natural gas due to normal market fluctuations not during periods of supplier delivery restriction does not constitute a period of natural gas curtailment or supply interruption. On-site gaseous fuel system

Table IV – 5	
	emergencies or equipment failures qualify as periods of supply interruption when the emergency or failure is beyond the control of the facility. **[Authority: COMAR 26.11.02.09A 40 CFR §63.11237]** (2) If the Permittee wishes to burn No. 2 fuel oil in either of the two (2) boilers at any other times other than allowed under section 5.1D of this table, the Permittee shall comply with the requirements of 40 CFR 63, Subpart JJJJJJ. **[Authority: COMAR 26.11.02.09A 40 CFR §63.11195(e)]**
5.2	**Testing Requirements:** A. Visible Emissions Limitations & B. Control of Sulfur Oxides See Monitoring, Record Keeping and Reporting Requirements. C. Control of Nitrogen Oxides The Permittee shall perform a combustion analysis at least once a year. **[Authority: COMAR 26.11.09.08E(2)]** D. Operational Limitation See Record Keeping and Reporting Requirements.
5.3	**Monitoring Requirements:** A. Visible Emissions Limitations The Permittee shall: (1) Properly operate and maintain the boilers in a manner to prevent visible emissions; and (2) verify no visible emissions when burning No.2 fuel oil. The Permittee shall perform a visual observation of each boiler exhaust stack for a 6 minute period once for each 168 hours that the boiler burns No. 2 fuel oil or at a minimum of once per year. If visible emissions are found during an observation, the Permittee shall:

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	(1) inspect all process and/or control equipment with potential to contribute to the visible emissions. For combustion sources (e.g., fuel burning equipment), inspect all combustion control systems and all combustion operations with potential to contribute to the visible emissions; (2) switch to an alternate boiler or natural gas when burning No.2 fuel oil or perform within 48 hours all repairs and/or adjustments to all process equipment, control equipment, combustion control systems and/or combustion sources necessary to eliminate visible emissions; (3) make written records of any switches, repairs and/or adjustments to process equipment, control equipment, combustion control systems and/or combustion sources that were necessary to eliminate visible emissions; and (4) if the Permittee is unable to switch to an alternate boiler or natural gas or the required adjustments and/or repairs to the malfunctioning boiler have not eliminated the visible emissions within 48 hours of operation, conduct at least once per day EPA Reference Method 9 visible emissions evaluations for a period of at least 12 minutes per evaluation until visible emissions have been eliminated. **[Authority: COMAR 26.11.03.06C]** B. Control of Sulfur Oxides The Permittee shall obtain from fuel oil suppliers written certification that all No. 2 fuel oil received at the facility to be burned in the two boilers complies with the limitation regarding sulfur content imposed under COMAR 26.11.09.07A(2)(b). **[Authority: COMAR 26.11.03.06C]** C. Control of Nitrogen Oxides The Permittee shall optimize combustion in the two boilers in accordance with the findings of the combustion analyses. **[Authority: COMAR 26.11.09.08E(2)]** D. Operational Limitation See Record Keeping and Reporting Requirements.

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5.4	**Record Keeping Requirements:** Note: All records must be maintained for a period of 5 years. **[Authority: COMAR 26.11.03.06C(5)(g)]** A. Visible Emissions Limitations The Permittee shall: (1) Maintain an operating manual and preventative maintenance plan on site for each boiler. (2) Maintain a record of the maintenance performed that relates to combustion performance for each boiler. (3) Make a written or printable electronic record of each required observation for visible emissions, and each such record shall include identification of the observer, the date of the observation, the time at the start of the observation, the time at the end of the observation, and an account of the observer's findings during performance of the observation. (4) Maintain a record of the hours that No. 2 fuel is burned in each boiler. **[Authority: COMAR 26.11.03.06C]** B. Control of Sulfur Oxides The Permittee shall maintain written certifications from the facility's fuel oil suppliers that all No. 2 fuel oil received at the facility to be burned in the two boilers complies with the limitation regarding sulfur content imposed under COMAR 26.11.09.07A(2)(b). **[Authority: COMAR 26.11.03.06C]** C. Control of Nitrogen Oxides The Permittee shall maintain records of: (1) All required combustion analyses performed on the two boilers; and (2) Required training of equipment operators concerning combustion optimization, such records shall include the names of all trainees,

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	the dates on which the training was administered, and identification of the concern that provided the training. **[Authority: COMAR 26.11.09.08E(5) and COMAR 26.11.03.06C]** D. Operational Limitation The Permittee shall maintain records of natural gas, propane, and No. 2 fuel usage for the two (2) boilers including the types and amounts of fuel used and documentation showing that No. 2 fuel was only used during periods of natural gas curtailment or for testing. **[Authority: COMAR 26.11.02.19C(1)(c)]**
5.5	**Reporting Requirements:** A. Visible Emissions Limitations The Permittee shall report occurrences of visible emissions from the two boilers in accordance with conditions number 4 (Report of Excess Emissions and Deviations), and number 9 (Compliance Certification report), of Section III – Plant Wide Conditions in the Permittee's current Part 70 operating permit. B. – D. The Permittee shall make available to the Department upon request any records that the Permittee is required to maintain. **[Authority: COMAR 26.11.03.06C]**

A permit shield shall cover the applicable requirements identified for the emissions unit(s) listed in the table above.

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6.0	**Emissions Unit Number(s)** EU-11: Pilot Plant EP 44: (1) one spray dryer EP 46: (1) one gas fired boiler EP 47: (1) one Henschel Mixer (10-liter) for silane coating controlled by (1) one carbon bed adsorber

Table IV – 6	
6.1	**Applicable Standards/Limits:** A. Visible Emissions Limitations - EP 44 and 47 COMAR 26.11.06.02C(2) which prohibits visible emissions other than water in an uncombined form. Exceptions. COMAR 26.11.06.02A(2) establishes that Section C does not apply to emissions during start-up, and process modifications or adjustments, or occasional cleaning of control equipment, if: (a) the visible emissions are not greater than 40 percent opacity; and (b) the visible emissions do not occur for more than 6 consecutive minutes in any 60 minute period. EP 46 COMAR 26.11.09.05A(2) which prohibits visible emissions other than water in an uncombined form. Exceptions. COMAR 26.11. 09.05A(3) establishes that Section A(2) does not apply to emissions during load changing, soot blowing, startup, or adjustments or occasional cleaning of control equipment, if: (a) the visible emissions are not greater than 40 percent opacity; and (b) the visible emissions do not occur for more than 6 consecutive minutes in any 60 minute period. B. Control of Particulate - EP 44 COMAR 26.11.06.03B(2) which limits particulate matter emissions to 0.03 grains per standard cubic foot of dry exhaust gas. C. Control of VOC - EP 47 COMAR 26.11.06.06B(2)(c), which limits emissions of VOC to not more than 20 pounds per day unless VOC emissions are reduced by 85 percent or more overall. D. Operational Limitations - EP 44 and 46 The Permittee shall use only natural gas for the spray dryer and the boilers at the pilot plant unless the Permittee requests and receives an approval or permit from the Department to burn an alternate fuel.

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	[Authority: COMAR 26.11.02.09A] EP 47 The exhaust gases from the Henschel mixer shall vent through a carbon bed adsorber (EP47) prior to discharging to the atmosphere. **[Authority: Permit to Construct #025-7-0105 M issued February 27, 2008]**
6.2	**Testing Requirements:** A.- D. See Monitoring, Record Keeping, and Reporting Requirements.
6.3	**Monitoring Requirements:** A. Visible Emissions Limitations - EP 44 and 47 The Permittee shall conduct a visible emissions observation of the exhaust gases from each emission point at least monthly and shall record the results of each observation. If the emissions in the exhaust gases are visible, the Permittee shall perform the following: (a) Inspect all process and/or control equipment that may affect visible emissions; (b) Perform all necessary repairs and/or adjustments to processes or control equipment within 48 hours, so that visible emissions in the exhaust gases are eliminated; and (c) Document, in writing, the results of the inspections and the repairs and/or adjustments made to the processes and/or control equipment. (d) If visible emissions have not been eliminated within 48 hours, the Permittee shall perform a Method 9 observation once daily for an 18 minute period until corrective actions have eliminated the visible emissions. **[Authority: COMAR 26.11.03.06C]** B. Control of Particulate - EP 44 See Reporting Requirements.

