Lawrence J. Hogan, Jr. State of Maryland **¹**Ben Grumbles **Governor** Secretary Boyd K. Rutherford Lieutenant Governor DEPARTMENT OF THE ENVIRONMENT Air and Radiation Administration 1800 Washington Boulevard, Suite 720 Baltimore, MD 21230 Part 70 **Construction Permit Operating Permit** PERMIT NO. 24-510-0314 **DATE ISSUED** November 1, 2018 To be paid in accordance with COMAR 26.11.02.19B PERMIT FEE EXPIRATION DATE October 31, 2023 **LEGAL OWNER & ADDRESS** SITE American Sugar Refining, Inc. American Sugar Refining, Inc. 1100 Key Highway East 1100 Key Highway East Baltimore, MD 21230 Baltimore, MD 21230 Attn: Mr. Gary Lasako, Environmental Manager **Baltimore City** AI#60 **SOURCE DESCRIPTION** Renewal Part 70 Operating Permit for one Sugar Manufacturing Plant. This source is subject to the conditions described on the attached pages. Page 1 of 96 Director, Air and Radiation Administration Program Manager

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### SECTION I SOURCE IDENTIFICATION

# 1. DESCRIPTION OF FACILITY

American Sugar Refining, Inc. (ASR) operates a sugar manufacturing plant which produces granulated and confectioner's sugars from raw cane sugar in bulk quantities and in various package sizes. The facility also manufacturers bulk quantities of liquid can sugars and syrups for industrial consumption. The sugar manufacturing process consists of two principle processes: decolorization and sugar production. The facility also operates a centralized steam and electrical cogeneration energy production facility (boiler house). There are four (4) boilers (130 million Btu/hr each) which fire natural gas and that fire fuel oil (No. 2 or No. 6) in curtailment and testing situations. There is also one (1) boiler which will be rated at 300 million Btu/hr that fires natural gas only.

The primary SIC code for this facility is 2062, cane sugar refining.

### 2. FACILITY INVENTORY LIST

Emissions Unit Number	MDE Registration Number	Emissions Unit Name and Description	Date of Installation
C1	5-1444	Combustion Engineering Boiler No. 1 rated at 130 million Btu/hr firing natural gas and fuel oil (No. 2 or No. 6).	1966 Modified June 12, 2012
C2	5-1445	Combustion Engineering Boiler No. 2 rated at 130 million Btu/hr firing natural gas and fuel oil (No. 2 or No. 6).	1966 Modified June 12, 2012
C3	5-1446	Combustion Engineering Boiler No. 3 rated at 130 million Btu/hr firing natural gas and fuel oil (No. 2 or No. 6).	1966 Modified June 12, 2012
C4	5-1447	Combustion Engineering Boiler No. 4 rated at 130 million Btu/hr firing natural gas and fuel oil (No. 2 or No. 6).	1966 Modified June 12, 2012
C6	5-1476	Babcock & Wilcox boiler rated at 300 million Btu/hr firing natural gas and equipped with a low-NO <sub>X</sub> burner and flue gas recirculation.	July 2000 Modified Jan 18, 2013
R29-1	6-2019	Raw Sugar Unloading and Conveying.	1921
R29-2	6-2019	Raw Sugar Shed.	1968
R29-3		Melter Feed.	1971
R29-4		Diatomite Fugitives.	1971

Emissions Unit Number	MDE Registration Number	Emissions Unit Name and Description	Date of Installation
D28-1	8-0301	Carbonatation Process – Lime silo equipped with a baghouse (RP-C-1).	1995
D10-1	8-0301	Carbonatation Process – Saturator 1 equipped with a demister and a scrubber (RP-C-2).	1995
D10-2	8-0301	Carbonatation Process – Saturator 1 equipped with a demister and a scrubber (RP-C-3).	1995
D10-3	8-0301	Carbonatation Process – Saturator 1 equipped with a demister and a scrubber (RP-C-4).	1995
D2-1	8-0301	Mud Loading.	1964
S5-1	8-0226	Scrap Melter 1, equipped with a Rotoclone scrubber (RP-C-10)	1922
S5-2	8-0382	Scrap Melter 2	1991
S5-3	8-0382	Remelt Screw Conveyors	1991
S5-4	6-2022	Invert System consisting of the following equipment:  S5-4A: Invert Cloudy Tank (5-3-16) S5-4B: Invert Precoat Tank (5-3-17) S5-4C: Sucrose Cloudy Tank (5-3-13) S5-4D: Sucrose Precoat Tank (5-3-14) S5-4E: Clear Sucrose Tank (5-3-12) S5-4F: Clear Inver Tank This system is controlled by a Rotoclone scrubber (RP-C-10).	
S5-5	6-2022	Caustic fugitives associated with the Invert System.	1958
S5-6	6-2020	Soft Sugar Shredder.	1969
S5-7	6-2021	Ten (10) Evaporation Pans (Pan #1-9 and 11).	1950
S6-4	8-0115	scrubber (RP-C-11).	
S6-5	8-0225	Sugar Packaging Line and Conveying System consists of the following equipment: S6-5A: Remelt Shredder. S6-5B: Maltrin Tank. S6-5C: Sugar Tank.	

Emissions Unit Number	MDE Registration Number	Emissions Unit Name and Description	Date of Installation
		S6-5J: UB-1 Tail End.	
		This equipment is all controlled by a Wheelabrator dry filter (6-5-1) (RP-C-12).	
S6-6	8-0115	Sugar Packaging Line and Conveying System consists of the following equipment: S6-6A: Oscillator S6-6B: DSE-1 (9-25-10) S6-6C: US-2 Scroll S6-6D: UB-1 North This equipment is controlled by a Wheelabrator dry filter (6-5-2) (RP-C-13).	
S6-7	8-0296	Sugar Packaging Line and Conveying System consists of the following equipment: S6-7A: Receiver 1300 2# S6-7B: Old V. Bag Packaging System S6-7C: Receiver 1250 S6-7D: Receiver 6-4-1300 S6-7E: 2# Poly Filler System S6-7F: New V.B. Filler System S6-7G: Old V. B. Filler System S6-7H: Packet Grinder S6-7I: 1-4 10X Filler System This equipment is controlled by a Wheelabrator dry filter (6-5-3) (RP-C-14).	November 2008
S1-1	8-0320	FEECO Rotary sugar dryer equipped with an Entoleter, Inc. vortex scrubber (RP-C-15).	1999
S6-1	8-0209	Sugar Mill 1 equipped with MAC dry filter (RP-C-16).	November 2008
S6-1A	8-0209	Starch Receiver 1 equipped with dry filter (RP-C-17).	November 2008
S6-2	8-0209	Sugar Mill 2 equipped with MAC dry filter (RP-C-18).	November 2008
S6-2A	8-0209	Starch Receiver 2 equipped with dry filter (RP-C-19).	November 2008
S6-3	8-0125	Sugar Mill 3 equipped with MAC dry filter (RP-C-20).	November 2008
S6-3A	8-0125	Starch Receiver 3 equipped with dry filter (RP-C-21).	November 2008
S6-9	8-0209	Starch Bin equipped with a dry filter (RP-C- Nover 22).	
S6-8	8-0266	Sugar Pulverizer (Mill 7) equipped with a baghouse (RP-C-24).	1988
S7A-1	8-0212	Bulk Sugar Conveying System consists of the following equipment:	1966

Emissions Unit Number	MDE Registration Number	Emissions Unit Name and Description	Date of Installation
		S7A-RE1: Bucket Elevator RE-1 S7A-XE1: Bucket Elevator XE-1 S7A-XRS1: Bucket Elevator XRS-1 S7A-UE1: Bucket Elevator UE-1 S7A-UE2A: Bucket Elevator UE-2A S7A-UE2B: Bucket Elevator UE-2B S7A-RE2: Bucket Elevator RE-2 S7A-U1: Storage Bin U1 S7A-U2: Storage Bin U2 S7A-U3: Storage Bin U3 S7A-U4: Storage Bin U5 S7A-U6: Storage Bin U6 S7A-XF1 Storage Bin XF-1 S7A-XF2: Storage Bin XF-2 S7A-V1: Storage Bin V1 S7A-V2: Storage Bin V2 S7A-V3: Storage Bin V2 S7A-V4: Storage Bin V4 S7A-V5: Storage Bin V5 S7A-V6: Storage Bin V5 S7A-V6: Storage Bin V6 S7A-C1: Storage Bin F1 S7A-AR1: Storage Bin AR1 S7A-AR2: Storage Bin AR2 S7A-AR3: Storage Bin AR3 S7A-AR4: Storage Bin AR4 S7A-AR5: Storage Bin AR6 S7A-AR6: Storage Bin AR6 S7A-AR7: Storage Bin AR7 S7A-AR8: Storage Bin AR8 S7A-RJX: Screw Conveyor Rejects Transfer This equipment is controlled by a scrubber (RP-C-25).	
S7-5	8-0265	Packaging Feed Tank 1 equipped with a filter (RP-C-26).	January 2001
S7-6	8-0265	Packaging Feed Tank 2 equipped with a filter (RP-C-27).	January 2001
S7-7	8-0265	Packaging Feed Tank 3 equipped with a filter January (RP-C-28). 2001	
S7-8	8-0265	Packaging Operations consists of the following equipment:  S7-8A: Fawema Packaging System  S7-8B: Paxall Packaging System	

Emissions Unit Number	MDE Registration Number	Emissions Unit Name and Description	Date of Installation
		S7-8C: Clouds Packaging System	
		S7-8D: Handi Pak System	
		This equipment is controlled by a Rotoclone scrubber (7-6-1)(RP-C-29).	
		Packaging System consisting of the following equipment:	
		S7-10A: Hesser Bagging System	
S7-10	8-0265	S7-10B: Supersack Unloading System	January 2001
		<b>Note:</b> Thiele, Tubline, and Supersacks are controlled by Wheelabrator dust collector 7-5-1 (RP-C-30). Hessers are controlled by Wheelabrator dust collector 7-5-2 (RP-C-32).	
		The truck unloading operations are equipped	1966 /
S7B-1	8-0223	with three (3) dust collection systems.	updated
0.2.	0 0220	Bulk Loading System equipped with an	2016
		Entoleter scrubber (RP-C-31). The "Super-Sack" Sugar Packing Line	
		consists of the following equipment:	
		S7-11A: Thiele Supersack System	
		S7-11B: Tub Packaging Line	
S7-11	8-0287	<b>Note:</b> Thiele, Tub line, and Supersacks controlled by Wheelabrator Dust collector 7-5-1 (RP-C-30).	1990
		S7-11C: Simplex Packaging Line	
		Note: Simplex controlled by Wheelabrator dust	
		collector 6-5-1 (RP-C-12).	
S7B-2	8-0212	Bin Tower Rejects Box.	1966
S7-12	8-0266	Maltodex Supersack Unloading System.	1982
S7-13	0.0000	Remelt Shredder Fugitives.	1989
S7-14	8-0223	Magnets Tailings Fugitives	1966
S7-15 S7-16	6-2018 9-1298	Packaging Video Inkjet Printers Packaging Adhesive Fugitives	1990 1990
31-10	3-1230	Dryer #1 (Powdered Specialty Sugars)	1990
S5-8	8-0332	equipped with a venturi scrubber (DW-1)(RP-C-33).	February 2004
		Dryer #2 (Powdered Specialty Sugars)	February
S5-8B	8-0332	equipped with venturi scrubbers (DW-2)(RP-C-34)	2004
05.05	0.0000	Liquid Sugar Cooler (Powdered Specialty	February
S5-8D	8-0332	Sugars) controlled by a Sly venturi scrubber (WS-3)(RP-C-35).	2004

Emissions Unit Number	MDE Registration Number	Emissions Unit Name and Description	Date of Installation	
S5-8E	8-0332	Three Centrifugal Separators (Powdered Specialty Sugars) controlled by a Sly venturi scrubber (WS-1)(RP-C-36).	February 2004	
S5-8F	8-0332	Washout Tanks and Beater (Powdered Specialty Sugars) controlled by a Rotoclone scrubber.	February 2004	
S5-8G	8-0332	Packaging and Conveying Equipment (Powdered Specialty Sugars) controlled by a Sly venturi scrubber (WS-1)(RP-C-36).	February 2004	
U5-1	8-0383	Cooling Tower CT-3	Unknown	
D3-6A and D3-6	-8-0386	One (1) 8,450 gallon HCl tank (D3-6A) equipped with a once through 25 gpm scrubber (D3-6).		
D3-7	-8-0386	One (1) 12,924 gallon Resin Acid Wash Tank.		
D3-8	-8-0386	One (1) 734 gallon CIP Tank.		
D3-9a, D3- 9b, D3-9c, and D3-9d	-8-0386	Four (4) De-ashing Resin Beds, each with a capacity of 10,574 gallons.	D 0040	
D3-10a, D3- 10b, D3- 10c, and D3-10d	-8-0386	Four (4) Decolorized Resin Beds, each with a capacity of 23,603 gallons.	Dec. 2013	
D3-11, D3- 11a, and D3-11b	-8-0386	Two (2) salt saturators (D3-11a and D3-11b) controlled by a 16" diameter, 24" high field erected water spray chamber (D3-11).		
D3-12	-8-0386	HCl equipment leak components, valves/pumps/connectors.		
U11-2	9-1293	One (1) diesel fired generator rated at 100 kilowatts (160 horsepower) for emergency and emergency demand response purposes.		

### 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

ARMA Air and Radiation Management 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<sub>X</sub> 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<sub>2</sub> 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 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 permitsto-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 offpermit 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 onpermit 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;

- Prevention of Significant Deterioration source, as defined in COMAR 26.11.01.01, approval required, except for generating stations constructed by electric companies;
- 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;
- 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 by (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;
- 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 <u>Section VI – State-only Enforceable Conditions</u>:

- 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.

- 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. [Reference: COMAR 26.11.03.06C(5)(g)]

#### Table IV - 1

### 1.0 | Emissions Unit Number(s): C1 thru C4

C1 - C4 – Four (4) Combustion Engineering Boilers each rated at 130 MMBtu/hr firing natural gas and fuel oil (No. 2 or No. 6) (only during periods of natural gas curtailment), and each equipped with an ultra low  $NO_X$  burner. (MDE Registration Nos. 510-0314-5-1444, 5-1445, 5-1446, and 5-1447)

# 1.1 | Applicable Standards/Limits:

- A. Control of Visible Emissions
  - (1) COMAR 26.11.09.05A(2) Visible Emissions. "Areas III and IV. In Areas III and IV, a person 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 except that, for the purpose of demonstrating compliance using COM data, emissions that are visible to a human observer are those that are equal to or greater than 10 percent opacity."

**COMAR 26.11.09.05 A(3) -** Exceptions. "Section A(1) and (2) of this regulation do 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 sixty minute period."