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	C. Control of VOC - EP 47 The Permittee shall: (a) monitor the carbon bed breakthrough detector at least once per day when the Henschel mixer is in operation. (b) replace the carbon canister of the carbon adsorption unit prior to or when breakthrough as identified by the breakthrough detector occurs. The Permittee shall not operate the Mixer if a replacement canister is not available when breakthrough occurs. **[Authority: Permit to Construct #025-7-0105 M issued February 27, 2008]** D. Operational Limitations See Record Keeping and Reporting Requirements.
6.4	**Record Keeping Requirements:** A. Visible Emissions Limitations - EP 44 and 47 The Permittee shall maintain a record of each visible emission check required in 6.3 of this table on site for a period of no less than five (5) years. Said record shall include the date, time, name of emission point, the applicable visible emissions requirement, the results of the check, what action(s), if any, was/were taken, and the name of the observer. **[Authority: COMAR 26.11.03.06C]** B. Control of Particulate - EP 44 See Reporting Requirements. C. Control of VOC - EP 47 The Permittee shall maintain a record of each log identifying the date and time that the breakthrough detector is monitored and the date and time when a carbon bed breakthrough occurs and is replaced in the carbon adsorption unit for a period of no less than five (5) years and make available to the Department upon request. **[Authority: Permit to Construct #025-7-0105 M issued February 27, 2008]**

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	D. Operational Limitations – EP 44 and 46 The Permittee shall maintain records of the quantity and types of fuel burned for at least 5 years and make these records available to the Department upon request. **[Authority: COMAR 26.11.02.19C(1)(c)]**
6.5	**Reporting Requirements:** A. Visible Emissions Limitations - EP 44 and 47 & B. Control of Particulate The Permittee shall report excess emissions and deviations in accordance with Section III, Condition 4 "Report of Excess Emissions and Deviations". [COMAR 26.11.03.06C] C. Control of VOC, & D. Operational Limitations The Permittee shall make available to the Department upon request any records that the Permittee is required to maintain. **[Authority: COMAR 26.11.03.06C]**

A permit shield shall cover the applicable requirements identified for the emissions unit(s) listed in the table above.

INSIGNIFICANT ACTIVITIES

This section provides a list of insignificant emissions units that were reported in the Title V permit application. The applicable Clean Air Act requirements, if any, are listed below the insignificant activity.

(1) No. 30 Fuel burning equipment using gaseous fuels or no. 1 or no. 2 fuel oil, and having a heat input less than 1,000,000 Btu (1.06 gigajoules) per hour;

The units are subject to the following requirements:

COMAR 26.11.09.05A(2), which establishes that the Permittee may not cause or permit the discharge of emissions from any fuel burning equipment, other than water in an uncombined form, which is visible to human observers.

Exceptions: COMAR 26.11.09.05A(2) does not apply to emissions during load changing, soot blowing, start-up, or adjustments or occasional cleaning of control equipment if:

(a) The visible emissions are not greater than 40 percent opacity; and

(b) The visible emissions do not occur for more than 6 consecutive minutes in any sixty minute period.

COMAR 26.11.09.07A(2)(b), which establishes that the Permittee may not burn, sell, or make available for sale any distillate fuel with a sulfur content by weight in excess of 0.3 percent.

(2) No. 1 Stationary internal combustion engines with less than 500 brake horsepower (373 kilowatts) of power output;

The natural gas fired, 30kw emergency generator is subject to the following requirements:

(A) COMAR 26.11.09.05E(2), Emissions During Idle Mode: The Permittee may not cause or permit the discharge of emissions from any engine, operating at idle, greater than 10 percent opacity.

(B) COMAR 26.11.09.05E(3), Emissions During Operating Mode: The Permittee may not cause or permit the discharge of emissions from any engine, operating at other than idle conditions, greater than 40 percent opacity.

(C) Exceptions:

(i) COMAR 26.11.09.05E(2) does not apply for a period of 2 consecutive minutes after a period of idling of 15 consecutive minutes for the purpose of clearing the exhaust system.

(ii) COMAR 26.11.09.05E(2) does not apply to emissions resulting directly from cold engine start-up and warm-up for the following maximum periods:

(a) Engines that are idled continuously when not in service: 30 minutes
(b) all other engines: 15 minutes.

(iii) COMAR 26.11.09.05E(2) & (3) do not apply while maintenance, repair or testing is being performed by qualified mechanics.

(D) 40 CFR 63, Subpart ZZZZ which states that the Permittee must:

(i) Change oil and filter every 500 hours of operation or annually, whichever comes first;

(ii) Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary;

(iii) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary;

(iv) operate and maintain the engine and keep records as specified in Subpart ZZZZ; and

(v) keep records of the hours of operation of the engine as recorded through a non-resettable hour meter.

(3) ✓ Space heaters utilizing direct heat transfer and used solely for comfort heat;

(4) No. 1 Unheated VOC dispensing containers or unheated VOC rinsing containers of 60 gallons (227 liters) capacity or less;

The Cold Degreaser is subject to COMAR 26.11.19.09D, which requires that the Permittee control emissions of volatile organic compounds (VOC) from cold degreasing operations by meeting the following requirements:

(a) COMAR 26.11.19.09D(2)(b), which establishes that the Permittee shall not use any VOC degreasing material that exceeds a vapor pressure of 1 mm Hg at 20 ° C;

(b) COMAR 26.11.19.09D(3)(a—d), which requires that the Permittee implement good operating practices designed to minimize spills and evaporation of VOC degreasing material. These practices, which shall be established in writing and displayed such that they are clearly visible to operators, shall include covers (including water covers), lids, or other methods of minimizing evaporative losses, and reducing the time and frequency during which parts are cleaned;

(c) COMAR 26.11.19.09D(4), which prohibits the use of any halogenated VOC for cold degreasing.

The Permittee shall maintain on site for at least five (5) years, and shall make available to the Department upon request, the following records of operating data:

(a) Monthly records of the total VOC degreasing materials used; and

(b) Written descriptions of good operating practices designed to minimize spills and evaporation of VOC degreasing materials.

(5) ✓ Equipment for drilling, carving, cutting, routing, turning, sawing, planing, spindle sanding, or disc sanding of wood or wood products;

(6) ✓ Brazing, soldering, or welding equipment, and cutting torches related to manufacturing and construction activities that emit HAP metals and not directly related to plant maintenance, upkeep and repair or maintenance shop activities;

(7) Containers, reservoirs, or tanks used exclusively for:

(a) ✓ Storage of butane, propane, or liquefied petroleum, or natural gas;

(b) No. 2 Storage of lubricating oils;

(c) No. 1 Unheated storage of VOC with an initial boiling point of 300 °F (149 °C) or greater;

(d) No. 4 Storage of Numbers 1, 2, 4, 5, and 6 fuel oil and aviation jet engine fuel;

(e) No. 2 The storage of VOC normally used as solvents, diluents, thinners, inks, colorants, paints, lacquers, enamels, varnishes, liquid resins, or other surface coatings and having individual capacities of 2,000 gallons (7.6 cubic meters) or less;

(8) ✓ First aid and emergency medical care provided at the facility, including related activities such as sterilization and medicine preparation used in support of a manufacturing or production process;

(9) ✓ Certain recreational equipment and activities, such as fireplaces, barbecue pits and cookers, fireworks displays, and kerosene fuel use;

(10) ✓ Comfort air conditioning subject to requirements of Title VI of the Clean Air Act;

(11) ✓ Laboratory fume hoods and vents (including two (2) insignificant R&D laboratory kilns); and

(12) any other emissions unit, not listed in this section, with a potential to emit less than the "de minimus" levels listed in COMAR 26.11.02.10X (list and describe units):

No. 1 Laboratory size tablet coater for R&D Lab (MDE letter to Mr. Walker on 3/19/04)

No. 1 Laboratory size spray dryer

No. 1 Air stripper to remove volatiles and stabilize pH of the incoming water to improve conformance to FDA requirements (MDE letter to Mr. Baugh on 8/21/07)

No. 1 Modification of the existing system 200 baghouse (EU 6, EP 13) to eliminate confined space entry by changing the design from a bottom loader to a top loader. The baghouse does not have a discharge external to the building (MDE letter to Mr. Wroczynski on 9/1/09)

STATE ONLY ENFORCEABLE REQUIREMENTS

The Permittee is subject to the following State-only enforceable requirements:

1. Applicable Regulations:

   (A) COMAR 26.11.06.08 and 26.11.06.09, which generally prohibit the discharge of emissions beyond the property line in such a manner that a nuisance or air pollution is created.

   (B) COMAR 26.11.15.05, which requires that the Permittee implement "Best Available Control Technology for Toxics" (T – BACT) to control emissions of toxic air pollutants.

   (C) COMAR 26.11.15.06, which prohibits the discharge of toxic air pollutants to the extent that such emissions will unreasonably endanger human health

2. Record Keeping and Reporting:

   The Permittee shall submit to the Department, by April 1 of each year during the term of this permit, a written certification of the results of an analysis of emissions of toxic air pollutants from the Permittee's facility during the previous calendar year. The analysis shall include either:

   (a) a statement that previously submitted compliance demonstrations for emissions of toxic air pollutants remain valid; or

   (b) a revised compliance demonstration, developed in accordance with requirements included under COMAR 26.11.15 & 16, that accounts for changes in operations, analytical methods, emissions determinations, or other factors that have invalidated previous demonstrations.

EVONIK CORPORATION
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HAVRE DE GRACE, MARYLAND 21078
PERMIT NO. 24-025-0005
PART 70 OPERATING PERMIT FACT SHEET

BACKGROUND

Evonik Corporation (Evonik) manufactures inorganic pigments. The facility produces inorganic, food grade silica pigments such as Sodium Aluminum Silicate, Calcium Silicate, and Synthetic Amorphous Silica. These pigments are typically in powder form and are used in tires, toothpaste, and food additives among other things. The facility is located in Harford County, which is part of the Baltimore City severe ozone non-attainment area. The primary SIC code for this facility is 2819.

The Company has grouped the emissions units as follows:

1. Pneumatic Silica Flour Conveying and Storage,
2. Hydrous Sodium Silicate Process Line,
3. Synthetic Amorphous Silica Process line (#1 Plant Wet Processing),
4. Synthetic Amorphous Silica/ Sodium AluminoSilicate Process Line (#2 Plant Wet Processing),
5. #1 Spray Dryer System,
6. #2 Spray Dryer System,
7. Product Milling and Storage Facility,
8. Warehouse area, dry processing area, product milling and packing system, Air Milling process, and roll compaction system,
9. Sulfate Evaporator Plant and Sodium Sulfate Drying and Handling Process Line (not in service),
10. Boilers, and
11. Pilot Plant.

The following table summarizes the actual emissions from Evonik based on its Annual Emission Certification Reports:

Table 1: Actual Emissions

Year	NO_x (TPY)	SO_x (TPY)	PM_{10} (TPY)	CO (TPY)	VOC (TPY)	Total HAP (TPY)
2014	13.12	0.13	13.88	16.99	1.10	0.019
2015	14.78	0.14	17.32	18.64	1.19	0.024
2016	12.03	0.12	15.15	13.56	0.78	0.030
2017	12.68	0.14	16.82	15.49	0.88	0.041
2018	15.81	0.14	19.23	15.18	0.89	0.033

The major source threshold for triggering Title V permitting requirements in Harford County is 25 tons per year for VOC, 25 tons for NOx, 100 tons per year for any other criteria pollutants, and 10 tons for a single HAP or 25 tons per year for total HAPS. Since the potential NOx emissions from the facility are greater than the major source threshold, Evonik is required to obtain a Title V – Part 70 Operating Permit under COMAR 26.11.03.01.

In 2017 the Department administratively amended the Title V permit to reflect the change the ownership of the facility from J.M. Huber Corporation to Evonik Corporation, effective September 1, 2017.

Evonik's current Title V – Part 70 Operating Permit was issued on January 26, 2018 and expires on January 31, 2020. This renewal Title V – Part 70 Operating Permit will be issued to replace the current permit. The facility's Title V – Part 70 Operating Permit renewal application was received by the Department on February 4, 2019. An administrative completeness review was conducted and the application was deemed administratively complete. An administrative completeness letter was sent on February 7, 2019 granting the Evonik Corporation an application shield.

APPLICABILITY OF FEDERAL REGULATIONS

NSPS applicability – None of the facility's installations are subject to any NSPS established under 40 CFR 60. 40 CFR Subpart Dc for small steam generating units rated between 10 and 100 MMBtu/hr maximum heat input does not apply. The two (2) natural gas fired boilers were either installed before the applicability date or they are below the minimum heat input rating of 10 MMBtu/hr (Pilot Plant boilers). The boilers have not undergone any major modifications since their initial construction.

NESHAP Part 61 applicability – None of the facility's installations are subject to any NESHAP established under 40 CFR 61.

NESHAP Part 63 applicability – None of the facility's installations are subject to any NESHAP established under 40 CFR Part 63. Specifically, 40 CFR 63, Subpart JJJJJJ does not apply because the boilers and dryers burn natural gas and No. 2 fuel oil as a backup only.

NSR and PSD applicability – Evonik has not received an NSR or PSD approval for this facility.

CAM APPLICABILITY

Compliance Assurance Monitoring (CAM), as specified in 40 CFR, Part 64, applies to any emission unit at a Title V major source that meets all of the following criteria:

(1) The emission unit is subject to a federally enforceable emission limit or standard for a regulated pollutant.

(2) The emission unit uses a control device to achieve compliance with any such emission limitation or standard.

(3) The emission unit has the potential to emit pre-control device emissions of the applicable regulated air pollutant that are equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source and must not otherwise be exempt from CAM.

Based on the following findings, there is no emission unit located at this premises subject to CAM:

(1) Baghouses used to recover products and/or enhance production efficiency such as in airveying processes, are "inherent process equipment" as defined in 40 CFR Part 64. "Inherent process equipment" means equipment that is necessary for the proper or safe functioning of the process, or material recovery equipment that the owner or operator documents is installed and operated primarily for purposes other than compliance with air pollution regulations. Equipment that must be operated at an efficiency higher than that achieved during normal process operations in order to comply with applicable emission limitation or standard is not inherent process

equipment. For the purposes of this part, inherent process equipment is not considered a control device."

(2) No process equipped with a control device produces uncontrolled emissions greater than any applicable major source threshold.

(3) The boilers at the facility are not equipped with control devices.

GREENHOUSE GAS (GHG) EMISSIONS

Evonik emits the following greenhouse gases (GHGs) related to Clean Air Act requirements: carbon dioxide, methane, and nitrous oxide. These GHGs originate from various processes (i.e., boilers, spray dryers) contained within the facility premises. The facility has not triggered Prevention of Significant Deterioration (PSD) requirements for GHG emissions; therefore, there are no applicable GHG Clean Air Act requirements. The Permittee shall quantify facility wide GHGs emissions and report them in accordance with Section 3 of the Part 70 permit.

The following table summarizes the actual emissions from Evonik based on its Annual Emission Certification Reports:

Table 2: Greenhouse Gases Emissions Summary

GHG	**Conversion factor**	**2016** tpy CO_2e	**2017** tpy CO_2e	**2018** tpy CO_2e
Carbon dioxide CO_2	1	19,058.52	21,450.56	21,364.63
Methane CH_4	25	9	10	10.25
Nitrous Oxide N_2O	300	102	117	117
Total GHG CO_{2eq}		**19,169.52**	**21,577.56**	**21,491.88**

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EMISSION UNIT IDENTIFICATION

Evonik has identified the following emission units as being subject to Title V permitting requirements and having applicable requirements.