### B. Control of Particulate Matter

(1) COMAR 26.11.09.06B(1)(a) - Control of Particulate Matter - Areas III and IV – Dust Collector Devices Required. "A person may not cause or permit the combustion of residual fuel oil in fuel burning

#### Table IV - 1

equipment unless the equipment is fitted with a dust collector which is so designed that it can reasonably be expected to produce sufficient dust particle force, residence time, and particle retention to satisfy the requirements of Table 1. This paragraph does not apply to fuel burning equipment where by-product gases or by-product gases in combination with residual fuel oil are burned and where the effluent gases do not contain particulate matter in excess of the requirements of Table 1, as applicable to residual oil burning."

- (2) COMAR 26.11.09.06B(2) Control of Particulate Matter Areas III and IV Residual Fuel-Oil-Burning Equipment. "A person may not cause or permit particulate matter caused by the combustion of residual fuel oil to be discharged into the atmosphere in excess of the amounts shown in Table 1."
- (3) **COMAR 26.11.09.09:** Table 1 <u>Emission Standards and Dust Collector Performance Standards for Fuel-Burning Equipment.</u>

Table 1 Emission Standards and Dust Collector Performance Standards for Fuel-Burning Equipment			
Equipment Description  Max. Rated Heat Input in million Btu (gigajoules) per hour per furnace  Max. Allowable Emissions of Part Matter – gr/scfd (mg/dscm)			
Existing and new equipment burning residual oil	Less than 13 (13.7) 13 – 50 (13.7 – 52.8) <b>50 – 250 (52.8 – 265)</b>	No requirement (a) 0.03 (69) <b>0.020 (46)</b>	

(4) No. 6 fuel oil is limited to a maximum of **0.068% ash content**. [Reference: MDE letter dated November 8, 2005 & MDE Permit to Construct 510-5-1444 through 5-1447 issued on August 28, 2014]

### C. Control of Sulfur Oxides

- (1) **COMAR 26.11.09.07A(2)** <u>Sulfur Content Limitations for Fuel.</u> "A person may not burn, sell, or make available for sale any fuel with a sulfur content by weight in excess of or which otherwise exceeds the following limitations: (2) In Areas III and IV:
  - (a) Not applicable.
  - (b) "Distillate fuel oils, 0.3 percent."
  - (c) "Residual fuel oils, 1.0 percent."

#### Table IV - 1

(2) No. 6 fuel oil is limited to a maximum of 0.5% sulfur content. [Reference: MDE letter dated November 8, 2005 & MDE Permit to Construct 510-5-1444 through 5-1447 issued on August 28, 2014]

#### D. Control of Nitrogen Oxides

(1) COMAR 26.11.09.08B(1)(c) - Control of NO<sub>X</sub> for Major Stationary Sources – Emissions Standards and Requirements. "Emission Standards in Pounds of NO<sub>X</sub> per Million Btu of heat input."

Fuel	Tangential-Fired	Wall-Fired
Gas only	0.20	0.20
Gas/Oil	0.25	0.25
Coal (dry bottom)	0.38	0.38
Coal (wet bottom)	1.00	1.00

- (2) **COMAR 26.11.09.08B(5)** Control of NO<sub>X</sub> for Major Stationary Sources Operator Training.
  - (a) "For purposes of this regulation, the equipment operator to be trained may be the person who maintains the equipment and makes the necessary adjustments for efficient operation.
  - (b) The operator training course sponsored by the Department shall include an in-house training course that is approved by the Department."
- (3) COMAR 26.11.09.08D(1)(b) Requirements for Fuel-Burning Equipment with a Rated Heat Input Capacity of Less than 250 Million Btu Per Hour and Greater than 100 Million Btu Per Hour. "All other fuel burning equipment with a rated heat input capacity of less than 250 Million Btu per hour and greater than 100 Million Btu per hour shall meet the NO<sub>X</sub> emission rates set forth in §B(1)(c) of this regulation."
- (4) No. 6 fuel oil is limited to a maximum of 0.5% nitrogen content. [Reference: MDE letter dated November 8, 2005 & MDE Permit to Construct 510-5-1444 through 5-1447 issued on August 28, 2014]

#### E. Operational Limitations

(1) The Permittee shall operate the boilers such that the combined hours of operation for Boilers #1 through #4 do not exceed 20,220 hours in any consecutive 12-month period.

[Reference: District Court Consent Decree, Civil Action No. JKB-12-1408, Section V(12) & MDE Permit to Construct 510-5-1444 through 5-1447 issued on August 28, 2014]

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- (2) In accordance with COMAR 26.11.09.06B(2), particulate matter emissions from the stack services Boilers #1 through #4 shall not exceed 0.020 grains per SCFD (corrected to 50% excess oxygen). [Reference: MDE Permit to Construct 510-5-1444 through 5-1447 issued on August 28, 2014]
- (3) In order to meet the 0.020 grains per SCFD (corrected to 50% excess oxygen) particulate matter emissions limit of COMAR 26.11.09.06B(2), the Permittee shall:
  - (a) Use only fuel oil (No. 2 or No. 6) in Boilers #1 through #4 with an ash content weight percent that will not cause total particulate matter emissions from the single powerhouse stack to exceed 0.020 grains per SCFD (corrected to 50% excess oxygen);
  - (b) Use natural gas and fuel oil (No. 2 or No. 6) in separate operating boilers that will not cause total particulate matter emissions from the single powerhouse stack to exceed 0.020 grains per SCFD (corrected to 50% excess oxygen); or
  - (c) Install a dust collector device designed to meet the 0.020 grains per SCFD (corrected to 50% excess oxygen) particulate matter emissions limit per COMAR 26.11.09.06B(1)(a).

[Reference: MDE Permit to Construct 510-5-1444 through 5-1447 issued on August 28, 2014]

- (4) The Permittee shall design and operate the ultra low NO<sub>X</sub> burners on Boilers 1-4 and the low NOx burner on Boiler 6 to meet the emission rate of 500 lbs/day (or 624 lbs/day, when appropriate) on a 30-day rolling average. [Reference: District Court Consent Decree, Civil Action No. JKB-12-1408, Sections V(11)(a) & V(10)(d) & MDE Permit to Construct 510-5-1476 issued on August 28, 2014. Modified by the Order Modifying Consent Decree dated August 5, 2013 and the emission rates proposed in a letter to the EPA dated March 14, 2014 and approved by the EPA in a letter on April 2, 2014.]
- (5) The primary combined NOx emission limit that applies to the operation of boilers 1-4 and 6 is 500 lbs/day, calculated on a 30-day rolling average as described in the Order Modifying Consent Decree. This limit applies at all times, except in the circumstances described below when the limit of 624 lbs/day applies.
  - (a) Any day in which:
    - (1) Boiler 6 operates at any point in time;
    - (2) Boiler 6 operates in conjunction with any of the CE boilers; or

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- (3) Boiler 6 does not operate and only three (3) of the CE boilers operate would count toward the 500 lbs/day 30 day rolling average.
- (b) If there are seven calendar days within a 30 day period in which Boiler 6 does not operate and each of the four CE boilers operates for some period of time in that calendar day, then the combined NOx emission limit is 624 lbs/day. The seven days do not need to be consecutive.
- (c) ASR will calculate the 30 day rolling average each day. If all four CE boilers operated for six days or less within the previous 30 calendar day period, the limit of 500 lbs/day applies. If all four CE boilers operated seven days or more during the previous 30-calendar day period, the limit of 624 lbs/day applies.

[Reference: District Court Consent Decree, Civil Action No. JKB-12-1408, Section V(11)(a) & MDE Permit to Construct 510-5-1444 through 5-1447 issued on August 28, 2014. Modified by the Order Modifying Consent Decree dated August 5, 2013 and the emission rates proposed in a letter to the EPA dated March 14, 2014 and approved by the EPA in a letter on April 2, 2014.]

- (6) The Permittee shall continuously operate the NO<sub>X</sub> control technology at all times of boiler operation. [Reference: District Court Consent Decree, Civil Action No. JKB-12-1408, Section V(11)(b) & MDE Permit to Construct 510-5-1444 through 5-1447 issued on August 28, 2014]
- (7) The total combined NO<sub>X</sub> emissions from Boilers 1-4 & 6 in any consecutive 12 month period shall not exceed 60 tons. [Reference: District Court Consent Decree, Civil Action No. JKB-12-1408, Section V(13) & MDE Permit to Construct 510-5-1444 through 5-1447 issued on August 28, 2014. Modified by the Order Modifying Consent Decree dated August 5, 2013 and the emission rates proposed in a letter to the EPA dated March 14, 2014 and approved by the EPA in a letter on April 2, 2014.]
- (8) The total combined NO<sub>X</sub> emissions from Boilers 1-4 & 6 in any calendar month shall not exceed 6.0 tons. [Reference: District Court Consent Decree, Civil Action No. JKB-12-1408, Section V(14) & MDE Permit to Construct 510-5-1444 through 5-1447 issued on August 28, 2014]

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### 1.2 **Testing Requirements**:

### A. Control of Visible Emissions

During stack testing periods, the Permittee shall conduct an opacity observation of the exhaust gases exiting the stack for a period of at least one hour in order to demonstrate compliance with the no visible emissions requirement of COMAR 26.11.09.05A(2) when burning fuel oil (No. 2 or No. 6). The opacity observation shall be conducted in accordance with US EPA Method 9, Method 22 or an equivalent method approved by the Department. [Reference: COMAR 26.11.03.06C & MDE Permit to Construct 510-5-1444 through 5-1447 issued on August 28, 2014]

### B. Control of Particulate Matter

Stack emissions tests shall be conducted at least once every two-year period to demonstrate compliance with the 0.020 gr/scfd particulate matter emission limit when the boiler burns fuel oil (No. 2 or No. 6) with a pre-determined ash content weight percent.

Stack emissions tests shall be conducted to demonstrate compliance with the 0.020 gr/scfd particulate matter emission limit can be achieved during either of the following operating conditions:

- (1) Burning only fuel oil (No. 2 or No. 6) with a pre-determined ash content weight percent in boilers 1 thru 4; and burning the lowest possible ratio of natural gas to fuel oil (No. 2 or No. 6) in boilers 1 thru 4.
- (2) Boilers 1 thru 4 shall each be operated at 90% or higher of their rated capacity during all stack emissions tests.

[Reference: COMAR 26.11.03.06C]

<u>Note:</u> The Permittee is not required to conduct stack testing on Boilers 1-4 when fuel oil (No. 2 or No. 6) has not been utilized at any time during the preceding two (2) years.

### C. Control of Sulfur Oxides

See Monitoring Requirements.

### D. Control of Nitrogen Oxides

See Monitoring Requirements.

### E. Operational Limitations

See Monitoring Requirements.

### 1.3 Monitoring Requirements:

### A. Control of Visible Emissions

The Permittee shall: properly operate and maintain the boilers in a manner to prevent visible emissions; and verify no visible emissions when burning fuel oil (No. 2 or No. 6). The Permittee shall perform a visual observation for a 6-minute once for each 168-hour period when the boiler burns fuel oil. If a boiler does not burn fuel oil for more than 100 hours in a calendar year, the visible

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emission observation requirement is waived for that boiler.

The Permittee shall perform the following, if visible emissions are observed: inspect combustion system and boiler operation; perform all necessary adjustments and/or repairs to the boiler within 48 hours so that visible emissions are eliminated; document in writing the results of inspections, adjustments, and/or repair to the boiler; and after 48 hours, if required adjustments and/or repair had not eliminated the visible emissions, perform a Method 9 observation for a 18-minute period once per day until corrective actions have eliminated the visible emissions. [Reference: COMAR 26.11.03.06C]

### B. Control of Particulate Matter

The Permittee shall obtain an analysis from the fuel supplier of each load of oil received indicating that the fuel oil (No. 2 or No. 6) has an ash content equal to or less than 0.068% by weight. [Reference: MDE letter dated November 8, 2005 & COMAR 26.11.03.06C]

### C. Control of Sulfur Oxides

The Permittee shall obtain an analysis from the fuel supplier of each load of oil received indicating that the No. 6 fuel oil has a sulfur content equal to or less than 0.5% by weight. [Reference: MDE letter dated November 8, 2005 & COMAR 26.11.03.06C]

The Permittee shall obtain an analysis from the fuel supplier of each load of oil received indicating that the No. 2 fuel oil has a sulfur content equal to or less than 0.3% by weight. [Reference: COMAR 26.11.03.06C]

### D. Control of Nitrogen Oxides

The Permittee shall obtain an analysis from the fuel supplier of each load of oil received indicating that the oil has a nitrogen content equal to or less than 0.5% by weight. [Reference: MDE letter dated November 8, 2005 & COMAR 26.11.03.06C]

At a point in each stack prior to a point at which boiler flue gas combines with flue gas from any other boiler, the Permittee shall install and make operational, concurrent with commencement of operations of the Ultra Low  $NO_X$  Burners, an  $NO_X$  continuous emissions monitoring system (CEMS) to monitor  $NO_X$  emissions in accordance with the requirements of 40 CFR Part 60.

[Reference: District Court Consent Decree, Civil Action No. JKB-12-1408, Section V(15) & MDE Permit to Construct 510-5-1444 through 5-1447 issued on August 28, 2014]

The required CEMS shall monitor and record the applicable  $NO_X$  Emission Rate for each boiler to demonstrate compliance with the established  $NO_X$  Emissions Rates and shall be continuously operated, except during CEMS breakdowns, repairs, calibration checks, and zero span adjustments. [Reference: District Court Consent Decree, Civil Action No. JKB-12-1408,

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### Section V(16) & MDE Permit to Construct 510-5-1444 through 5-1447 issued on August 28, 2014]

If the Permittee is unable to obtain emissions data from the CEMS because of a malfunction of the CEM for more than 2 hours in duration, the Permittee shall use the alternative measurement method approved by the Department and EPA. [Reference: COMAR 26.11.01.11B(4) & MDE Permit to Construct 510-5-1444 through 5-1447 issued on August 28, 2014]

A CEMS used to monitor a gas concentration shall record not less than four equally spaced data points per hour and automatically reduce data in terms of averaging times consistent with the applicable emission standard per COMAR 26.11.01.11D. [Reference: MDE Permit to Construct 510-5-1444 through 5-1447 issued on August 28, 2014]

All emissions of  $NO_X$  shall be measured by the CEMS. During any periods of time when any CEMS is inoperable or not measuring  $NO_X$  emissions from any boiler, the Permittee shall apply the missing data substitution procedures provided in 40 CFR Part 75, Subpart D. [Reference: District Court Consent Decree, Civil Action No. JKB-12-1408, Section V(18) & MDE Permit to Construct 510-5-1444 through 5-1447 issued on August 28, 2014]

COMAR 26.11.01.11C – Quality Assurance for CEMS. "A CEM used to monitor a gas concentration shall meet the quality assurance criteria of 40 CFR Part 60, Appendix F, as amended, which is incorporated by reference, or, if applicable, the quality assurance criteria of 40 CFR Part 75, Appendix B, as amended."

### E. Operational Limitations

See Monitoring Requirements for Control of Nitrogen Oxides.