Table 3: Emission Unit Identification

Emissions Unit Number	MDE/ARA Registration Number	Emissions Unit Description	Emissions Point ID	Emission Point Description	Date of Installation
EU-1	7-0064	Pneumatic Silica Flour Conveying and Storage	EP1	Sand Silo equipped with a bin vent baghouse. Sand Slurry Tank #3 & #4 located inside Sand Silo.	1977, 2006
			EP5	Caustic Tank with a vent	
EU-2	7-0028	Hydrous Sodium Silicate Process Line	EP6	Six (6) dissolvers vented to a York demister	1972
EU-3	7-0065	Synthetic Amorphous Silica Process line (#1 Plant Wet Processing)	EP7	Reactors #3, #4, #5 and #6, and two (2) digesters vented to a scrubber demister #1.	1978, modified in 1997
			EP9 (inside discharge)	Lime slurry tanks vented to a baghouse.	
EU-4	7-0131	Synthetic Amorphous Silica/ Sodium Alumino Silicate Process Line (#2 Plant Wet Processing)	EP8	Two (2) reactors, filter feed tank, acid, magnesium hydroxide and aluminum sulfate tanks vented to scrubber demister #2.	1985
EU-5	7-0102	#1 Spray Dryer System	EP10	Spray Dryer #1 vented to #1 Plant baghouse.	1959, modified in 1980, 1989

Emissions Unit Number	MDE/ARA Registration Number	Emissions Unit Description	Emissions Point ID	Emission Point Description	Date of Installation
			EP12 (inside discharge)	#1 baghouse vented to subsequent baghouse.	and 2004
EU-6	7-0069	#2 Spray Dryer System	EP11	Spray Dryer #2 vented to #2 baghouse.	1963, modified in 1985, 2005 and 2009
			EP13 (inside discharge)	#2 baghouse vented to subsequent baghouse.	
			EP14 (inside discharge)	Silo exhaust baghouse.	
			EP25 (inside discharge)	Vacuum clean-up system.	
EU-7	7-0151	Product Milling and Storage Facility	EP15	#1 and #2 dryers conveyed to a common bunker.	1988, modified in 1993 and 2017
			EP17	#1 and #2 dryers vented to a baghouse. Two (2) attrition mills vented to baghouses #3 and #4.	
			EP18	#2 Silo vented to a bin vent and baghouse.	
			EP19	#3 Silo vented to a bin vent and baghouse.	
			EP20	4 Silo vented to a bin vent and baghouse.	

Emissions Unit Number	MDE/ARA Registration Number	Emissions Unit Description	Emissions Point ID	Emission Point Description	Date of Installation
			EP21	#5 Silo vented to a bin vent and baghouse.	
			EP22	#6 Silo vented to a bin vent and baghouse.	
			EP23	Railcar loading baghouse.	
			EP24	Truck loading baghouse.	
			EP49	Bulk product area baghouse.	
EU-8	7-0132	Warehouse area, dry processing area, product milling and packing system, Air Milling process, and roll compaction system	EP26	#7 Silo equipped with a bin vent filter.	1985, modified in 1995, 1997, and 2003
			EP27	#8 Silo equipped with a bin vent filter.	
			EP28	Mill feed bunker baghouse.	
			EP29	Mills #1 and #2 baghouse.	
			EP30	Packing area baghouse.	
			EP31	Roll compaction system baghouse.	
			EP32 (inside discharge)	Air milling process system baghouse.	
			EP33	Air milling process system baghouse.	
			EP34	Vacuum Clean-up System equipped with a baghouse.	
			EP48	#9 Silo vented to a baghouse.	

Emissions Unit Number	MDE/ARA Registration Number	Emissions Unit Description	Emissions Point ID	Emission Point Description	Date of Installation
EU-9	7-0136	Sulfate Evaporator Plant and Sodium Sulfate Drying and Handling Process Line	EP35	Bag dump and precoat tank baghouse.	1985
			EP36	Sulfate evaporator plant boil out tank vent demister.	
			EP37	Sodium sulfate rotary dryer baghouse.	
			EP38	Cooled sodium sulfate baghouse.	
			EP39	SO_4 storage bunker baghouse.	
			EP40	Loading airveying system baghouse.	
EU-10	5-0032	Boiler	EP41	#1 Keeler Boiler (88 MMBtu/Hr)	1976
	5-0013	Boiler	EP42	#2 Keeler Boiler (47 MMBtu/Hr)	1962
EU-11	7-0105	Pilot Plant	EP44	One (1) Spray Dryer vented to a baghouse.	1980, modified in 1983, and

Emissions Unit Number	MDE/ARA Registration Number	Emissions Unit Description	Emissions Point ID	Emission Point Description	Date of Installation
			EP47	One (1) 10-liter Henschel Mixer for silane coating equipped with one (1) carbon bed adsorber for VOC control. Adsorber emissions, along with other pilot plant pick up points, go through a demister and are vented to EP 47.	2008
	5-0125	Boiler	EP46	High Pressure Boiler (1.7 MMBtu/Hr)	1996

AN OVERVIEW OF THE PART 70 PERMIT

The Fact Sheet is an informational document. If there are any discrepancies between the Fact Sheet and the Part 70 permit, the Part 70 permit is the enforceable document.

Section I of the Part 70 Permit contains a brief description of the facility and an inventory list of the emissions units for which applicable requirements are identified in Section IV of the permit.

Section II of the Part 70 Permit contains the general requirements that relate to administrative permit actions. This section includes the procedures for renewing, amending, reopening, and transferring permits, the relationship to permits to construct and approvals, and the general duty to provide information and to comply with all applicable requirements.

Section III of the Part 70 Permit contains the general requirements for testing, record keeping and reporting; and requirements that affect the facility as a whole, such as open burning, air pollution episodes, particulate matter from construction and demolition activities, asbestos provisions, ozone depleting substance provisions, general conformity, and acid rain permit. This section includes the requirement to report excess emissions and deviations, to submit an annual emissions certification report and an annual compliance certification report, and results of sampling and testing.

Section IV of the Part 70 Permit identifies the emissions standards, emissions limitations, operational limitations, and work practices applicable to each emissions unit located at the facility. For each standard, limitation, and work practice, the permit identifies the basis upon which the Permittee will demonstrate compliance. The basis will include testing, monitoring, record keeping, and reporting requirements. The demonstration may include one or more of these methods.

Section V of the Part 70 Permit contains a list of insignificant activities. These activities emit very small quantities of regulated air pollutants and do not require a permit to construct or registration with the Department. For insignificant activities that are subject to a requirement under the Clean Air Act, the requirement is listed under the activity.

Section VI of the Part 70 Permit contains State-only enforceable requirements. Section VI identifies requirements that are not based on the Clean Air Act, but solely on Maryland air pollution regulations. These requirements generally relate to the prevention of nuisances and implementation of Maryland's Air Toxics Program.

MODIFICATIONS TO THE CURRENT TITLE V PERMIT

The following changes are incorporated into this Title V – Part 70 Operating Permit renewal:

(1) Emissions Unit 9 is not in service. Some parts have been removed and others disconnected. It is still on site but no longer in use.

(2) Boiler #3 (EP 43) has been removed from Emissions Unit 10.

(3) The Pilot Plant low pressure boiler (EP 45) has been removed from Emissions Unit 11.

(4) The responsible official has been changed from Mr. Mike Mullahey to Mr. Marco Delgado-Nava, Plant Manager.

REGULATORY REVIEW/TECHNICAL REVIEW/COMPLIANCE METHODOLOGY

Emissions Unit Numbers:

EU-1: Pneumatic Silica Flour Conveying and Storage
EU-7: Bulk Milling, Storage, and Loading
EU-8: Warehouse area, dry processing area, product milling and packing system, Air Milling processing, and roll compaction system

Applicable Requirements:

A. Visible Emissions Limitations

COMAR 26.11.06.02C(2), which prohibits visible emissions other than water in an uncombined form.

Exceptions. **COMAR 26.11.06.02A(2)** establishes that "Section C does not apply to emissions during start-up, and process modifications or adjustments, or occasional cleaning of control equipment, if: (a) the visible emissions are not greater than 40 percent opacity; and (b) the visible emissions do not occur for more than 6 consecutive minutes in any 60 minute period."

B. Control of Particulate

COMAR 26.11.06.03B(2), which limits particulate matter emissions to 0.03 grains per standard cubic foot of dry exhaust gas.

COMAR 26.11.06.03D, which requires that reasonable precautions be taken to prevent any particulate matter from becoming airborne as a result of material being handled, transported, or stored.

Compliance Demonstration for Visible Emissions and Particulate Matter:

The Permittee shall conduct a visible emissions observation of the exhaust gases from each emission point at least monthly when the system is operating and shall record the results of each observation. If the

emissions in the exhaust gases are visible, the Permittee shall perform the following:

(a) Inspect all process and/or control equipment that may affect visible emissions;

(b) Perform all necessary repairs and/or adjustments to processes or control equipment within 48 hours, so that visible emissions in the exhaust gases are eliminated;

(c) Document, in writing, the results of the inspections and the repairs and/or adjustments made to the processes and/or control equipment; and

(d) If visible emissions have not been eliminated within 48 hours, the Permittee shall perform a Method 9 observation once daily for an 18 minute period until corrective actions have eliminated the visible emissions.

The Permittee shall develop and maintain a preventative maintenance plan for the baghouse that describes the maintenance activity and time schedule for completing each activity. The Permittee shall perform maintenance activities within the timeframes established in the plan and shall maintain a log with records of the dates that maintenance was performed.