### 1.4 Record Keeping Requirements:

<u>NOTE</u>: All records must be maintained for a period of 5 years. [Reference: COMAR 26.11.03.06C(5)(g)]

### A. Control of Visible Emissions

The Permittee shall maintain an operational manual and preventive maintenance plan on site; maintain the test result of the Method 9 performed; maintain records of the results of the monthly inspections; maintain a record of the maintenance performed that relates to combustion performance; maintain a log of visible emissions observations performed and make it available to the Department upon request; maintain a record of the hours that fuel oil (No. 2 or No. 6) is burned. [Reference: COMAR 26.11.03.06C].

### B. Control of Particulate Matter

The Permittee shall maintain records of all stack emissions test documents and the fuel supplier certification for each shipment of fuel oil (No. 2 or No. 6)

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stating the ash content in weight percent. [Reference: COMAR 26.11.03.06C]

### C. Control of Sulfur Oxides

The Permittee shall maintain records of the annual fuel supplier certifications stating that the No. 6 fuel oil used in Boilers 1 thru 4 is in compliance with the 1.0% by weight sulfur limitation required by COMAR 26.11.09.07A(2)(c). [NOTE: Per November 8, 2005 letter from MDE, based on stack testing data, sulfur content of fuel oil is not to exceed 0.5%]

The Permittee shall maintain records of the annual fuel supplier certifications stating that the No. 2 fuel oil used in Boilers 1 thru 4 is in compliance with the 0.3% by weight sulfur limitation required by COMAR 26.11.09.07A(2)(b).

The Permittee shall maintain records of the certification from the supply company of all natural gas curtailment events, including date and duration of the event.

[Reference: MDE Permit to Construct 510-5-1444 through 5-1447 issued on August 28, 2014]

### D. Control of Nitrogen Oxides

The Permittee shall maintain records of the following and make available to the Department upon request:

- (1) The fuel supplier certification for each shipment of fuel oil (No. 2 or No. 6) stating the nitrogen content in weight percent.
- (2) All training and combustion analysis records required by COMAR 26.11.09.08B(5).

[Reference: COMAR 26.11.03.06C]

### E. Operational Limitations

- (1) The Permittee shall maintain electronically for at least five (5) years, and shall make available to the Department upon request, records of the following information:
  - (a) Monthly fuel oil (No. 2 or No. 6) usage in gallons per month and the total fuel usage (No. 2 or No. 6) for the previous rolling 12-month period. [Reference: MDE Permit to Construct 510-5-1444 through 5-1447 issued on August 28, 2014]
  - (b) To comply with the annual emissions cap the Permittee shall convert the monitored CEMS data to a mass emission (tons) and sum the total amount of NO<sub>X</sub> emissions for the current month and the previous eleven months. [Reference: District Court Consent Decree, Civil Action No. JKB-12-1408, Section V(20) & MDE Permit to Construct 510-5-1444 through 5-1447 issued on August 28, 2014]
  - (c) To comply with the monthly emissions cap the Permittee shall convert the monitored CEMS data to a mass emission

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(tons) and sum the amount of NO<sub>X</sub> emissions for each operating day during the month. [Reference: District Court Consent Decree, Civil Action No. JKB-12-1408, Section V(21) & MDE Permit to Construct 510-5-1444 through 5-1447 issued on August 28, 2014]

- (d) All stack emissions test documents. [Reference: MDE Permit to Construct 510-5-1444 through 5-1447 issued on August 28, 2014]
- (2) To comply with the limit on combined total hours of operation for Boilers #1 through #4, the Permittee shall maintain electronically for at least five (5) years, and shall make available to the Department upon request, monitoring records of the hours of operation of each boiler. [Reference: District Court Consent Decree, Civil Action No. JKB-12-1408, Section V(19) & MDE Permit to Construct 510-5-1444 through 5-1447 issued on August 28, 2014]

### 1.5 Reporting Requirements:

### A. Control of Visible Emissions

The Permittee shall report, in accordance with requirements under COMAR 26.11.01.07, occurrences of excess emissions to the Compliance Program of the Air and Radiation Management Administration.

### B. Control of Particulate Matter

At least 30 days prior to the projected date of the stack emission test, the Permittee shall submit a test protocol to the Department for review and approval. Within 45 days after the emission test, the Permittee shall submit to the Department, a stack test report that includes the stack emissions test results and opacity observations results. [Reference: COMAR 26.11.03.06C]

### C. Control of Sulfur Oxides

The Permittee shall make records of certification from the supplier available to the Department upon request. [Reference: COMAR 26.11.03.06C]

### D. Control of Nitrogen Oxides

- (1) The Permittee shall submit: a record of training program attendance for each operator to the Department upon request.
- (2) The Permittee shall comply with the CEM System Downtime Reporting Requirements of COMAR 26.11.01.11E as follows:
  - (a) All CEM system downtime that lasts or is expected to last more than 24 hours shall be reported to the Department by telephone before 10 a.m. of the first regular business day following the breakdown.
  - (b) The system breakdown report required by §E(1)(a) of this regulation shall include the reason, if known, for the breakdown and the estimated period of time that the CEM will be down. The owner or operator of the CEM shall notify

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the Department by telephone when an out-of-service CEM is back in operation and producing data that has met performance specifications for accuracy, reliability, and durability of acceptable monitoring systems, as provided in COMAR 26.11.31, and is producing data.

- (3) The Permittee shall comply with the CEM Data Reporting Requirements of COMAR 26.11.01.11E as follows:
  - (a) All test results shall be reported in a format approved by the Department.
  - (b) Certification testing shall be repeated when the Department determines that the CEM data may not meet performance specifications because of component replacement or other conditions that affect the quality of generated data.
  - (c) A quarterly summary report shall be submitted to the Department not later than 30 days following each calendar quarter. The report shall be in a format approved by the Department, and shall include the following:
    - The cause, time periods, and magnitude of all emissions which exceed the applicable emission standards;
    - (ii) The source downtime including the time and date of the beginning and end of each downtime period and whether the source downtime was planned or unplanned:
    - (iii) The time periods and cause of all CEM downtime including records of any repairs, adjustments, or maintenance that may affect the ability of the CEM to meet performance specifications of emission data;
    - (iv) Quarterly totals of excess emissions, installation downtime, and CEM downtime during the calendar quarter;
    - (v) Quarterly quality assurance activities;
    - (vi) Daily calibration activities that include reference values, actual values, absolute or percent of span differences, and drift status; and
    - (vii) Other information required by the Department that is determined to be necessary to evaluate the data, to ensure that compliance is achieved, or to determine the applicability of this regulation.
  - (d) All information required by this regulation to be reported to the Department shall be retained and made available for review by the Department for a minimum of 2 years from the time the report is submitted."

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- (4) The Permittee must report orally or by electronic or facsimile transmission to the U.S. EPA and MDE, no later than 24 hours after the Permittee knew or should have known of any violation of the District Court Consent Decree, any permit regulations, or any event that may pose an immediate threat to the public health or welfare or the environment.
- (5) The Permittee shall submit within 30 days following each January 1<sup>st</sup> and July 1<sup>st</sup> a semi-annual report to the U.S. EPA for the immediately preceding half-calendar year period. This report shall:
  - (a) Identify any and all dates on which the Permittee has installed, or describe the progress of installation of, each Ultra Low NO<sub>X</sub> burner required for NO<sub>X</sub> control, emission limits, CEMS, and monitoring requirements, and describe any problems encountered or anticipated during such installation, together with implemented or proposed solutions;
  - (b) Provide all CEMS data collected for each Boiler #1 through #4 including an explanation of any periods of CEMS downtime together with any missing data for which American Sugar applied missing data substitution procedures, under Section VI.B of the Consent Order.
  - (c) Demonstrate compliance with all applicable 30-day rolling average emission limits in Section V of the District Court Consent Decree.
  - (d) Describe the status of any operation and maintenance work relating to activities required under the District Court Consent Decree.

[Reference: MDE Permit to Construct 510-5-1444 through 5-1447 issued on August 28, 2014]

E. <u>Operational Limitations</u>
See Reporting Requirements for Control Nitrogen Oxides.

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

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### 2.0 Emissions Unit Number(s): C6

C6 – One (1) Babcox and Wilcox boiler rated at 300 MMBtu/hr firing natural gas and equipped with a low NO<sub>X</sub> burner and flue gas recirculation. (MDE Registration No. 510-0314-5-1476)

### 2.1 Applicable Standards/Limits:

### A. Control of Visible Emissions

COMAR 26.11.09.05A(2) - <u>Visible Emissions – Areas III and IV.</u> "In Areas III and IV, a person 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 except that, for the purpose of demonstrating compliance using COM data, emissions that are visible to a human observer are those that are equal to or greater than 10 percent opacity."

**COMAR 26.11.09.05A(3)** - Exceptions. "Section A(1) and (2) of this **regulation** do 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 sixty minute period.

### B. Control of Nitrogen Oxides

- (1) COMAR 26.11.09.08B(1)(a), Control of NOx Emissions for Major
  Stationary Sources General Requirements and Conditions. "Emission
  Standards and Requirements. A person who owns or operates an
  installation that causes NOx emissions subject to this regulation is in
  compliance with this regulation if the person establishes compliance with
  the emissions standards in §B(1)(c) of this regulation."
- (2) COMAR 26.11.09.08B(1)(c), Control of NO<sub>x</sub> Emissions for Major Stationary Sources General Requirements and Conditions. "Emission Standards in Pounds of NO<sub>x</sub> per Million Btu of heat input."

Fuel	<b>Tangential-Fired</b>	Wall-Fired
Gas only	0.20	0.20
Gas/Oil	0.25	0.25
Coal (dry bottom)	0.38	0.38
Coal (wet bottom)	1.00	1.00

(3) COMAR 26.11.09.08B(2)(a)(i) and (b), (c), and (d), Control of NO<sub>x</sub>

Emissions for Major Stationary Sources – Demonstration of Compliance.

(a) "A person subject to a NO<sub>x</sub> emission standard in this regulation shall

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demonstrate compliance as follows:

- (i) For installations equipped with a CEM, compliance with the NO<sub>x</sub> emissions standards in this regulation shall be established using CEM data; or"
- (ii) Not applicable.
- (b) "CEMs shall be certified in accordance with 40 CFR Part 60, Appendix B, or Part 75, Appendix A."
- (c) "CEMs shall meet the quality assurance criteria in 40 CFR Part 60, Appendix F, or, for sources subject to Title IV of the Clean Air Act (Acid Rain), the quality assurance criteria in 40 CFR Part 75, Appendix B."
- (d) "Except as otherwise established by the Department and approved by the EPA, for a person who establishes compliance with the NO<sub>x</sub> emissions standards in this regulation using a CEM, compliance shall be determined as 30-day rolling averages."
- (e) Not applicable.

### (4) **COMAR 26.11.09.08B(5)** - Operator Training.

- (a) "For purposes of this regulation, the equipment operator to be trained may be the person who maintains the equipment and makes the necessary adjustments for efficient operation.
- (b) The operator training course sponsored by the Department shall include an in-house training course that is approved by the Department."
- (5) COMAR 26.11.09.08C(3), Requirements for Fuel-Burning Equipment with a Rated Heat Input Capacity of 250 Million Btu Per Hour or Greater. "A person who owns or operates fuel burning equipment with a rated heat input capacity of 250 Million Btu per hour or greater shall install, operate, calibrate, and maintain a certified NOx CEM or an alternative NOx monitoring method approved by the Department and the EPA on each installation."
- (6) The Permittee shall design and operate the ultra low NO<sub>X</sub> burners on Boilers 1-4 and the low NO<sub>X</sub> burner on Boiler 6 to meet the emission rate of 500 lbs/day (or 624 lbs/day, when appropriate) on a 30-day rolling average. [Reference: District Court Consent Decree, Civil Action No. JKB-12-1408, Sections V(11)(a) & V(10)(d & MDE Permit to Construct 510-5-1476 issued on August 28, 2014. Modified by the Order Modifying Consent Decree dated August 5, 2013 and the emission rates proposed in a letter to the EPA dated March 14, 2014 and approved by the EPA in a letter on April 2, 2014.]
- (7) The primary combined NOx emission limit that applies to the operation of boilers 1-4 and 6 is 500 lbs/day, calculated on a 30-day rolling average as described in the District Court Consent Decree. This limit applies at all times, except in the circumstances described below when the limit of 624

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lbs/day applies.

- (a) Any day in which: (1) Boiler 6 operates at any point in time;
   (2) Boiler 6 operates in conjunction with any of the CE boilers; or (3) Boiler 6 does not operate and only three (3) of the CE boilers operate would count toward the 500 lbs/day 30 day rolling average.
- (b) If there are seven calendar days within a 30 day period in which Boiler 6 does not operate and each of the four CE boilers operates for some period of time in that calendar day, then the combined NOx emission limit is 624 lbs/day. The seven days do not need to be consecutive.
- (c) ASR will calculate the 30 rolling average each day. If all four CE boilers operated for six days or less within the previous 30 calendar day period, the limit of 500 lbs/day applies. If all four CE boilers operated seven days or more during the previous 30-calendar day period, the limit of 624 lbs/day applies.

[Reference: District Court Consent Decree, Civil Action No. JKB-12-1408, Section V(11)(a) & MDE Permit to Construct 510-5-1444 through 5-1447 issued on August 28, 2014. Modified by the Order Modifying Consent Decree dated August 5, 2013 and the emission rates proposed in a letter to the EPA dated March 14, 2014 and approved by the EPA in a letter on April 2, 2014.]

- (8) The total **combined** NO<sub>X</sub> emissions from Boilers 1-4 & 6 in any consecutive 12 month period shall not exceed 60 tons. [Reference: District Court Consent Decree, Civil Action No. JKB-12-1408, Section V(13) & MDE Permit to Construct 510-5-1476 issued on August 28, 2014. Modified by the Order Modifying Consent Decree dated August 5, 2013 and the emission rates proposed in a letter to the EPA dated March 14, 2014 and approved by the EPA in a letter on April 2, 2014.]
- (9) The total combined NO<sub>X</sub> emissions from Boilers 1-4 & 6 in any calendar month shall not exceed 6.0 tons. [Reference: District Court Consent Decree, Civil Action No. JKB-12-1408, Section V(14) & & MDE Permit to Construct 510-5-1476 issued on August 28, 2014]
- (10) The Permittee shall not cause to be discharged into the atmosphere any gases that contain NO<sub>X</sub> (expressed as NO<sub>2</sub>) in excess of 86 ng/J (0.20 lb/MMBtu) heat input. This limit applies at all times including periods of startup, shutdown, or malfunction. Compliance with this emission limit is determined on a 30-day rolling average basis. [Reference: 40 CFR §60.44b(I)(1), 40 CFR §60.44b(h), 40 CFR §60.44b(i), and 40 CFR §60.46b(a) & MDE Permit to Construct 510-5-1476 issued on August 28, 2014]

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(11) The Permittee shall continuously operate the low NO<sub>X</sub> burner at all times of boiler operation. [Reference: District Court Consent Decree, Civil Action No. JKB-12-1408, Section V(11)(b) & MDE Permit to Construct 510-5-1476 issued on August 28, 2014. Modified by the Order Modifying Consent Decree dated August 5, 2013 and the emission rates proposed in a letter to the EPA dated March 14, 2014 and approved by the EPA in a letter on April 2, 2014.]

### C. Operational Limitations

- (1) The Permittee shall burn only natural gas in this boiler. [Reference: MDE Permit to Construct 510-5-1476 issued on August 28, 2014]
- (2) The Permittee must use gaseous fuels with potential SO<sub>2</sub> emissions rates of 26 ng/J (0.060 lb/MMBtu) or less and shall not use a post-combustion technology to reduce SO<sub>2</sub> or PM emissions. The Permittee must meet these requirements in order to not be required to install or operate a COMS. [Reference: 40 CFR §60.48b(j)(2) & MDE Permit to Construct 510-5-1476 issued on August 28, 2014]

### 2.2 **Testing Requirements**:

A. <u>Control of Visible Emissions</u> See Reporting Requirements.

### B. Control of Nitrogen Oxides

- (1) The Permittee shall conduct the performance test as required under §60.8 using the continuous system for monitoring NO<sub>X</sub> under §60.48b to determine compliance with the NO<sub>X</sub> emission limit as follows:
  - (a) For the initial compliance test, NO<sub>X</sub> from the steam generating unit are monitored for 30 successive steam generating unit operating days and the 30-day average emission rate is used to determine compliance with the NO<sub>X</sub> emission standards under §60.44b. The 30-day average emission rate is calculated as the average of all hourly emission data recorded by the monitoring system during the 30-day test period.
  - (b) Following the date on which the initial performance test is completed or is required to be completed under  $\S60.8$ , whichever date comes first, the Permittee shall determine compliance with the  $NO_X$  standards under  $\S60.44b$  on a continuous basis through the use of a 30-day rolling average emission rate. A new 30-day rolling average emission rate is calculated each steam generating unit operating day as the average of all of the hourly  $NO_X$  emission data for the preceding 30 steam generating unit operating days.

[Reference: 40 CFR §60.46b(c) and 40 CFR §60.46b(e)(1) and (3)]

### Table IV - 2

- (2) The Permittee shall repeat certification testing when the Department determines that the CEM data may not meet performance specifications because of component replacement or other conditions that affect the quality of generated data. [Reference: COMAR 26.11.01.11E(2)(b)]
- C. <u>Operational Limitations</u> See Monitoring Requirements.

### 2.3 | Monitoring Requirements:

A. <u>Control of Visible Emissions</u>
 See Reporting Requirements.

### B. Control of Nitrogen Oxides

(1) At a point in the stack prior to a point at which boiler flue gas combines with flue gas from any other boiler, American Sugar shall install and make operational, a NO<sub>X</sub> continuous emissions monitoring system (CEMS) to monitor NO<sub>X</sub> emissions in accordance with the requirements of 40 CFR Part 60. The CEMS shall be installed and operated in accordance with the plan approved by the Department and EPA under the provisions of COMAR 26.11.01.11B(1)(a).

[Reference: District Court Consent Decree, Civil Action No. JKB-12-1408, Section V(15) and COMAR 26.11.01.11B(1)(a) & MDE Permit to Construct No. 510-0314-5-1476 issued August 28, 2014]

- (2) The Permittee shall calibrate, maintain, and operate a continuous emissions monitoring system, and record the output of the system for measuring NO<sub>x</sub> emissions in accordance with 40 CFR §60.48b(b)(1).
- (3) Each CEMs shall be installed, certified, calibrated, maintained, and operated in accordance with the applicable requirements of 40 CFR Part 60, and any requirements established by applicable Maryland regulations. [Reference: District Court Consent Decree, Civil Action No. JKB-12-1408, Section V(17) & MDE Permit to Construct No. 510-0314-5-1476 issued August 28, 2014]
- (4) The Permittee shall install, calibrate, maintain, and operate CEMS for measuring NO<sub>X</sub> and O2 (or CO2) emissions discharged to the atmosphere, and shall record the output of the system. [Reference: 40 CFR §60.48b(b)(1)]
- (5) The procedures under §60.13 shall be followed for installation, evaluation, and operation of the continuous monitoring system. The span value for NO<sub>X</sub> is 500 ppm. [Reference: 40 CFR §60.48b(e)(2)(i)]

### Table IV - 2

- (6) The CEMS shall monitor and record the applicable NO<sub>X</sub> Emission Rate for Boiler 6 to demonstrate compliance with the NO<sub>X</sub> emission rates and shall be continuously operated, except during CEMS breakdowns, repairs, calibration checks, and zero span adjustments. [Reference: District Court Consent Decree, Civil Action No. JKB-12-1408, Section V(16) & MDE Permit to Construct No. 510-0314-5-1476 issued August 28, 2014]
- (7) The CEMS shall be operated and data recorded during all periods of operation of Boiler 6 except for CEMS breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments. [Reference: 40 CFR §60.48b(c)]
- (8) The Permittee shall measure all emissions of NO<sub>X</sub> with the CEMS. During any period of time when any CEMS is inoperable or not measuring NO<sub>X</sub> emissions from Boiler 6, the Permittee shall apply the missing data substitution procedures in 40 CFR Part 75, Subpart D. [Reference: District Court Consent Decree, Civil Action No. JKB-12-1408, Section V(18) and 40 CFR §60.48b(f) & MDE Permit to Construct No. 510-0314-5-1476 issued August 28, 2014]
- (9) To comply with the annual emission cap, the Permittee shall convert the monitored CEMS data to a mass emission (tons) and sum the total amount of NO<sub>X</sub> emissions for the current month and the previous eleven months. [Reference: District Court Consent Decree, Civil Action No. JKB-12-1408, Section V(20) & MDE Permit to Construct No. 510-0314-5-1476 issued August 28, 2014]
- (10) To comply with the monthly emissions cap, the Permittee shall convert the monitored CEMS data to a mass emission (tons) and sum the amount of NO<sub>x</sub> emissions for each Operating Day during the month. [Reference: District Court Consent Decree, Civil Action No. JKB-12-1408, Section V(21) & MDE Permit to Construct No. 510-0314-5-1476 issued August 28, 2014]
- (11) The 1-hour average NO<sub>X</sub> emission rates measured by the continuous NO<sub>X</sub> monitor required by 40 CFR §60.48b(b) and required under §60.13(h) shall be expressed in ng/J or lb/MMBtu heat input and shall be used to calculate the average emission rates under §60.44b. The 1-hour averages shall be calculated using the data points required under §60.13(h)(2). [Reference: 40 CFR §60.48b(d)]
- (12) The Permittee shall use the alternative measurement method approved by the Department and the EPA if the Permittee is unable to obtain emissions data from CEMS because of a malfunction of the CEMS for

### Table IV - 2

more than 2 hours in duration. [Reference: COMAR 26.11.01.11B(4)]

- (13) The Permittee shall ensure that the CEMS used to monitor a gas concentration shall meet the quality assurance criteria of 40 CFR Part 60, Appendix F, as amended, which is incorporated by reference, or, if applicable, the quality assurance criteria of 40 CFR Part 75, Appendix B, as amended. [Reference: COMAR 26.11.01.10C]
- (14) The CEM used to monitor a gas concentration shall record not less than four equally spaced data points per hour and automatically reduce data in terms of averaging times consistent with the applicable emission standard. [Reference: COMAR 26.11.01.11D(2)]

### C. Operational Limitations

The Permittee shall install meters to record the hours of operation of this boiler and shall maintain the monitoring records in an electronic format for at least five (5) years. [Reference: District Court Consent Decree, Civil Action No. JKB-12-1408, Section V(19) & MDE Permit to Construct No. 510-0314-5-1476 issued August 28, 2014]

### 2.4 Record Keeping Requirements:

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

A. Control of Visible Emissions
See Reporting Requirements.

### B. Control of Nitrogen Oxides

- (1) The Permittee shall maintain records for at least two (2) years of the following information for Boiler 6 for each operating day.
  - (a) Calendar date:
  - (b) The average hourly NO<sub>X</sub> emission rates (expressed as NO<sub>2</sub>) (ng/J) or lb/MMBtu heat input) measured or predicted;
  - (c) The 30-day average NO<sub>X</sub> emission rates (ng/J or lb/MMBtu heat input) calculated at the end of each Boiler 6 operating day from the measured or predicted hourly nitrogen oxide emission rates for the preceding 30 Boiler 6 operating days;
  - (d) Identification of the Boiler 6 operating days when the calculated 30day average NO<sub>X</sub> emission rates are in excess of the NO<sub>X</sub> emissions standards under §60.44b, with the reasons for such excess emissions as well as a description of corrective actions taken;
  - (e) Identification of the Boiler 6 operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken;
  - (f) Identification of the times when emission data have been excluded

### Table IV - 2

- from the calculation of average emission rates and the reasons for excluding data;
- (g) Identification of the "F" factor used for calculations, method of determination, and type of fuel combusted;
- (h) Identification of the times when the pollutant concentration exceeded full span of the CEMS;
- (i) Description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specification 2 or 3 in appendix B of 40 CFR Part 60; and
- (j) Results of daily CEMS drift tests and quarterly accuracy assessments as required under appendix F, Procedure 1 of 40 CFR Part 60.

[Reference: 40 CFR §60.49b(g), (i) and (o)]

- (2) The Permittee shall maintain for at least five (5) years, and shall make available to the Department upon request, records of the following information:
  - (a) Annual fuel use records for Boiler 6;
  - (b) Log of operation and maintenance of the CEMs including duration and reason of any malfunctions; and
  - (c) Records of operator training.

[Reference: MDE Permit to Construct No. 510-0314-5-1476 issued August 28, 2014]

### C. Operational Limitations

The Permittee shall record and maintain records of the amounts of natural gas combusted during each day and calculate the annual capacity factor for natural gas for the reporting period. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month. The records must be maintained on-site for at least two (2) years and be made available to the Department upon request.

[Reference: 40 CFR §60.49b(d)(1) and (o)]

### 2.5 Reporting Requirements:

### A. Control of Visible Emissions

The Permittee shall report, in accordance with requirements under COMAR 26.11.01.07, occurrences of excess emissions to the Compliance Program of the Air and Radiation Management Administration.

### B. Control of Nitrogen Oxides

(1) The Permittee must submit excess emission reports for any excess emissions that occurred during the reporting period. The Permittee must maintain these records on site for at least two (2) years. [Reference: 40 CFR §60.49b(h)(2)(i) and (o)]

### Table IV - 2

- (2) The Permittee must submit notification of the date of initial startup of Boiler 6, as provided by §60.7. This notification shall include the following:
  - (a) The design heat input capacity of Boiler 6 and identification of the fuel to be combusted;
  - (b) If applicable, a copy of any federally enforceable requirements that limits the annual capacity factor for any fuel or mixture of fuel under §§60. 44b(c), (d), (e), (i), (j), (k), 60.46b(h), or 60.48b(i); and
  - (c) The annual capacity factor at which the Permittee anticipates operating the facility based on the natural gas fired.

[Reference: 40 CFR §60.49b(a)]

- (3) The Permittee shall submit to the Department the performance test data from the initial performance test and the performance evaluation of the CEMS using the applicable performance specifications in appendix B of 40 CFR Part 60. [Reference: 40 CFR §60.49b(b)]
- (4) The Permittee must report orally or by electronic or facsimile transmission to the U.S. EPA and MDE, no later than 24 hours after the Permittee knew or should have known of any violation of the District Court Consent Decree, any permit regulations, or any event that may pose an immediate threat to the public health or welfare of the environment. [Reference: District Court Consent Decree, Civil Action No. JKB-12-1408, Section IX(40) & MDE Permit to Construct No. 510-0314-5-1476 issued August 28, 2014]
- (5) COMAR **26.11.09.08K** Reporting Requirements.
  - (1) "When demonstration of compliance with the NO<sub>X</sub> emission standards in this regulation is based on CEM data, quarterly emission reports shall be submitted to the Department on or before the thirtieth day of the month following the end of each calendar quarter.
  - (2) When compliance with this regulation is demonstrated by a stack test, the results of the stack tests required by this regulation shall be submitted to the Department within 45 days after completion of the test.
  - (3) A person subject to this regulation shall maintain annual fuel use records on site for not less than 3 years, and make these records available to the Department upon request."
- (6) The Permittee must report to the Department, by telephone, any CEM system downtime that lasts or is expected to last more than 24 hours, by 10 a.m. of the first regular business day following the breakdown. The Permittee must also notify the Department, by telephone, when an out-of-service CEMS is back in operation. [Reference: COMAR]

### Table IV – 2

### 26.11.01.11E(1)(a) and (b)]

- (7) The Permittee shall comply with the CEM system downtime reporting requirements of COMAR 26.11.01.11E:
  - (a) All CEM system downtime that lasts or is expected to last more than 24 hours shall be reported to the Department by telephone before 10 a.m. of the first regular business day following the breakdown.
  - (b) The system breakdown report required by COMAR 26.11.01.11E(1)(a) shall include the reasons, if known, for the breakdown and the estimated period of time that the CEMS will be down. The Permittee shall notify the Department by telephone when an out-of-service CEM is back in operation and producing valid data.

[Reference: COMAR 26.11.01.11E(1)]

- (8) The Permittee shall submit to the Department quarterly, a CEMs summary report not later than 30 days following each calendar quarter to demonstrate compliance with the NOx emissions limits. The report shall include the following information:
  - (i) The cause, time periods, and magnitude of all emissions which exceed the applicable emission standards;
  - (ii) The source downtime including the time and date of the beginning and end of each downtime period and whether the source downtime was planned or unplanned;
  - (iii) The time periods and cause of all CEM downtime including records of any repairs, adjustments, or maintenance that may affect the ability of the CEM to meet performance specifications of emission data;
  - (iv) Quarterly totals of excess emissions, installation downtime, and CEM downtime during the calendar quarter;
  - (v) Quarterly quality assurance activities;
  - (vi) Daily calibration activities that include reference values, actual values, absolute or percent of span differences, and drift status; and
  - (vii) Other information required by the Department that is determined to be necessary to evaluate the data, to ensure that compliance is achieved, or to determine the applicability of this regulation.

[Reference: COMAR 26.11.01.11E(2)(c)]

- (9) The Permittee shall submit within 30 days following each January 1<sup>st</sup> and July 1<sup>st</sup>, a semi-annual report to the U.S. EPA for the immediately preceding half-calendar year period. This report shall:
  - (a) Identify any and all dates on which the Permittee has installed, or describe the progress of installation of the low NO<sub>X</sub> burner required for NO<sub>X</sub> control, emission limits, CEMs, and monitoring requirements and describe any problems encountered or anticipated during such installation, together with implemented or

### Table IV – 2

proposed solutions;

- (b) Provide all CEMS data collected for Boiler 6 including an explanation of any periods of CEMS downtime together with any missing data for which the Permittee applied and missing data substitution procedures under Section VI.B of the District Court Consent Decree;
- (c) Demonstrate compliance with all applicable 30-day rolling average emission limits in Section V of the District Court Consent Decree; and
- (d) Describe the status of any operation and maintenance work relating to activities under the District Court Consent Decree.