The Permittee shall maintain records of the results of the monthly inspections and records of maintenance activities for at least 5 years and make all records available to the Department upon request.

<u>EP 31 and EP 33 only</u>

The Permittee shall continuously measure the pressure drop across each baghouse for EP 31 and EP 33 when the equipment is operating.
[Authority: Permit to Construct #12-6-0240N issued June 28, 1995 and Permit to Construct #12-7-0132M issued August 26, 1997]

Rationale for Periodic Monitoring Strategy:

Each baghouse is designed to achieve an emissions rate of less than 0.03 gr/dscf. If the baghouses are properly maintained, they will continue to achieve its designed efficiency and will not have visible emissions. In addition, pressure drop monitoring is required for the larger baghouses.

The visible emission observation and/or pressure drop measurement will reveal any malfunction or lack of maintenance of the control equipment.

Emissions Unit Numbers

EU-2: Hydrous Sodium Silicate Process Line
EU-3: Synthetic Amorphous Silica Process line (#1 Plant Wet Processing)
EU-4: Synthetic Amorphous Silica/ Sodium Alumino Silicate Process Line (#2 Plant Wet Processing)

Applicable Requirements:

A. Visible Emissions Limitations

COMAR 26.11.06.02C(2) which prohibits visible emissions other than water in an uncombined form.

Exceptions. **COMAR 26.11.06.02A(2)** establishes that "Section C does not apply to emissions during start-up, and process modifications or adjustments, or occasional cleaning of control equipment, if: (a) the visible emissions are not greater than 40 percent opacity; and (b) the visible emissions do not occur for more than 6 consecutive minutes in any 60 minute period."

B. Control of Particulate

COMAR 26.11.06.03B(2), which limits particulate matter emissions to 0.03 grains per standard cubic foot of dry exhaust gas.

Compliance Demonstration for Visible Emissions and Particulate Matter:

The Permittee shall conduct a visible emissions observation of the exhaust gases from each emission point at least monthly when the system is operating and shall record the results of each observation. If the emissions in the exhaust gases are visible, the Permittee shall perform the following:

(a) Inspect all process and/or control equipment that may affect visible emissions;

(b) Perform all necessary repairs and/or adjustments to processes or control equipment within 48 hours, so that visible emissions in the exhaust gases are eliminated;

(c) Document, in writing, the results of the inspections and the repairs and/or adjustments made to the processes and/or control equipment; and

(d) If visible emissions have not been eliminated within 48 hours, the Permittee shall perform a Method 9 observation once daily for an 18 minute period until corrective actions have eliminated the visible emissions.

The Permittee shall develop and maintain a preventative maintenance plan for each demister and baghouse that describes the maintenance activity and time schedule for completing each activity. The Permittee shall perform maintenance activities within the timeframes established in the plan and shall maintain a log with records of the dates that maintenance was performed.

The Permittee shall maintain records of the results of the monthly inspections and records of maintenance activities for at least 5 years and make all records available to the Department upon request.

Rationale for Periodic Monitoring Strategy:

Each baghouse and demister is designed to achieve an emissions rate of less than 0.03 gr/dscf and prevent visible emissions. If the equipment is properly maintained, it will continue to achieve its designed efficiency and will not have visible emissions. The visible emission observation requirement will reveal any malfunction or lack of maintenance of the control equipment.

Emissions Unit Numbers

EU-5: #1 Spray Dryer System (EP 10)
EU-6: #2 Spray Dryer System (EP 11)

The Permittee uses natural gas as the primary fuel with No. 2 fuel oil as back-up on interruptions for both spray dryers.

Applicable Requirements:

EP 10 and EP 11

A. Visible Emissions Limitations

COMAR 26.11.06.02C(2) which prohibits visible emissions other than water in an uncombined form.

Exceptions. **COMAR 26.11.06.02A(2)** establishes that "Section C does not apply to emissions during start-up, and process modifications or adjustments, or occasional cleaning of control equipment, if: (a) the visible emissions are not greater than 40 percent opacity; and (b) the visible emissions do not occur for more than 6 consecutive minutes in any 60 minute period."

B. Control of Particulate

COMAR 26.11.06.03B(2), which limits particulate matter emissions to 0.03 grains per standard cubic foot of dry exhaust gas.

Compliance Demonstration for Visible Emissions and Particulate Matter:

The Permittee shall conduct a visible emissions observation of the exhaust gases from each emission point at least monthly when the system is operating and shall record the results of each observation. If the emissions in the exhaust gases are visible, the Permittee shall perform the following:

(a) Inspect all process and/or control equipment that may affect visible emissions;

(b) Perform all necessary repairs and/or adjustments to processes or control equipment within 48 hours, so that visible emissions in the exhaust gases are eliminated;

(c) Document, in writing, the results of the inspections and the repairs and/or adjustments made to the processes and/or control equipment; and

(d) If visible emissions have not been eliminated within 48 hours, the Permittee shall perform a Method 9 observation once daily for an 18

minute period until corrective actions have eliminated the visible emissions.

The Permittee shall develop and maintain a preventative maintenance plan for the baghouse that describes the maintenance activity and time schedule for completing each activity. The Permittee shall perform maintenance activities within the timeframes established in the plan and shall maintain a log with records of the dates that maintenance was performed.

The Permittee shall maintain records of the results of the monthly inspections and records of maintenance activities for at least 5 years and make all records available to the Department upon request.

EP 10 only

The Permittee shall continuously measure the particulate matter (PM) using the dual dust monitors from this emission point and record the values at least once a day. **[Authority: Permit to Construct # 025-7-0102 M issued December 1, 1989]**

The Permittee shall keep daily records of the PM emissions on site for at least five years and make all records available to the Department upon request.

Rationale for Periodic Monitoring Strategy:

Each baghouse is designed to achieve an emissions rate of less than 0.03 gr/dscf. If the baghouses are properly maintained, it will continue to achieve its designed efficiency and will not have visible emissions. The visible emission observation and/or dual dust monitoring requirements will reveal any malfunction or lack of maintenance of the control equipment.

C. Control of NO_x

COMAR 26.11.09.08J(1), which require the Permittee to maintain good operating practices as recommended by the equipment vendor to minimize NOx emissions.

COMAR 26.11.09.08J(2), which require the Permittee to prepare and implement a written in-house training program for all operators of these installations that include instruction on good operating and maintenance practices for the particular installation.

COMAR 26.11.09.08J(3), which require the Permittee to maintain and make available to the Department, upon request, the written in-house operator training program.

COMAR 26.11.09.08J(4), which limits the Permittee to burn only gas in each installation, where gas is available, during the period May 1 through September 30 of each year.

COMAR 26.11.09.08J(5), which require the Permittee to maintain operator training attendance records for each operator at the site for at least 2 years and make these records available to the Department upon request.

Compliance Demonstration for NO_x control:

Since the potential NO_x emissions from the Evonik facility, located in Harford County, Maryland, are greater than the major source threshold of 25 tons/year, as a result, all parts of COMAR 26.11.09.08J listed above apply.

In order to maintain compliance with the COMAR 26.11.09.08J(1), (2) and (4), The Permittee shall:

(a) maintain good operating practices as recommended by the equipment vendor to minimize NOx emissions;

(b) prepare and implement a written in-house training program for all operators of these installations that include instruction on good operating and maintenance practices for the particular installation;

(c) use natural gas as the primary fuel with No.2 fuel oil as a back-up on interruptions for the #1 and #2 spray dryer systems unless the Permittee requests and receives an approval or permit from the Department to burn an alternate fuel [COMAR 26.11.02.09A; Compliance with this condition also satisfies the requirements of COMAR 26.11.09.08J(4), which limits only gas in each installation, where gas is available, during the period May 1 through September 30 of each year]; and

(d) maintain records of the quantity and types of fuel burned.

The Permittee shall demonstrate compliance with the requirements of COMAR 26.11.09.08J(3) and (5), by maintaining records that provide the

following information and make these records available to the Department upon request:

(a) the written in-house operator training program; and

(b) operator training attendance records for each operator at the site for at least 2 years.

Rationale for Periodic Monitoring Strategy:

By implementing (1) good operating practices as recommended by the equipment vendor to minimize NOx emissions, (2) written in-house training program for all operators that include instruction on good operating and maintenance practices for the particular installation, (3) keeping the records of fuel usages, and (4) keeping operator training attendance records for each operator, the Permittee will be able to demonstrate compliance with the requirements of COMAR 26.11.09.08J.