[Reference: District Court Consent Decree, Civil Action No. JKB-12-1408, Section IX(38) & MDE Permit to Construct No. 510-0314-5-1476 issued August 28, 2014]

### C. Operational Limitations

See Record Keeping Requirements and Reporting Requirements of Control of Nitrogen Oxides.

Table IV – 3

### 3.0 Emissions Unit Number(s): R29-1

R29-1 – Raw Sugar Unloading and Conveying (MDE Registration No.6-2019).

### 3.1 | Applicable Standards/Limits:

### A. Control of Visible Emissions

**COMAR 26.11.06.02C(2)** - <u>Visible Emission Standards.</u> "In Areas III and IV a person may not cause or permit the discharge of emissions from any installation or building, other than water in an uncombined form, which is visible to human observers."

COMAR 26.11.06.02 A(2), <u>General Exceptions</u>. "The visible emissions standards in §C of this regulation do 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."

<sup>&</sup>quot;A permit shield shall cover the applicable requirements identified for the emissions unit(s) listed in the table above."

### Table IV – 3

### B. Control of Particulate Matter

**COMAR 26.11.06.03C(1)** - Particulate Matter from Unconfined Sources. "A person may not cause or permit emissions from an unconfined source without taking reasonable precautions to prevent particulate matter from becoming airborne. These reasonable precautions shall include, when appropriate as determined by the Department, the installation and use of hoods, fans, and dust collectors to enclose, capture, and vent emissions. In making this determination, the Department shall consider technological feasibility, practicality, economic impact, and the environmental consequences of the decision."

### 3.2 Testing Requirements:

- A. <u>Control of Visible Emissions</u> See Monitoring Requirements.
- B. <u>Control of Particulate Matter</u> See Monitoring Requirements.

### 3.3 Monitoring Requirements:

### A. Control of Visible Emissions

The Permittee shall perform a walk-through inspection once a month of the facility to look for sources of visible emissions. The Permittee shall visually inspect the exhaust gases from each stack that exhausts outside a building and look at openings in buildings through which visible emissions can escape to the outside. The Permittee shall record the results of each observation. If visible 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 all processes and/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 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.

[Reference: COMAR 26.11.03.06]

### B. Control of Particulate Matter

The Permittee shall develop and maintain a preventative maintenance plan for

### Table IV – 3

each control device that describes the maintenance activity and time schedule for completing each activity. The Permittee shall perform maintenance activities within the time frame established in the plan. [Reference: COMAR 26.11.03.06]

### 3.4 | Record Keeping Requirements:

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

### A. Control of Visible Emissions

The Permittee shall maintain records of the results of the monthly inspections and the log of inspection and maintenance for at least five (5) years and make them available to the Department upon request. [Reference: COMAR 26.11.03.06]

### B. Control of Particulate Matter

The Permittee shall maintain the following records on site for at least five (5) years and shall be made available to the Department upon request:

- a copy of the preventative maintenance plan for equipment installed to minimize dusting; and
- (2) a log with records of the dates and description of maintenance activity performed.

[Reference: COMAR 26.11.03.06C]

### 3.5 Reporting Requirements:

A. <u>Visible Emissions Limitations</u>
See Record Keeping Requirements.

### B. <u>Control of Particulate Matter</u> See Record Keeping Requirements.

<sup>&</sup>quot;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): R29-2, 3, 4; S7B-2; S7-12; S7-13; S7-14

R29-2: Raw Sugar Shed (MDE Registration No. 6-2019)

R29-3: Melter Feed

R29-4: Diatomite Fugitives

S7B-2: Bin Tower Rejects Box (MDE Registration No. 8-0212)

S7-12: Maltodex Supersack Unloading System (MDE Registration No. 8-0266)

S7-13: Remelt Shredder Fugitives

S7-14: Magnets Tailings Fugitives (MDE Registration No. 8-0223)

### 4.1 Applicable Standards/Limits:

### A. Control of Visible Emissions

**COMAR 26.11.06.02C(2)** - <u>Visible Emission Standards.</u> "In Areas III and IV a person may not cause or permit the discharge of emissions from any installation or building, other than water in an uncombined form, which is visible to human observers."

COMAR 26.11.06.02 A(2), <u>General Exceptions</u>. "The visible emissions standards in §C of this regulation do 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 Matter

**COMAR 26.11.06.03B(2)** - Particulate Matter from Confined Sources. "(2) Areas III and IV. (a) A person may not cause or permit to be discharged into the outdoor atmosphere from any other installation, particulate matter in excess of 0.03 gr/SCFD (68.7 mg/dscm)."

### 4.2 | Testing Requirements:

A. <u>Control of Visible Emissions</u>
 See Monitoring Requirements.

B. <u>Control of Particulate Matter</u> See Monitoring Requirements.

### 4.3 | Monitoring Requirements:

### A. Control of Visible Emissions

The Permittee shall perform a walk-through inspection once a month of the facility to look for sources of visible emissions. The Permittee shall visually inspect the exhaust gases from each stack that exhausts outside a building and

### Table IV – 4

look at openings in buildings through which visible emissions can escape to the outside. The Permittee shall record the results of each observation. If visible 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 all processes and/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 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.

[Reference: COMAR 26.11.03.06]

The Permittee shall maintain records of the results of the monthly inspections and the log of inspection and maintenance for at least five (5) years and make them available to the Department upon request. [Reference: COMAR 26.11.03.06]

### B. Control of Particulate Matter

The Permittee shall develop and maintain a preventative maintenance plan for each control device that describes the maintenance activity and time schedule for completing each activity. The Permittee shall perform maintenance activities within the time frame established in the plan. [Reference: COMAR 26.11.03.06]

### 4.4 Record Keeping Requirements:

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

### A. Control of Visible Emissions

The Permittee shall maintain records of the results of the monthly inspections and the log of inspection and maintenance for at least five (5) years and make them available to the Department upon request. [Reference: COMAR 26.11.03.06]

### B. Control of Particulate Matter

The Permittee shall maintain the following records on site for at least five (5) years and shall be made available to the Department upon request:

- a copy of the preventative maintenance plan for equipment installed to minimize dusting; and
- (2) a log with records of the dates and description of maintenance activity performed.

[Reference: COMAR 26.11.03.06C]

### Table IV – 4

### 4.5 Reporting Requirements:

- A. <u>Visible Emissions Limitations</u>
  See Record Keeping Requirements.
- B. <u>Control of Particulate Matter</u> See Record Keeping Requirements.

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

### Table IV - 5

### 5.0 Emissions Unit Number(s): D28-1, D10-1, D10-2, and D10-3

Carbonation System:

D28-1 (formerly S-D1-1) - Carbonation Process – Lime silo equipped with a baghouse (RP-C-1). (MDE Registration No. 510-0314-8-0301) D10-1 (formerly S-D1-2) – Carbonation Process – Saturator 1 equipped with a demister and a scrubber (RP-C-2). (MDE Registration No. 510-0314-8-0301) D10-2 (formerly S-D1-3) – Carbonation Process – Saturator 2 equipped with a demister and a scrubber (RP-C-3). (MDE Registration No. 510-0314-8-0301) D10-3 (formerly S-D1-4) – Carbonation Process – Saturator 3 equipped with a demister and a scrubber (RP-C-4). (MDE Registration No. 510-0314-8-0301)

### 5.1 Applicable Standards/Limits:

### A. Control of Visible Emissions

COMAR 26.11.06.02C(2) - Visible Emission Standards. "In Areas III and IV a person may not cause or permit the discharge of emissions from any installation or building, other than water in an uncombined form, which is visible to human observers."

COMAR 26.11.06.02 A(2), <u>General Exceptions</u>. "The visible emissions standards in §C of this regulation do 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 Matter

**COMAR 26.11.06.03B(2)** - Particulate Matter from Confined Sources. "(2) Areas III and IV. (a) A person may not cause or permit to be discharged into the outdoor atmosphere from any other installation, particulate matter in excess of 0.03 gr/SCFD (68.7 mg/dscm)."

	Table IV – 5		
<b>.</b>	Taction Demoissance		
5.2	Testing Requirements:		
	A. Control of Visible Emissions See Monitoring Requirements.		
	B. Control of Particulate Matter See Monitoring Requirements.		
5.3	Monitoring Requirements:		
	<ul> <li>A. Control of Visible Emissions The Permittee shall perform a walk-through inspection once a month of the facility to look for sources of visible emissions. The Permittee shall visually inspect the exhaust gases from each stack that exhausts outside a building and look at openings in buildings through which visible emissions can escape to the outside. The Permittee shall record the results of each observation. If visible emissions in the exhaust gases are visible, the Permittee shall perform the following: <ol> <li>Inspect all process and/or control equipment that may affect visible emissions;</li> <li>Perform all necessary repairs and/or adjustments to all processes and/or control equipment, within 48 hours, so that visible emissions in the exhaust gases are eliminated;</li> <li>Document, in writing, the results of the inspections and the repairs and/or adjustments made to the processes and/or control equipment; and</li> <li>If visible emissions have not 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.</li> </ol> </li> <li>[Reference: COMAR 26.11.03.06]</li> </ul>		
	B. Control of Particulate Matter The Permittee shall develop and maintain a preventative maintenance plan for each control device that describes the maintenance activity and time schedule for completing each activity. The Permittee shall perform maintenance activities within the time frame established in the plan. [Reference: COMAR 26.11.03.06]		
5.4	Record Keeping Requirements:		
	NOTE: All records must be maintained for a period of 5 years. [Reference: COMAR 26.11.03.06C(5)(g)]		
	A. <u>Control of Visible Emissions</u> The Permittee shall maintain records of the results of the monthly inspections and the log of inspection and maintenance for at least five (5) years and make them available to the Department upon request. [Reference: COMAR 26.11.03.06]		

### Table IV – 5

### B. Control of Particulate Matter

The Permittee shall maintain the following records on site for at least five (5) years and shall be made available to the Department upon request:

- (1) a copy of the preventative maintenance plan for each dust collector;
- (2) records of the dust collector malfunctions and the corrective actions taken to bring it back into proper operation; and
- (3) a log with records of the dates and description of maintenance activity performed.

[Reference: COMAR 26.11.03.06C]

### 5.5 | Reporting Requirements:

### A. <u>Visible Emissions Limitations</u>

See Record Keeping Requirements.

### B. Control of Particulate Matter

See Record Keeping Requirements.

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

### Table IV – 6

### 6.0 Emissions Unit Number(s): D2-1, U5-1

D2-1: Mud Loading (MDE Registration No.8-0301).

U5-1: Cooling Tower (MDE Registration No. 8-0383)

### 6.1 Applicable Standards/Limits:

### A. Control of Visible Emissions

**COMAR 26.11.06.02C(2)** - <u>Visible Emission Standards.</u> "In Areas III and IV a person may not cause or permit the discharge of emissions from any installation or building, other than water in an uncombined form, which is visible to human observers."

### B. Control of Particulate Matter

COMAR 26.11.06.03C(1) - Particulate Matter from Unconfined Sources.

"A person may not cause or permit emissions from an unconfined source without taking reasonable precautions to prevent particulate matter from becoming airborne. These reasonable precautions shall include, when appropriate as determined by the Department, the installation and use of hoods, fans, and dust collectors to enclose, capture, and vent emissions. In making this determination, the Department shall consider technological feasibility, practicality, economic impact, and the environmental consequences of the decision."

	Table IV – 6		
6.2	Testing Requirements:  A. Control of Visible Emissions See Monitoring Requirements.		
	B. Control of Particulate Matter See Monitoring Requirements.		
6.3	Monitoring Requirements:		
	<ul> <li>A. Control of Visible Emissions</li></ul>		
	B. Control of Particulate Matter The Permittee shall develop and maintain a preventative maintenance plan for each control device that describes the maintenance activity and time schedule for completing each activity. The Permittee shall perform maintenance activities within the time frame established in the plan. [Reference: COMAR 26.11.03.06]		
6.4	Record Keeping Requirements:  NOTE: All records must be maintained for a period of 5 years. [Reference: COMAR 26.11.03.06C(5)(g)]		
	A. <u>Control of Visible Emissions</u> The Permittee shall maintain records of the results of the monthly inspections and the log of inspection and maintenance for at least five (5) years and make them available to the Department upon request. [Reference: COMAR 26.11.03.06]		

### Table IV – 6

### B. Control of Particulate Matter

The Permittee shall maintain the following records on site for at least five (5) years and shall be made available to the Department upon request:

- (1) a copy of the preventative maintenance plan for equipment installed to minimize dusting; and
- (2) a log with records of the dates and description of maintenance activity performed.

[Reference: COMAR 26.11.03.06C]

### 6.5 Reporting Requirements:

- A. <u>Visible Emissions Limitations</u>
  See Record Keeping Requirements.
- B. <u>Control of Particulate Matter</u> See Record Keeping Requirements.

### Table IV - 7

### 7.0 <u>Emissions Unit Number(s): S5-1, S5-2, S5-3, S5-4, S5-5, S5-6, S5-8A, S5-8B, S5-8D, S5-8E, S5-8F, S5-8G, S1-1, S7A-1, S7-5, S7-6, S7-7, S7-8A, S7-8B, S7-8C, S7-10A, S7-10B, S7-10C, S7B-1, S7-11A, S7-11B, S7-11C</u>

S5-1 (formerly S-S1-1): Scrap Melter 1 equipped with a rotoclone scrubber(RP-C-10). (MDE Registration No. 8-0226)

S5-2: Scrap Melter 2 (MDE Registration No. 8-0382)

S5-3: Remelt Screw Conveyors (MDE Registration No. 8-0382)

S5-4: Invert system controlled by a rotoclone scrubber (RP-C-10). This system consists of the following equipment:

S5-4A – Invert Cloudy Tank (5-3-16)

S5-4B – Invert Precoat Tank (5-3-17)

S5-4C – Sucrose Cloudy Tank (5-3-13)

S5-4D – Sucrose Precoat Tank (5-3-14)

S5-4E – Clear Sucrose Tank (5-3-12)

S5-4F – Clear Invert Tank (5-3-15)

(ARMA Registration No. 6-2022)

S5-5: Caustic Fugitives associated with the invert system. (MDE Registration No. 6-2022)

S5-6: Soft Sugar Shredder. (MDE Registration No. 510-0314-6-2020)

<sup>&</sup>quot;A permit shield shall cover the applicable requirements identified for the emissions unit(s) listed in the table above."

### Table IV - 7

S5-8 (formerly S-S5-1 through S-S5-5): Specialty Sugar Refining Process. This process consists of the following equipment:

S5-8A (formerly S-S5-1): Dryer #1 (Powdered Specialty Sugars) equipped with a venturi scrubber (RP-C-33) (DW-1).

S5-8B (formerly S-S5-1): Dryer # 2 (Powdered Specialty Sugars) equipped with a venturi scrubber (RP-C-34) (DW-2).

S5-8D (formerly S-S5-2): Liquid Sugar Cooler (Powdered Specialty Sugars) equipped with a Sly venturi scrubber (RP-C-35) (WS-3).