D. Operating Requirement

The Permittee shall use natural gas as the primary fuel with No.2 fuel oil as back-up on interruptions for both spray dryers unless the Permittee requests and receives an approval or permit from the Department to burn an alternate fuel **[Authority: COMAR 26.11.02.09A]**.

Compliance Demonstration for Operating Requirements:

The Permittee shall demonstrate compliance of operating requirements by maintaining records of the quantity and types of fuel burned for at least 5 years and make these records available to the Department upon request.

Emissions Unit Number

EU-9: Sulfate Evaporate Plant and Sodium Sulfate Drying and Handling Process Line

Applicable Requirements:

A. Visible Emissions Limitations

COMAR 26.11.06.02C(2), which prohibits visible emissions other than water in an uncombined form.

Exceptions. **COMAR 26.11.06.02A(2)** establishes that "Section C does not apply to emissions during start-up, and process modifications or adjustments, or occasional cleaning of control equipment, if: (a) the visible emissions are not greater than 40 percent opacity; and (b) the visible emissions do not occur for more than 6 consecutive minutes in any 60 minute period."

B. Control of Particulate

COMAR 26.11.06.03B(2), which limits particulate matter emissions to 0.03 grains per standard cubic foot of dry exhaust gas.

Compliance Demonstration for Visible Emissions and Particulate Matter:

The Permittee shall conduct a visible emissions observation of the exhaust gases from each emission point at least monthly when the system is operating and shall record the results of each observation.

If the emissions in the exhaust gases are visible, the Permittee shall perform the following:

(a) Inspect all process and/or control equipment that may affect visible emissions;

(b) Perform all necessary repairs and/or adjustments to processes or control equipment within 48 hours, so that visible emissions in the exhaust gases are eliminated;

(c) Document, in writing, the results of the inspections and the repairs and/or adjustments made to the processes and/or control equipment; and

(d) If visible emissions have not been eliminated within 48 hours, the Permittee shall perform a Method 9 observation once daily for an 18 minute period until corrective actions have eliminated the visible emissions.

The Permittee shall develop and maintain a preventative maintenance plan for each baghouse that describes the maintenance activity and time schedule for completing each activity. The Permittee shall perform maintenance activities within the timeframes established in the plan and shall maintain a log with records of the dates that maintenance was performed.

The Permittee shall maintain records of the results of the monthly inspections and records of maintenance activities for at least 5 years and make all records available to the Department upon request.

Rationale for Periodic Monitoring Strategy:

The baghouse is designed to achieve an emissions rate of less than 0.03 gr/dscf. If the baghouse is properly maintained, it will continue to achieve its designed efficiency and will not have visible emissions. The visible emission observation requirement will reveal any malfunction or lack of maintenance of the control equipment.

C. Operating Requirement

EP 37

The Permittee shall only burn natural gas in the Rotary Dryer**. [Authority: Permit to Construct #025-7-0136 N issued Oct. 28, 1985]**

Compliance Demonstration for Operating Requirement:

The Permittee shall demonstrate compliance with the operating requirements by maintaining records of the quantity and types of fuel burned for at least 5 years and make these records available to the Department upon request.

Emissions Unit Numbers

EU-10: Boilers

EU-10 includes EP41- Boiler #1 (88 MMBTU/hr) and EP 42- Boiler #2 (47 MMBTU/hr). The boilers use natural gas as the primary fuel and No. 2 fuel oil as a backup only. Propane is used as a start-up fuel only. Because the boilers are limited to using No. 2 fuel oil as a backup as defined by 40 CFR §63.11237 they are exempt from the requirements of 40 CFR 63, Subpart JJJJJJ.

The boilers were constructed prior to June 1989 and have not been modified or reconstructed since then. These boilers are, therefore, exempt from 40 CFR 60, Subpart Dc.

Applicable Requirements:

A. Visible Emissions Limitations

COMAR 26.11.09.05A(2), which requires that a person not cause or permit the discharge of emissions from any fuel burning equipment, other than water in uncombined form, which is visible to human observers.

Exceptions. **COMAR 26.11.09.05A(3)** establishes that "Section A(2) does not apply to emissions during load changing, soot blowing, start-up, or occasional cleaning of control equipment which do not exceed 40 percent opacity for a opacity or periods aggregating not more than 6 consecutive minutes in any 60 minutes."

Compliance Demonstration for Visible Emissions:
The Permittee shall properly operate and maintain the boilers in a manner to prevent visible emissions; and verify that there are no visible emissions when burning No. 2 fuel oil. The Permittee shall perform a visual observation of stack emissions for a 6-minute period once for each 168 hours that the boiler burns oil or at a minimum of once per year.

The Permittee shall perform the following, if emissions are visible:

(a) Inspect combustion control system and boiler operations;

(b) Switch to an alternate boiler or natural gas when burning No.2 fuel oil or perform all necessary adjustments and/or repairs to the boiler within 48 hours, so that visible emissions are eliminated;

(c) Document in writing the results of the inspections, adjustments and/or repairs to the boiler; and

After 48 hours, if the required adjustments and/or repairs had not eliminated the visible emissions, perform Method 9 observations once daily for a period of at least 12 minutes per evaluation until corrective actions have eliminated the visible emissions.

The Permittee shall maintain operations manual and preventive maintenance plan. The Permittee shall maintain a log of maintenance performed that relates to combustion performance. The Permittee shall report incidents of visible emissions in accordance with permit conditions number 4 (Report of Excess Emissions and Deviations), and number 9 (Compliance Certification report), of Section III, Plant Wide Conditions in

the Permittee's current Part 70 operating permit. The basis for these monitoring, record keeping, and reporting requirements is the Department's authority to create periodic monitoring requirements, COMAR 26.11.03.06C.

Rationale for Periodic Monitoring Strategy:
Boilers that burn natural gas fuel, propane, or No. 2 fuel oil with a rated heat input capacity of more than 10 MM Btu/hr and less than 100 MM Btu/hr rarely have visible emissions if properly operated and maintained. The Permittee is required to maintain on site an operating manual, preventative maintenance plan, and records of maintenance performed that relate to combustion performance.

If visible emissions occur, it will happen when burning No. 2 fuel oil. The Permittee is required to perform a visual observation of the exhaust gases from the boiler stack for a 6-minute period, once each 168 hours that fuel oil is burned. If the total hours of burning No. 2 fuel oil is less than 168 hours per year. A minimum of one observation for visible emissions is required each year. The Permittee is required to maintain a record of the results of the observations and number of hours that No. 2 fuel oil is burned.

B. Control of Sulfur Oxides

COMAR 26.11.09.07A(2), which limits the sulfur content in distillate fuel oil to 0.3 percent by weight.

Compliance Demonstration for Sulfur Oxides:

The Permittee shall:

(a) use the distillate fuel oil with sulfur content less than 0.3 percent by weight when fire the boilers with No. 2 fuel oil.

(b) obtain from fuel oil suppliers written certification that all No. 2 fuel oil received at the facility to be burned in the two boilers complies with the limitation regarding sulfur content imposed under COMAR 26.11.09.07A(2)(b).

(c) maintain records of the quantity and types of fuel burned and make available to the Department upon request.

Rationale for Periodic Monitoring Strategy

The Sulfur Oxides emissions come from the fuels used to fire the boilers. The sulfur content of the natural gas is relatively low and Sulfur Oxides emissions will be negligible for the boilers in this facility. The sulfur content in the distillate fuel are restricted to 0.3 percent by weight to minimum the Sulfur Oxides emissions.

The Permittee will be able to demonstrate compliance with the requirements of COMAR 26.11.09.07A by: (1)using the distillate fuel oil with sulfur content less than 0.3 percent by weight when fire the boilers with No. 2 fuel oil; (2)obtaining from fuel oil suppliers written certification that all No. 2 fuel oil received at the facility to be burned in the two boilers complies with the limitation regarding sulfur content imposed under COMAR 26.11.09.07A(2)(b); and (3)maintaining records of the quantity and types of fuel burned and make available to the Department upon request.

C. Control of Nitrogen Oxides

COMAR 26.11.09.08E, which requires that a person who operates fuel burning equipment with a rated heat input capacity of 100 MMBTU per hour or less:

(1) submit to the Department an identification of each affected installation, the rate heat input capacity of each installation, and the type of fuel burned in each installation;

(2) perform a combustion analysis for each affected installation at least once each year and optimize combustion based on the analysis;

(3) maintain the results of all required combustion analyses performed at the site for at least 2 years and make this data available to the Department and the EPA upon request;

(4) once every 3 years, require each operator of the installation to attend an operator training program on combustion optimization that is sponsored by the Department, the EPA or equipment vendors; and

(5) prepare and maintain a record of training program attendance for each operator at the site, and make these records available to the Department upon request.

Compliance Demonstration for Nitrogen Oxides:

In order to maintain compliance with the COMAR 26.11.09.08E(1), (2) and (4), The Permittee shall:

(1) submit to the Department an identification of each affected installation, the rate heat input capacity of each installation, and the type of fuel burned in each installation;

(2) perform a combustion analysis for each affected installation at least once each year and optimize combustion based on the analysis; and

(3) at least once every 3 years require each operator of the installation to attend an operator training program on combustion optimization that is sponsored by the Department, the EPA or equipment vendors. [In accordance with COMAR 16.11.09.08B(5)(a), the equipment operator to be trained may be the person who maintains the equipment and makes the necessary adjustments for efficient operation.].

The Permittee shall demonstrate compliance with the requirements of COMAR 26.11.09.08E(3) and (5), by maintaining records that provide the following information and make these records available to the Department upon request:

(1) results of all required combustion analyses performed at the site for at least 2 years; and

(2) records of training program attendance for each operator of this installation at the site.

Note: All records must be maintained for a period of 5 years. **[Authority: COMAR 26.11.03.06C(5)(g)]**

Rationale for Periodic Monitoring Strategy:

By (1) submitting the required information of affected installation; (2) performing annual combustion analysis and optimize combustion based on the analysis; (3) conducting an operator-training program on combustion optimization; and (4) maintaining results of all required combustion analyses performed at the site for at least five years; and (5) keeping records of training program attendance for each operator at the site, the Permittee will be able to demonstrate compliance with the requirements of COMAR 26.11.09.08E.

D. Operational Limitation

(1) The Permittee shall burn only natural gas, propane, or No. 2 fuel oil in each of the two (2) boilers unless the Permittee obtains an approval from the Department to burn alternate fuels. No. 2 fuel oil may only be burned during periods of gas curtailment, gas supply interruption, startups, or periodic testing on liquid fuel. Periodic testing on liquid fuel may not exceed 48 hours during any calendar year for each boiler.

Period of gas curtailment or supply interruption means a period of time during which the supply of gaseous fuel to an affected boiler is restricted or halted for reasons beyond the control of the facility. The act of entering into a contractual agreement with a supplier of natural gas established for curtailment purposes does not constitute a reason that is under the control of the facility for the purposes of this definition. An increase in the cost or unit price of natural gas due to normal market fluctuations not during periods of supplier delivery restriction does not constitute a period of natural gas curtailment or supply interruption. On-site gaseous fuel system emergencies or equipment failures qualify as periods of supply interruption when the emergency or failure is beyond the control of the facility.
[Authority: COMAR 26.11.02.09A 40 CFR §63.11237]

(2) If the Permittee wishes to burn No. 2 fuel oil in either of the two (2) boilers at any other times other than allowed under section 5.1D of this permit, the Permittee shall comply with the requirements of 40 CFR 63, Subpart JJJJJJ.
[Authority: COMAR 26.11.02.09A 40 CFR §63.11195(e)]

Compliance Demonstration for the Operating Limitation:

The Permittee shall maintain records of natural gas, propane, and No. 2 fuel usage for the two (2) boilers including the types and amounts of fuel used and documentation showing that No. 2 fuel was only used during periods of natural gas curtailment or for testing.

Rationale for Periodic Monitoring Strategy:

No periodic monitoring will be required for the operational fuel requirement as the Permittee is required to maintain records of the types and quantity of fuel burned to ensure that No. 2 fuel oil was only used during periods of natural gas curtailment, supply

interruption or testing and to support the annual emissions certification report.

Emissions Unit Numbers

EU-11: Pilot Plant

The pilot plant (EU-11) includes a spray dryer (EP 44), a high-pressure boiler rated at 1.7 MMBTU/hr and 300 psig (EP 46), and a 10 liter mixer for silane coating with a carbon bed absorber for controlling VOC (EP47). Natural gas is the only fuel used for the boilers in the pilot plant.

Applicable Requirements:

A. Visible Emissions Limitations

EP 44 and 47

COMAR 26.11.06.02C(2), which prohibits visible emissions other than water in an uncombined form.

Exceptions. **COMAR 26.11.06.02A(2)** establishes that "Section C does not apply to emissions during start-up, and process modifications or adjustments, or occasional cleaning of control equipment, if: (a) the visible emissions are not greater than 40 percent opacity; and (b) the visible emissions do not occur for more than 6 consecutive minutes in any 60 minute period."

EP 46

COMAR 26.11.09.05A(2), which requires that a person not cause or permit the discharge of emissions from any fuel burning equipment, other than water in uncombined form, which is visible to human observers.

Exceptions. **COMAR 26.11.09.05A(3)** establishes that "Section A(2) does not apply to emissions during load changing, soot blowing, start-up, or occasional cleaning of control equipment which do not exceed 40 percent opacity for a opacity or periods aggregating not more than 6 consecutive minutes in any 60 minutes."

B. Control of Particulate

EP 44 only

COMAR 26.11.06.03B(2), which limits particulate matter emissions to 0.03 grains per standard cubic foot of dry exhaust gas.

Compliance Demonstration for Visible Emissions and Particulate:

The Permittee shall conduct a visible emissions observation of the exhaust gases from each emission point at least monthly when the system is operating and shall record the results of each observation. If the emissions in the exhaust gases are visible, the Permittee shall perform the following:

(a) Inspect all process and/or control equipment that may affect visible emissions;

(b) Perform all necessary repairs and/or adjustments to processes or control equipment within 48 hours, so that visible emissions in the exhaust gases are eliminated;

(c) Document, in writing, the results of the inspections and the repairs and/or adjustments made to the processes and/or control equipment; and

(d) If visible emissions have not been eliminated within 48 hours, the Permittee shall perform a Method 9 observation once daily for an 18 minute period until corrective actions have eliminated the visible emissions.

The Permittee shall maintain records of the results of the monthly inspections and records of maintenance activities for at least 5 years and make all records available to the Department upon request.

Rationale for Periodic Monitoring Strategy

The spray dryer has minimal visible emissions. The monthly visible emission observation requirement will reveal any malfunction or lack of maintenance of the control equipment.

C. Control of VOC – EP 47

COMAR 26.11.06.06B(2)(c), which limits emissions of VOC to not more than 20 pounds per day unless VOC emissions are reduced by 85 percent or more overall.

Compliance Demonstration for VOCs:

In order to maintain compliance with COMAR 26.11.06.06B(2)(c) the Permittee shall:

(a) monitor the carbon bed breakthrough detector at least once per day when the Henschel mixer is in operation.

(b) replace the carbon canister of the carbon adsorption unit prior to or when breakthrough as identified by the breakthrough detector occurs. The Permittee shall not operate the mixer if a replacement canister is not available when breakthrough occurs.
[Authority: Permit to Construct #025-7-0105 M issued February 27, 2008]

Rationale for Periodic Monitoring Strategy:

Daily monitoring of the carbon bed breakthrough detector when the mixer is in use and timely replacement of the carbon canister are sufficient to demonstrate that the Permittee achieves 85 percent VOC reduction overall.

D. Operational Limitation

EP 44 and 46

The Permittee shall use only natural gas for the spray dryer and the boilers at the pilot plant unless the Permittee requests and receives an approval or permit from the Department to burn an alternate fuel **[Authority: COMAR 26.11.02.09A]**.

Compliance Demonstration for the Operational Limitation:

The Permittee shall demonstrate compliance of operating requirements by maintaining records of the quantity and types of fuel burned for at least 5 years and make these records available to the Department upon request.

Rationale for Periodic Monitoring Strategy:

No periodic monitoring will be required as the Permittee is required to maintain records of the types and quantity of fuel burned to support the annual emissions certification report.

EP 47

The exhaust gases from the Henschel mixer shall vent through a carbon bed adsorber (EP47) prior to discharging to the atmosphere.
[Authority: Permit to Construct #025-7-0105 M issued February 27, 2008]

Compliance Demonstration for the Operational Limitation:

The Permittee monitors the carbon bed breakthrough detector at least once per day when the mixer is in operation and keep records for at least 5 years and make these records available to the Department upon request.