S5-8E (formerly S-S5-3): Three (3) Centrifugal Separators (Powdered Specialty Sugars) equipped with a Sly venturi scrubber (RP-C-36) (WS-1).

S5-8F (formerly S-S5-4): Washout Tanks and Beater (Powdered Specialty Sugars) equipped with a Rotoclone scrubber.

S5-8G (formerly S-S5-5): Packaging and Conveying Equipment (Powdered Specialty Sugars) equipped with a Sly venturi scrubber (RP-C-36) (WS-1). (MDE Registration No. 8-0332)

S1-1 (formerly S-S2-7): One (1) 80 ton per hour FECO rotary sugar dryer equipped with an Entoleter, Inc. vortex scrubber (RP-C-15) (MDE Registration No. 0320)

S7A-1 (formerly S-S4-1) Bulk Sugar Conveying System equipped with a scrubber (RP-C-25). This system consists of the following equipment:

S7A-RE1 – Bucket Elevator RE-1,

S7A-XE1 – Bucket Elevator XE-1,

S7A-XRS1 – Bucket Elevator XRS-1,

S7A-UE1 – Bucket Elevator UE-1,

S7A-UE2A – Bucket Elevator UE-2A,

S7A-UE2B – Bucket Elevator UE-2B,

S7A-RE2 – Bucket Elevator RE-2,

S7A-U1 – Storage Bin U1,

S7A-U2 – Storage Bin U2,

S7A-U3 – Storage Bin U3,

S7A-U4 – Storage Bin U4,

S7A-U5 – Storage Bin U5,

S7A-U6 – Storage Bin U6,

S7A-XF1 – Storage Bin XF1,

S7A-XF2 – Storage Bin XF2,

S7A-V1 – Storage Bin V1,

S7A-V2 – Storage Bin V2,

S7A-V3 – Storage Bin V3,

S7A-V4 – Storage Bin V4,

S7A-V5 – Storage Bin V5,

S7A-V6 – Storage Bin V6,

S7A-C1 – Storage Bin C1,

S7A-F1 – Storage Bin F1,

S7A-AR1 – Storage Bin AR1,

S7A-AR2 – Storage Bin AR2,

S7A-AR3 – Storage Bin AR3,

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S7A-AR4 – Storage Bin AR4,

S7A-AR5 - Storage Bin AR5,

S7A-AR6 – Storage Bin AR6,

S7A-AR7 - Storage Bin AR7,

S7A-AR8 - Storage Bin AR8, and

S7A-RJX – Screw Conveyor Rejects Transfer.

(MDE Registration No. 8-0212)

S7-5 (formerly S-S4-6A): Packaging Feed Tank 1 equipped with a filter (RP-C-26)

(MDE Registration No. 8-0265)

S7-6 (formerly S-S4-6B): Packaging Feed Tank 2 equipped with a filter (RP-C-27)

(MDE Registration No. 8-0265)

S7-7 (formerly S-S4-6C): Packaging Feed Tank 3 equipped with a filter (RP-C-28)

(MDE Registration No. 8-0265)

S7-8 (formerly S-S4-7): Packaging Operations controlled by a rotoclone scrubber

(RP-C-29). This system consists of the following equipment:

S7-8A: Fawema Packaging System,

S7-8B: Paxall Packaging System,

S7-8C: Clouds Packaging System, and

S7-8D: Handi Pak System

(MDE Registration No. 8-0265)

S7-10 (formerly S-S4-8): Wheelabrator Dust Collector (RP-C-30) (7-5-1).

Note: Wheelabrator controls emissions from the Thiele, Supersacks and Tubline

systems.

S7-10B: Supersack Unloading System.

S7-10A:Hesser Bagging System,

Note: Hessers are controlled by Wheelabrator 6-5-2 (RP-C-32)

(MDE Registration No. 8-0265)

S7B-1 (formerly S-S4-12): Bulk Loading System. Bulk Loading System equipped with an Entoleter scrubber (RP-C-31). The truck unloading operations are

equipped with three (3) dust collection systems. (MDE Registration No. 8-0223)

S7-11 (formerly S-S4-14): One "Super-Sack" Sugar Packaging Line controlled by a

Sly baghouse (RP-C-30). This line consists of the following equipment:

S7-11A: Thiele Supersack System,

S7-11B: Tub Packaging Line, and

S7-11C: Simplex Packaging Line.

(MDE Registration No. 8-0287)

### 7.1 Applicable Standards/Limits:

A. Control of Visible Emissions

COMAR 26.11.06.02C(2), Visible Emission Standards. "In Areas III and IV a

### Table IV - 7

person may not cause or permit the discharge of emissions from any installation or building, other than water in an uncombined form, which is visible to human observers."

COMAR 26.11.06.02 A(2), <u>General Exceptions</u>. "The visible emissions standards in §C of this regulation do 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 Matter

- (1) COMAR 26.11.06.03B <u>Particulate Matter from Confined Sources.</u> "(2) Areas III and IV. (a) A person may not cause or permit to be discharged into the outdoor atmosphere from any other installation, particulate matter in excess of 0.03 gr/SCFD (68.7 mg/dscm)."
- (2) COMAR 26.11.06.03D Particulate Matter from Materials Handling and Construction. "A person may not cause or permit any material to be handled, transported, or stored, or a 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."

### 7.2 | Testing Requirements:

- A. <u>Control of Visible Emissions</u> See Monitoring Requirements.
- B. Control of Particulate Matter
  See Monitoring Requirements.

### 7.3 | Monitoring Requirements:

### A. Control of Visible Emissions

The Permittee shall perform a walk-through inspection once a month of the facility to look for sources of visible emissions. The Permittee shall visually inspect the exhaust gases from each stack that exhausts outside a building and look at openings in buildings through which visible emissions can escape to the outside. The Permittee shall record the results of each observation. If 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 all processes and/or

### Table IV - 7

- 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 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.

[Reference: COMAR 26.11.03.06C]

### B. Control of Particulate Matter

- (1) The Permittee shall develop and maintain a preventative maintenance plan for each control device that describes the maintenance activity and time schedule for completing each activity. The Permittee shall perform maintenance activities within the timeframe established in the plan.
  - [Reference: COMAR 26.11.03.06C]
- (2) The exhaust gases from two liquid sugar dryers (VD1 and VD-2), the liquid sugar coolers (VC-1) and three centrifugal separators (SK-1, SK-2, and SK-3) shall be vented through the cyclonic separator and the venturi scrubber, when the specialty sugar refining process is operating.

  [Reference: MDE Permit to Construct #510-8-0332 issued on July 10, 2003]
- (3) The exhaust gases from the washout tanks/beater shall be vented through the rotoclone scrubber, when the specialty sugar refining process is operating. [Reference: MDE Permit to Construct #510-8-0332 issued on July 10, 2003]
- (4) The exhaust gases from the packing and conveying equipment shall be vented through the rotoclone and the venturi scrubber, when the specialty sugar refining process is operating. [Reference: MDE Permit to Construct #510-8-0332 issued on July 10, 2003]

### 7.4 Record Keeping Requirements:

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

### A. Control of Visible Emissions

The Permittee shall maintain records of the results of the monthly inspections and the log of inspection and maintenance for at least five (5) years and make them available to the Department upon request. [Reference: COMAR 26.11.03.06C]

### B. Control of Particulate Matter

(1) Records of the amount and type of specialty sugar produced each month for the specialty sugar refining process equipped with four venturi scrubbers shall be kept at the site for at least five (5) years and shall be made available to the Department upon request. [Reference: Permit to Construct #510-8-0332 issued on July 10, 2003]

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- (2) The Permittee shall maintain the following records on site for at least five
  - (5) years and shall be made available to the Department upon request:
  - (a) a copy of the preventative maintenance plan for each dust collector;
  - (b) records of the dust collector malfunctions and the corrective actions taken to bring it back into proper operation; and
  - (c) a log with records of the dates and description of maintenance activity performed.

[Reference: COMAR 26.11.03.06C]

### 7.5 Reporting Requirements:

- A. <u>Control of Visible Emissions</u> See Record Keeping Requirements.
- B. <u>Control of Particulate Matter</u> See Record Keeping Requirements.

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### 8.0 | Emissions Unit Number(s): S6-4, S6-5, S6-5, S6-7

S6-4 (formerly S-S2-6A): BMA Granulator equipped with an Entoleter Scrubber (RP-C-11). (MDE Registration No. 8-0115)

S6-5 (formerly S-S2-6A): Sugar Packaging Line and Conveying Systems controlled by a shared Wheelabrator dry filter (RP-C-12, RP-C-13, and RP-C-14). This line consists of the following equipment:

S6-5A: Remelt Shredder,

S6-5B: Maltrin Tank.

S6-5C: Sugar Tank,

S6-5D: MFB Feeder,

S6-5E: Sugar Feed to Mill 1,

S6-5F: Sugar Feed to Mill 2,

S6-5G: Sugar Feed to Mill 3,

S6-5H: 6-5-1200 Receiver,

S6-5I: UB-1 South Hood, and

S6-5J: UB-1 Tail End.

(MDE Registration No. 8-0222)

S6-6 (formerly S-S2-6A): Sugar Packaging Line and Conveying Systems controlled by a shared Wheelabrator dry filter (RP-C-12, RP-C-13, and RP-C-14). This line

<sup>&</sup>quot;A permit shield shall cover the applicable requirements identified for the emissions unit(s) listed in the table above."

### Table IV – 8

consists of the following equipment:

S6-6A: Oscillator,

S6-6B: DSE-1 (9-25-10), S6-6C: US-2 Scroll, and S6-6D: UB-1 North.

(MDE Registration No. 8-0296)

S6-7 (formerly S-S2-6A): Sugar Packaging Line and Conveying Systems controlled by a shared Wheelabrator dry filter (RP-C-12, RP-C-13, and RP-C-14). This line consists of the following equipment:

S6-7A: Receiver 1300 2#,

S6-7B: Old V. Bag Packaging System,

S6-7C: Receiver 1250, S6-7D: Receiver 6-4-1300, S6-7E: 2# Poly Filler System, S6-7F: New V.B. Filler System, S6-7G: Old V.B. Filler System, S6-7H: Packet Grinder, and

S6-7I: 1-4 10X Filler System. (MDE Registration No. 8-0225)

### 8.1 **Applicable Standards/Limits:**

### A. Control of Visible Emissions

**COMAR 26.11.06.02C(2)** - <u>Visible Emission Standards.</u> "In Areas III and IV a person may not cause or permit the discharge of emissions from any installation or building, other than water in an uncombined form, which is visible to human observers."

**COMAR 26.11.06.02A(2)** - General Exceptions. "The visible emissions standards in §C of this regulation do 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 Matter

- (1) **COMAR 26.11.06.03B(2)** <u>Particulate Matter from Confined Sources.</u> "(2) Areas III and IV. (a) A person may not cause or permit to be discharged into the outdoor atmosphere from any other installation, particulate matter in excess of 0.03 gr/SCFD (68.7 mg/dscm)."
- (2) COMAR 26.11.06.03D Particulate Matter from Materials Handling and Construction. "A person may not cause or permit any material to be handled, transported, or stored, or a 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. These reasonable precautions shall include, but not be limited

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- to, the following when appropriate as determined by the control officer:
- (1) Use of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land.
- (2) Application of asphalt, oil, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which can create airborne dusts.
- (3) Installation and use of hoods, fans, and dust collectors to enclose and vent the handling of dusty materials. Adequate containment methods shall be employed during sandblasting of buildings or other similar operations.
- (4) Covering, at all times when in motion, open-bodied vehicles transporting materials likely to create air pollution. Alternate means may be employed to achieve the same results as would covering the vehicles.
- (5) The paving of roadways and their maintenance in clean condition.
- (6) The prompt removal from paved streets of earth or other material which has been transported there by trucks or earth moving equipment or erosion by water."

### 8.2 **Testing Requirements:**

- A. <u>Control of Visible Emissions</u> See Monitoring Requirements.
- B. <u>Control of Particulate Matter</u> See Monitoring Requirements.

### 8.3 | Monitoring Requirements:

### A. Control of Visible Emissions

The Permittee shall perform a walk-through inspection once a month of the facility to look for sources of visible emissions. The Permittee shall visually inspect the exhaust gases from each stack that exhausts outside a building and look at openings in buildings through which visible emissions can escape to the outside. The Permittee shall record the results of each observation. If 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 all processes and/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

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(4) If visible emissions have not 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.

[Reference: COMAR 26.11.03.06C]

#### B. Control of Particulate Matter

(1) The Permittee shall develop and maintain a preventative maintenance plan for each control device that describes the maintenance activity and time schedule for completing each activity. The Permittee shall perform maintenance activities within the timeframe established in the plan.

[Reference: COMAR 26.11.03.06C]

(2) The exhaust gases from the packing and conveying equipment shall be vented through the rotoclone and the venturi scrubber, when the specialty sugar refining process is operating. [Reference: MDE Permit to Construct #510-8-0332 issued on July 10, 2003]

#### 8.4 Record Keeping Requirements:

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

#### A. Control of Visible Emissions

The Permittee shall maintain records of the results of the monthly inspections and the log of inspection and maintenance for at least five (5) years and make them available to the Department upon request. [Reference: COMAR 26.11.03.06C]

#### B. Control of Particulate Matter

- (1) Records of the amount and type of specialty sugar produced each month for the specialty sugar refining process equipped with four venturi scrubbers shall be kept at the site for at least five (5) years and shall be made available to the Department upon request. [Reference: MDE Permit to Construct #510-8-0332 issued on July 10, 2003]
- (2) The Permittee shall maintain the following records on site for at least five (5) years and shall be made available to the Department upon request:
  - (a) a copy of the preventative maintenance plan for each dust collector:
  - (b) records of the dust collector malfunctions and the corrective actions taken to bring it back into proper operation; and
  - (c) a log with records of the dates and description of maintenance activity performed.

[Reference: COMAR 26.11.03.06C]

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#### 8.5 Reporting Requirements:

- A. <u>Control of Visible Emissions</u> See Record Keeping Requirements.
- B. <u>Control of Particulate Matter</u> See Record Keeping Requirements.

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#### 9.0 | Emissions Unit Number(s): S6-1, S6-1A, S6-2, S6-2A, S6-3, S6-3A, S6-8, S6-9

S6-1 (formerly S-S3-1): Sugar Mill Process consisting of the following equipment: S6-1 (formerly S-S3-1): Sugar Mill 1 equipped with MAC dry filter (RP-C-16) (MDE Registration No. 8-0209).

S6-1A (formerly S-S3-1): Starch Receiver 1 equipped with a dry filter (RP-C-17). (MDE Registration No. 8-0209)

S6-2 (formerly S-S3-2): Sugar Mill 2 equipped with MAC dry filter (RP-C-18) (MDE Registration No. 8-0209).

S6-2A (formerly S-S3-2): Starch Receiver 2 equipped with a dry filter (RP-C-19). (MDE Registration No. -8-0209)

S6-3 (formerly S-S3-3): Sugar Mill 3 equipped with MAC dry filter (RP-C-20) (MDE Registration No. 8-0125).

S6-3A (formerly S-S3-3): Starch Receiver 3 equipped with a dry filter (RP-C-21). (MDE Registration No. 8-0125)

S6-8 (formerly S-S3-7): Sugar Pulverizer (Mill 7) equipped with a Mikropul baghouse (RP-C-24). (MDE Registration No. 8-0266)

S6-9 (formerly S-S3-8): Starch Bin equipped with a vent filter (RP-C-22). (MDE Registration No. 8-0125)

#### 9.1 | Applicable Standards/Limits:

#### A. Control of Visible Emissions

**COMAR 26.11.06.02C(2)** - <u>Visible Emission Standards.</u> "In Areas III and IV a person may not cause or permit the discharge of emissions from any installation or building, other than water in an uncombined form, which is visible to human observers."

**COMAR 26.11.06.02A(2)** - <u>General Exceptions.</u> "The visible emissions standards in §C of this regulation do not apply to emissions during start-up and process modifications or adjustments, or occasional cleaning of control equipment, if:

<sup>&</sup>quot;A permit shield shall cover the applicable requirements identified for the emissions unit(s) listed in the table above."

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- (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 Matter

- (1) COMAR 26.11.06.03B(2) Particulate Matter from Confined Sources. "(2) Areas III and IV. (a) A person may not cause or permit to be discharged into the outdoor atmosphere from any other installation, particulate matter in excess of 0.03 gr/SCFD (68.7 mg/dscm)."
- (2) COMAR 26.11.06.03D Particulate Matter from Materials Handling and Construction. "A person may not cause or permit any material to be handled, transported, or stored, or a 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. These reasonable precautions shall include, but not be limited to, the following when appropriate as determined by the control officer:
  - (4) Use of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land.
  - (5) Application of asphalt, oil, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which can create airborne dusts.
  - (6) Installation and use of hoods, fans, and dust collectors to enclose and vent the handling of dusty materials. Adequate containment methods shall be employed during sandblasting of buildings or other similar operations.
  - (7) Covering, at all times when in motion, open-bodied vehicles transporting materials likely to create air pollution. Alternate means may be employed to achieve the same results as would covering the vehicles.
  - (8) The paving of roadways and their maintenance in clean condition.
  - (9) The prompt removal from paved streets of earth or other material which has been transported there by trucks or earth moving equipment or erosion by water."

#### 9.2 Testing Requirements:

- A. <u>Control of Visible Emissions</u> See Monitoring Requirements.
- B. <u>Control of Particulate Matter</u> See Monitoring Requirements.

#### 9.3 | Monitoring Requirements:

A. <u>Control of Visible Emissions</u>
The Permittee shall perform a walk-through inspection once a month of the

#### Table IV – 9

facility to look for sources of visible emissions. The Permittee shall visually inspect the exhaust gases from each stack that exhausts outside a building and look at openings in buildings through which visible emissions can escape to the outside. The Permittee shall record the results of each observation. If 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 all processes and/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 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.

[Reference: COMAR 26.11.03.06C]

#### B. Control of Particulate Matter

The Permittee shall develop and maintain a preventative maintenance plan for each control device that describes the maintenance activity and time schedule for completing each activity. The Permittee shall perform maintenance activities within the timeframe established in the plan. [Reference: COMAR 26.11.03.06C]

#### 9.4 Record Keeping Requirements:

<u>NOTE</u>: All records must be maintained for a period of 5 years. [Reference: COMAR 26.11.03.06C(5)(g)]

#### A. Control of Visible Emissions Limitations

The Permittee shall maintain records of the results of the monthly inspections and the log of inspection and maintenance for at least five (5) years and make them available to the Department upon request. [Reference: COMAR 26.11.03.06C]

#### B. Control of Particulate Matter

The Permittee shall maintain the following records on site for at least five (5) years and shall be made available to the Department upon request:

- (a) a copy of the preventative maintenance plan for each dust collector;
- (b) records of the dust collector malfunctions and the corrective actions taken to bring it back into proper operation; and
- (c) a log with records of the dates and description of maintenance activity performed.

[Reference: COMAR 26.11.03.06C]

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#### 9.5 Reporting Requirements:

- A. <u>Control of Visible Emissions</u>
  See Record Keeping Requirements.
- B. <u>Control of Particulate Matter</u> See Record Keeping Requirements.

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#### 10.0 Emissions Unit Number(s): \$5-7, \$7-15, \$7-16

S5-7: Ten (10) Evaporation Pans (Pan 1 thru 9 and 11) (MDE Registration No. 6-2021)

S7-15: Packaging Video Inkjet Printers (MDE Registration No. 6-0218)

S7-16: Packaging Adhesive Fugitives (MDE Registration No. 9-1298).

#### 10.1 Applicable Standards/Limits:

#### A. Control of Visible Emissions

**COMAR 26.11.06.02C(2)** - <u>Visible Emissions Standards.</u> "In Areas III and IV a person may not cause or permit the discharge of emissions from any installation or building, other that water in an uncombined form, which is visible to human observers."

COMAR 26.11.06.02 A(2), <u>General Exceptions</u>. "The visible emissions standards in §C of this regulation do 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 VOC Emissions

The following conditions B(1) - B(5) apply only to the Video Inkjet Packaging Lines (MDE Registration No. 6-2018)

- (1) **COMAR 26.11.19.02I** <u>Good Operating Practices, Equipment Cleanup, and VOC Storage.</u>
  - (1) <u>"Applicability</u>. The requirements in this section apply to a person who owns or operates an installation that is subject to any requirement in this chapter."
  - (2) "Good Operating Practices.

<sup>&</sup>quot;A permit shield shall cover the applicable requirements identified for the emissions unit(s) listed in the table above."

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- (a) A person who is subject to this section shall implement good operating practices to minimize VOC emissions into the atmosphere.
- (b) Good operating practices shall, at a minimum, include the following:
  - (i) Provisions for training of operators on practices, procedures, and maintenance requirements that are consistent with the equipment manufacturers' recommendations and the source's experience in operating the equipment, with the training to include proper procedures for maintenance of air pollution control equipment;
  - (ii) Maintenance of covers on containers and other vessels that contain VOC and VOC-containing materials when not in use:
  - (iii) Minimize spills of VOC-containing cleaning materials;
  - (iv) Convey VOC-containing cleaning materials from one location to another in closed containers or pipelines;
  - (v) Minimize VOC emissions from cleaning of storage, mixing, and conveying equipment;
  - (vi) As practical, scheduling of operations to minimize color or material changes when applying VOC coatings or other materials by spray gun;
  - (vii) For spray gun applications of coatings, use of high volume low pressure (HVLP) or other high efficiency application methods where practical; and
  - (viii) As practical, mixing or blending materials containing VOC in closed containers and taking preventive measures to minimize emissions for products that contain VOC.
- (c) A person subject to this regulation shall:
  - (i) Establish good operating practices in writing;
  - (ii) Make the written operating practices available to the Department upon request; and
  - (iii) Display the good operating practices so that they are clearly visible to the operator or include them in operator training."
- (3) "Equipment Cleanup.
  - (a) A person subject to this section shall take all reasonable precautions to prevent or minimize the discharge of VOC into the atmosphere when cleaning process and coating application equipment, including containers, vessels, tanks, lines, and pumps.
  - (b) Reasonable precautions for equipment cleanup shall, at a minimum, include the following:
    - (i) Storing all wastes and waste materials, including cloth

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- and paper that are contaminated with VOC, in closed containers:
- (ii) Preparing written standard operating procedures for frequently cleaned equipment, including when practical, provisions for the use of low-VOC or non-VOC materials and procedures to minimize the quantity of VOC materials used;
- (iii) Using enclosed spray gun cleaning, VOC-recycling systems and other spray gun cleaning methods where practical that reduce or eliminate VOC emissions; and
- (iv) Using, when practical, detergents, high-pressure water, or other non-VOC cleaning options to clean coating lines, containers, and process equipment."

#### (4) "VOC Storage and Transfer.

- (a) A person subject to this section who stores VOCs shall, at a minimum, install conservation vents or other vapor control measures on storage tanks with a capacity of 2,000 gallons or more to minimize VOC emissions.
- (b) A person subject to this section shall, at a minimum, utilize vapor balance, vapor control lines, or other vapor control measures when VOCs are transferred from a tank truck into a stationary storage tank with a capacity greater than 10,000 gallons and less than 40,000 gallons that store VOCs or materials containing VOCs, other than gasoline, that have a vapor pressure greater than 1.5 psia."
- (2) COMAR 26.11.19.16C Control of VOC Equipment Leaks General Requirements. "A person subject to this regulation shall comply with all of the following requirements:
  - (1) Visually inspect all components on the premises for leaks at least once each calendar month.
  - (2) Tag any leak immediately so that the tag is clearly visible. The tag shall be made of a material that will withstand any weather or corrosive conditions to which it may be normally exposed. The tag shall bear an identification number, the date the leak was discovered, and the name of the person who discovered the leak. The tag shall remain in place until the leak has been repaired.
  - (3) Take immediate action to repair all observed VOC leaks that can be repaired within 48 hours.
  - (4) Repair all other leaking components not later than 15 days after the leak is discovered. If a replacement part is needed, the part shall be ordered within 3 days after discovery of the leak, and the leak shall be repaired within 48 hours after receiving the part.
  - Maintain a supply of components or component parts that are recognized by the source to wear or corrode, or that otherwise need to be routinely replaced, such as seals, gaskets, packing, and pipe

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fittings.

- (6) Maintain a log that includes the name of the person conducting the inspection and the date on which leak inspections are made, the findings of the inspection, and a list of leaks by tag identification number. The log shall be made available to the Department upon request. Leak records shall be maintained for a period of not less than 2 years from the date of their occurrence."
- (3) **COMAR 26.11.19.16D.** Exceptions. Components that cannot be repaired as required in this regulation because they are inaccessible, or that cannot be repaired during operation of the source, shall be identified in the log and included within the source's maintenance schedule for repair during the next source shutdown."
- (4) **COMAR 26.11.19.18B(1)(d)** <u>Applicability.</u> "This regulation applies to a person, owner or operator who: (d) Performs digital imaging at a premises that causes VOC emissions of 20 pounds or more per day from all digital imaging at the premises."
- (5) COMAR 26.11.19.18F General Requirements for Digital Imaging. "A person who owns or operates digital imaging that is subject to this regulation may not cause the discharge of VOC emissions into the atmosphere in excess of 100 pounds on any day from all digital printing at the premises."

### The following conditions B(6) - B(11) apply only to the Packaging Adhesive Fugitives lines (MDE Registration No. 9-1298)

- (6) **COMAR 26.11.35.01E -** <u>Applicability and Exemptions.</u> "The provisions of Regulation .04A and D of this chapter do not apply to the use of adhesives, sealants, adhesive primers, sealant primers, cleanup solvents, and surface preparation solvents if:
  - (1) The total volume of noncomplying adhesives, sealants, primers, cleanup solvents, and surface preparation solvents applied facilitywide does not exceed 55 gallons per calendar year; and
  - (2) The person claiming the usage exemption under §E(1) of this regulation maintains monthly operational records sufficient to demonstrate compliance as required by Regulation .05A of this chapter."

**Note:** In any calendar year in which ASR uses more than 55 gallons of packaging adhesives, ASR must meet the requirements of COMAR 26.11.35.04A and D.

(7) **COMAR 26.11.35.04A** - <u>Standards.</u> "Except as provided in §E of this regulation and Regulation .01 of this chapter, on and after

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January 1, 2009, a person may not: (3) Use or apply an adhesive, sealant, adhesive primer, or sealant primer within the State that exceeds the applicable VOC content limits specified in Table 1."

#### (8) **COMAR 26.11.35.04G** - <u>Table 1.</u>

Porous material	120	1.00		
Adhesives Applied to the Listed Substrate				
Category	VOC (grams per liter*)	VOC (pounds per gallon*)		
Adhesive, sealant, adhesive primer, or sealant primer	VOC content limit			
VOC Content Limits for Adhesives, Sealants, Adhesive Primers, Sealant Primers, and Adhesives Applied to Particular Substrates				

<sup>\*</sup> The VOC content is determined as the weight of volatile compounds, less water and exempt compounds, as specified in Regulation .06 of this chapter.

#### (9) COMAR 26.11.35.04C - Surface Preparation or Cleanup Solvent.

- (1) "This section applies to a person subject to this chapter using a surface preparation or cleanup solvent.
- (2) Except as provided in §C(3) of this regulation for single-ply roofing, a person may not use materials for surface preparation containing VOCs unless the VOC content of the surface preparation solvent is less than 70 grams per liter.
- (3) If a surface preparation solvent is used in applying single-ply roofing, a person may not use materials for surface preparation containing VOCs unless the composite vapor pressure, excluding water and exempt compounds, of the surface preparation solvent does not exceed 45 millimeters of mercury at 20°C.
- (4) Except as provided in §C(5) of this regulation, a person may not use materials containing VOCs for the removal of adhesives, sealants, or adhesive or sealant primers from surfaces, other than spray application equipment, unless the composite vapor pressure of the solvent used is less than 45 millimeters of mercury at 20°C.
- (5) Removal of an adhesive, sealant, adhesive primer, or sealant primer from the parts of spray application equipment shall be performed as follows:
  - In an enclosed cleaning system or equivalent cleaning system as determined by the test method identified in Regulation .06H of this chapter;
  - (b) Using a solvent with a VOC content less than or equal to 70 grams of VOC per liter of material; or

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- (c) Parts containing dried adhesive may be soaked in a solvent if the composite vapor pressure of the solvent, excluding water and exempt compounds, is less than or equal to 9.5 millimeters of mercury at 20°C and the parts and solvent are in a closed container that remains closed except when adding parts to or removing parts from the container."
- (10) COMAR 26.11.35.04E <u>Standards.</u> "A person using adhesives, sealants, adhesive primers, sealant primers, surface preparation solvents, or cleanup solvents subject to this chapter shall store or dispose of all absorbent materials, such as cloth or paper, that are moistened with adhesives, sealants, primers, or solvents subject to this chapter in nonabsorbent containers that are closed except when placing materials in or removing materials from the container."
- (11) **COMAR 26.11.35.04F** <u>Standards.</u> "A person may not solicit, require the use, or specify the application of an adhesive, sealant, adhesive primer, sealant primer, surface preparation solvent, or cleanup solvent if the use or application results in a violation of this chapter. This requirement applies to all written or oral contracts under which an adhesive, sealant, adhesive primer, sealant primer, surface preparation solvent, or cleanup solvent subject to this chapter is to be used at a location in the State."

#### **10.2** Testing Requirements:

- A. <u>Control of Visible Emissions</u> See Reporting Requirements.
- B. <u>Control of VOC Emissions</u> See Monitoring Requirements.