Rationale for Periodic Monitoring Strategy:

Daily monitoring of the carbon bed breakthrough detector when the mixer is in use and timely replacement of the carbon canister are sufficient to demonstrate that the mixer vents to the carbon bed adsorber.

COMPLIANCE SCHEDULE

Evonik is currently in compliance with all applicable air quality regulations.

TITLE IV – ACID RAIN

Not Applicable

TITLE VI – OZONE DEPLETING SUBSTANCES

Evonik is not subject to Title VI requirements.

SECTION 112(r) – ACCIDENTAL RELEASE

Evonik is not subject to the requirements of Section 112(r).

PERMIT SHIELD

The Evonik facility requested that a permit shield be expressly included in the Permittee's Part 70 permit. Permit shields are granted on an emission unit by emission unit basis. If an emission unit is covered by a permit shield, a permit shield statement will follow the emission unit table in Section IV - Plant Specific Conditions of the permit. In this case, a permit shield was granted for each emission unit covered by the permit.

INSIGNIFICANT ACTIVITIES

This section provides a list of insignificant emissions units that were reported in the Title V permit application. The applicable Clean Air Act requirements, if any, are listed below the insignificant activity.

(1) No. 30 Fuel burning equipment using gaseous fuels or no. 1 or no. 2 fuel oil, and having a heat input less than 1,000,000 Btu (1.06 gigajoules) per hour;

The units are subject to the following requirements:

COMAR 26.11.09.05A(2), which establishes that the Permittee may not cause or permit the discharge of emissions from any fuel burning equipment, other than water in an uncombined form, which is visible to human observers.

Exceptions: COMAR 26.11.09.05A(2) does not apply to emissions during load changing, soot blowing, start-up, or adjustments or occasional cleaning of control equipment if:

(a) The visible emissions are not greater than 40 percent opacity; and

(b) The visible emissions do not occur for more than 6 consecutive minutes in any sixty minute period.

COMAR 26.11.09.07A(2)(b), which establishes that the Permittee may not burn, sell, or make available for sale any distillate fuel with a sulfur content by weight in excess of 0.3 percent.

No. 2 Stationary internal combustion engines with less than 500 brake horsepower (373 kilowatts) of power output;

The natural gas fired, 30kw emergency generator and the natural gas fired, 11 kw emergency generator (currently in storage) are subject to the following requirements:

(A) COMAR 26.11.09.05E(2), Emissions During Idle Mode: The Permittee may not cause or permit the discharge of emissions from any engine, operating at idle, greater than 10 percent opacity.

(B) COMAR 26.11.09.05E(3), Emissions During Operating Mode: The Permittee may not cause or permit the discharge of emissions from any engine, operating at other than idle conditions, greater than 40 percent opacity.

(C) Exceptions:

(i) COMAR 26.11.09.05E(2) does not apply for a period of 2 consecutive minutes after a period of idling of 15 consecutive minutes for the purpose of clearing the exhaust system.

(ii) COMAR 26.11.09.05E(2) does not apply to emissions resulting directly from cold engine start-up and warm-up for the following maximum periods:

(a) Engines that are idled continuously when not in service: 30 minutes
(b) all other engines: 15 minutes.

(iii) COMAR 26.11.09.05E(2) & (3) do not apply while maintenance, repair or testing is being performed by qualified mechanics.

(D) 40 CFR 63, Subpart ZZZZ which states that the Permittee must:

(i) Change oil and filter every 500 hours of operation or annually, whichever comes first;

(ii) Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary;

(iii) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary;

(iv) operate and maintain the engine and keep records as specified in Subpart ZZZZ; and

(v) keep records of the hours of operation of the engine as recorded through a non-resettable hour meter.

(2) ✓ Space heaters utilizing direct heat transfer and used solely for comfort heat;

(3) No. 1 Unheated VOC dispensing containers or unheated VOC rinsing containers of 60 gallons (227 liters) capacity or less;

The Cold Degreaser is subject to COMAR 26.11.19.09D, which requires that the Permittee control emissions of volatile organic compounds (VOC) from cold degreasing operations by meeting the following requirements:

(a) COMAR 26.11.19.09D(2)(b), which establishes that the Permittee shall not use any VOC degreasing material that exceeds a vapor pressure of 1 mm Hg at 20 ° C;

(b) COMAR 26.11.19.09D(3)(a—d), which requires that the Permittee implement good operating practices designed to minimize spills and evaporation of VOC degreasing material. These practices, which shall be established in writing and displayed such that they are clearly visible to operators, shall include covers (including water covers), lids, or other methods of minimizing evaporative losses, and reducing the time and frequency during which parts are cleaned;

(c) COMAR 26.11.19.09D(4), which prohibits the use of any halogenated VOC for cold degreasing.

The Permittee shall maintain on site for at least five (5) years, and shall make available to the Department upon request, the following records of operating data:

(a) Monthly records of the total VOC degreasing materials used; and

(b) Written descriptions of good operating practices designed to minimize spills and evaporation of VOC degreasing materials.

(4) ✓ Equipment for drilling, carving, cutting, routing, turning, sawing, planing, spindle sanding, or disc sanding of wood or wood products;

(5) ✓ Brazing, soldering, or welding equipment, and cutting torches related to manufacturing and construction activities that emit HAP metals and not directly related to plant maintenance, upkeep and repair or maintenance shop activities;

(6) Containers, reservoirs, or tanks used exclusively for:

(a) ✓ Storage of butane, propane, or liquefied petroleum, or natural gas;

(b) No. 2 Storage of lubricating oils;

(c) No. 1 Unheated storage of VOC with an initial boiling point of 300 °F (149 °C) or greater;

(d) No. 4 Storage of Numbers 1, 2, 4, 5, and 6 fuel oil and aviation jet engine fuel;

(e) No. 2 The storage of VOC normally used as solvents, diluents, thinners, inks, colorants, paints, lacquers, enamels, varnishes, liquid resins, or other surface coatings and having individual capacities of 2,000 gallons (7.6 cubic meters) or less;

(7) ✓ First aid and emergency medical care provided at the facility, including related activities such as sterilization and medicine

preparation used in support of a manufacturing or production process;

(8) ✓ Comfort air conditioning subject to requirements of Title VI of the Clean Air Act;

(9) ✓ Laboratory fume hoods and vents (including two (2) insignificant R&D laboratory kilns); and

(10) any other emissions unit, not listed in this section, with a potential to emit less than the "de minimus" levels listed in COMAR 26.11.02.10X (list and describe units):

No. 1 Laboratory size tablet coater for R&D Lab (MDE letter to Mr. Walker on 3/19/04)

No. 1 Laboratory size spray dryer

No. 1 Air stripper to remove volatiles and stabilize pH of the incoming water to improve conformance to FDA requirements (MDE letter to Mr. Baugh on 8/21/07)

No. 1 Modification of the existing system 200 baghouse (EU 6, EP 13) to eliminate confined space entry by changing the design from a bottom loader to a top loader. The baghouse does not have a discharge external to the building (MDE letter to Mr. Wroczynski on 9/1/09)

STATE ONLY ENFORCEABLE REQUIREMENTS

The Permittee is subject to the following State-only enforceable requirements:

1. Applicable Regulations:

   (A) COMAR 26.11.06.08 and 26.11.06.09, which generally prohibit the discharge of emissions beyond the property line in such a manner that a nuisance or air pollution is created.

   (B) COMAR 26.11.15.05, which requires that the Permittee implement "Best Available Control Technology for Toxics" (T – BACT) to control emissions of toxic air pollutants.

   (C) COMAR 26.11.15.06, which prohibits the discharge of toxic air pollutants to the extent that such emissions will unreasonably endanger human health

2. Record Keeping and Reporting:

   The Permittee shall submit to the Department, by April 1 of each year during the term of this permit, a written certification of the results of an analysis of emissions of toxic air pollutants from the Permittee's facility during the previous calendar year. The analysis shall include either:

   (a) a statement that previously submitted compliance demonstrations for emissions of toxic air pollutants remain valid; or

   (b) a revised compliance demonstration, developed in accordance with requirements included under COMAR 26.11.15 & 16, that accounts for changes in operations, analytical methods, emissions determinations, or other factors that have invalidated previous demonstrations.