#### 10.3 **Monitoring Requirements:**

- A. <u>Control of Visible Emissions</u> See Reporting Requirements.
- B. Control of VOC Emissions

The following conditions B(1) and B(2) apply only to the Video Inkjet Packaging Lines (MDE Registration No. 6-2018)

(1) The Permittee shall conduct facility-wide inspections at least once per calendar month to determine the compliance status of facility operations with regard to implementation of "good operating practices" designed to minimize emissions of VOC. [Reference: COMAR 26.11.03.06C]

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- (2) The Permittee shall:
  - (1) Visually inspect all components (process equipment, storage tanks, pumps, compressors, valves, flanges, pipeline fittings, pressure relief valves) at the facility for VOC leaks at least once each calendar month;
  - (2) Tag any VOC leak immediately with I.D. Number, the date VOC leak was discovered, and the name of the person who discovered the VOC leak. The tag is to remain in place until the VOC leak is repaired;
  - (3) Take immediate action to repair/control all observed VOC leaks that can be repaired within 48 hours;
  - (4) Repair all other VOC leaking components not later than 15 days after the VOC leak is discovered in accordance with COMAR 26.11.19.16C(4):
  - (5) If a replacement part is needed, it shall be ordered within 3 days after discovery of the VOC leak and the leak shall be repaired within 48 hours after receiving the part;
  - (6) Maintain a supply of components or component parts that are recognized by the source to wear or corrode, or that otherwise need to be routinely replaced; and
  - (7) Identify in a log components that cannot be repaired as required by this regulation because they are inaccessible, or that cannot be repaired during operation of the source, and include them within the source's maintenance schedule for repair during the next source shutdown.

[Reference: COMAR 26.11.19.16C and D]

### The following conditions B(3) – B(6) apply to the Packaging Adhesive Fugitive lines only (MDE Registration No. 510-0314-9-1298)

- (3) The Permittee shall not use any adhesive with a VOC content of greater than 1.0 pound per gallon (120 grams per liter). The VOC content is determined as the weight of volatile compounds, less water and exempt compounds as specified in COMAR 26.11.36.06. [Reference: COMAR 26.11.35.04G, Table 1, footnote]
- (4) The Permittee shall not use materials for surface preparation containing VOCs unless the VOC content of the surface preparation solvent is less than 70 grams per liter. [Reference: COMAR 26.11.36.04C(2)]
- (5) The Permittee shall not use materials containing VOCs for the removal of adhesives, sealants, or adhesive or sealant primers from surfaces other than spray application equipment, unless the composite vapor pressure of the solvent used is less than 45 millimeters of mercury at 20°C. Removal of an adhesive sealant, adhesive primer, or sealant primer from the parts of spray application equipment shall be performed according to COMAR

#### Table IV - 10

26.11.36.04C(5). [Reference: COMAR 26.11.36.04C(4) and (5)]

(6) The Permittee shall store or dispose of all absorbent materials, such as cloth or paper, that are moistened with adhesives, sealants, primers, or solvents subject to COMAR 26.11.36 in nonabsorbent containers that are closed except when placing materials in or removing materials from the container. [Reference: COMAR 26.11.36.04E]

#### 10.4 Record Keeping Requirements:

<u>NOTE</u>: All records must be maintained for a period of 5 years. [Reference: COMAR 26.11.03.06C(5)(g)]

- A. <u>Control of Visible Emissions</u> See Reporting Requirements.
- B. Control of VOC Emissions

The following conditions B(1) – B(3) apply only to the Video Inkjet Packaging Lines (MDE Registration No. 6-2018)

- (1) The Permittee shall maintain:
  - (a) Written descriptions of all "good operating practices" designed to minimize emissions of VOC from facility-wide operations.
     [Reference: COMAR 26.11.19.02]
  - (b) Records of all inspections conducted to determine the facility's compliance status with regard to implementation of "good operating practices" designed to minimize emissions of VOC from facility-wide operations. The records shall include for each inspection the name of the inspector, the date and time of the inspection, and an account of the findings. [Reference: COMAR 26.11.03.06C]
- (2) The Permittee shall:
  - (a) Maintain a log that includes the name of the person conducting the inspection, the date on which VOC leak inspection was made, the findings of the inspection, a list of VOC leaks by tag identification number, the date the part was ordered, and the date the VOC leak was repaired; and
  - (c) Make the log available to the Department upon request and shall be maintained for a period of not <u>less</u> than two years from the date of the VOC leaks' occurrence.

[Reference: COMAR 26.11.19.16C(6)]

(3) **COMAR 26.11.19.18G** - Record Keeping. "A person subject to this regulation shall maintain the following records for not less than 3 years, and make the records available to the Department upon request: (3) The VOC content of each ink, coating, cleanup material, or any other material

	Table IV – 10					
	containing VOC that is used at the premises."					
10.5	Reporting Requirements:					
	Control of <u>Visible Emissions</u> The Permittee shall report all occurrences of excess emissions to the Department. [Reference: COMAR 26.11.01.07]					
	<ul> <li>B. Control of VOC Emissions The following conditions B(1) and B(2) apply only to the Video Inkjet Packaging Lines (MDE Registration No. 6-2018) (1) Good operating practices information as required by COMAR 26.11.19.02I shall be made available to the Department upon request</li> </ul>					
	(2) VOC Leak inspection logs as required by COMAR 26.11.19.16 shall be made available to the Department upon request.  The following condition B(3) applies to the Packaging Adhesive Fugitive lines only (MDE Registration No. 510-0314-9-1298)					
	(3) The Permittee shall report all occurrences of excess emissions to the Department. [Reference: COMAR 26.11.01.07]					

<sup>&</sup>quot;A permit shield shall cover the applicable requirements identified for the emissions unit(s) listed in the table above."

	T. I.I. IV. 44				
	Table IV – 11				
11.0	Emissions Unit Number(s): Ion Exchange System				
	lon Exchange System consisting of the following equipment: One (1) 8,450 gallon HCl tank (D3-6A) equipped with a once through 25 gpm scrubber (D3-6) One (1) 12,924 gallon Resin Acid Wash Tank (D3-7). One (1) 734 gallon Clean in Place (CIP) Tank (D3-8). Four (4) Deashing Resin Beds, each with a capacity of 10, 574 gallons (D3-9a, -9b, -9c, and -9d). Four (4) Decolorized Resin Beds, each with a capacity of 23,603 gallons (D3-10a, -10b, -10c, and -10d). Two (2) salt saturators (D3-11a and D3-11b) controlled by a 16" diameter, 24" high field erected water spray chamber (D3-12). HCl equipment leak components, valves/pumps/ connectors (D3-12). (MDE Registration No. 510-0314-8-0386).				
11.1	Applicable Standards/Limits:				
	A. Control of Visible Emissions				

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**COMAR 26.11.06.02C(2)** - <u>Visible Emissions.</u> "In Areas III and IV a person may not cause or permit the discharge of emissions from any installation or building, other than water in an uncombined form, which is visible to human observers."

COMAR 26.11.06.02 A(2), <u>General Exceptions</u>. "The visible emissions standards in §C of this regulation do 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 Matter

- (1) COMAR 26.11.06.03B(2)(a) Particulate Matter from Confined Sources. "A person may not cause or permit to be discharged into the outdoor atmosphere from any other installation, particulate matter in excess of 0.03 gr/SCFD (68.7 mg/dscm)."
- (2) COMAR 26.11.06.03C(1) Particulate Matter from Unconfined Sources. "A person may not cause or permit emissions from an unconfined source without taking reasonable precautions to prevent particulate matter from becoming airborne. These reasonable precautions shall include, when appropriate as determined by the Department, the installation and use of hoods, fans, and dust collectors to enclose, capture, and vent emissions. In making this determination, the Department shall consider technological feasibility, practicality, economic impact, and the environmental consequences of the decision."
- (3) COMAR 26.11.06.03D Particulate Matter from Materials

  Handling and Construction. "A person may not cause or permit
  any material to be handled, transported, or stored, or a 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."

#### 11.2 **Testing Requirements**:

- A. <u>Control of Visible Emissions</u> See Record Keeping Requirements.
- B. <u>Control of Particulate Matter</u> See Record Keeping Requirements.

	Table IV – 11
11.3	Monitoring Poguiroments:
11.3	Monitoring Requirements:
	A. Control of Visible Emissions
	See Record Keeping Requirements.
	B. Control of Particulate Matter
	See Record Keeping Requirements.
11.4	Record Keeping Requirements:
	NOTE: All records must be maintained for a period of 5 years. [Reference:
	COMAR 26.11.03.06C(5)(g)]
	A. Control of Visible Emissions
	The Permittee shall maintain at the facility for at least five (5) years, and shall
	make available to the Department upon request, records necessary to support annual certifications of emissions.
	annual certifications of emissions.
	B. Control of Particulate Matter
	The Permittee shall maintain the following records for at least five (5) years and shall make the records available to the Department upon request:
	(a) Annual HCl throughput for each tank and resin bed.
	(b) Annual salt throughput for each salt saturator.
	(c) All written descriptions of "good operating practices" designed to
	minimize emissions of HAP.  (d) HAP leak detection and repair logs that include identification of
	the persons who conducted the leak detection inspections, the
	dates on which the inspections were conducted, the findings
	during the inspections, a listing by tag identification number and a
	description of all leaks discovered, and the date and nature of all leak repairs effected.
	[Reference: MDE Permit to Construct No. 510-0314-8-0386 issued
	November 18, 2013]
11.5	Reporting Requirements:
11.5	Reporting Requirements.
	A. Control of Visible Emissions
	(1) The Permittee shall submit to the Department by April 1 of each year a
	certification of emissions for the previous calendar year.
	(2) The Permittee shall report all occurrences of excess emissions to the
	Department. [Reference: COMAR 26.11.01.07]
	B. Control of Particulate Matter
	(1) The Permittee shall submit to the Department by April 1 of each year a

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certification of emissions for the previous calendar year.

(2) The Permittee shall report all occurrences of excess emissions to the Department. [Reference: COMAR 26.11.01.07]

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#### 12.0 Emissions Unit Number(s): U11-2

100 kW emergency generator (MDE Registration No. 510-0314-9-1293)

#### 12.1 Applicable Standards/Limits:

A. Control of Visible Emissions

**COMAR 26.11.09.05E** - <u>Stationary Internal Combustion Engine Powered</u> Equipment.

- "(2) Emissions During Idle Mode. A person may not cause or permit the discharge of emissions from any engine, operating at idle, greater than 10 percent opacity.
- (3) <u>Emissions During Operating Mode</u>. A person may not cause or permit the discharge of emissions from any engine, operating at other than idle conditions, greater than 40 percent opacity.
- (4) Exceptions.
  - (a) Section E(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.
  - (b) Section E(2) does not apply to emissions resulting directly from cold engine start-up and warm-up for the following maximum periods:
    - (i) Engines that are idled continuously when not in service: 30 minutes;
    - (ii) All other engines: 15 minutes.
  - (c) Section E(2) and (3) does not apply while maintenance, repair, or testing is being performed by qualified mechanics."

#### B. Control of Sulfur Oxide Emissions

**COMAR 26.11.09.07A(2)** - <u>Sulfur Content Limitations for Fuel</u>. "A person may not burn, sell, or make available for sale any fuel with a sulfur content by weight in excess of or which otherwise exceeds the following limitations: In Areas III and IV: (b) Distillate fuel oils, 0.3 percent."

C. Control of Nitrogen Oxide Emissions

COMAR 26.11.09.08G(1) - Requirements for Fuel-Burning Equipment with a Capacity Factor of 15 Percent or Less, and Combustion Turbines

<sup>&</sup>quot;A permit shield shall cover the applicable requirements identified for the emissions unit(s) listed in the table above."

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with a Capacity Factor Greater than 15 Percent.

- "A person who owns or operates fuel-burning equipment with a capacity factor (as defined in 40 CFR Part 72.2) of 15 percent or less shall:
- (a) Provide certification of the capacity factor of the equipment to the Department in writing;
- (b) For fuel-burning equipment that operates more than 500 hours during a calendar year, perform a combustion analysis and optimize combustion at least once annually;
- (c) Maintain the results of the combustion analysis at the site for at least 2 years and make these results available to the Department and the EPA upon request;
- (d) Require each operator of an installation, except combustion turbines, to attend operator training programs at least once every 3 years, on combustion optimization that are sponsored by the Department, the EPA, or equipment vendors; and
- (e) Maintain a record of training program attendance for each operator at the site, and make these records available to the Department upon request."

<u>Note</u>: **COMAR 26.11.09.08B(5)(a)** states that "for the purpose of this regulation, the equipment operator to be trained may be the person who maintains the equipment and makes the necessary adjustments for efficient operation".

**Note:** The emergency generator is exempt from the RICE MACT - Subpart ZZZZ—National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines per 40 CFR §63.6585 (f) which states: "The emergency stationary RICE listed in paragraphs (f)(1) through (3) of this section <u>are not</u> subject to this subpart. The stationary RICE must meet the definition of an emergency stationary RICE in §63.6675, which includes operating according to the provisions specified in §63.6640(f).(3): Existing institutional emergency stationary RICE located at an area source of HAP emissions that do not operate or are not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) and that do not operate for the purpose specified in §63.6640(f)(4)(ii).

"Emergency stationary RICE" means any stationary reciprocating internal combustion engine that meets all of the criteria in paragraphs (1) through (3) of this definition. All emergency stationary RICE must comply with the requirements specified in §63.6640(f) in order to be considered emergency stationary RICE. If the engine does not comply with the requirements specified in §63.6640(f), then it is not considered to be an emergency stationary RICE under this subpart.

(1) The stationary RICE is operated to provide electrical power or mechanical work during an emergency situation. Examples include stationary RICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or

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stationary RICE used to pump water in the case of fire or flood, etc.

- (2) The stationary RICE is operated under limited circumstances for situations not included in paragraph (1) of this definition, as specified in §63.6640(f).
- (3) The stationary RICE operates as part of a financial arrangement with another entity in situations not included in paragraph (1) of this definition only as allowed in §63.6640(f)(2)(ii) or (iii) and §63.6640(f)(4)(i) or (ii).

#### 12.2 Testing Requirements:

- A. <u>Control of Visible Emissions</u>
   See Monitoring Requirements.
- B. Control of Sulfur Oxide Emissions
  See Monitoring Requirements.
- C. Control of Nitrogen Oxide Emissions

The Permittee shall perform a combustion analysis and optimize combustion at least once annually for any of the engines that operates more than 500 hours during a calendar year. [Reference: COMAR 26.11.09.08G(1)(b)].

#### 12.3 Monitoring Requirements:

A. Control of Visible Emissions

The Permittee shall properly operate and maintain the engines in a manner to minimize visible emissions. [Reference: COMAR 26.11.03.06C]

B. Control of Sulfur Oxide Emissions

The Permittee shall obtain a certification from the fuel supplier indicating that the oil complies with the limitation on the sulfur content of the fuel oil. [Reference: COMAR 26.11.03.06C].

C. Control of Nitrogen Oxide Emissions

The Permittee shall calculate the capacity factor within 30 days after the end of each month. If any engine operates more than 500 hours during a calendar year, the Permittee shall perform a combustion analysis and optimize combustion at least once every year. [Reference: COMAR 26.11.03.06C].

#### 12.4 Record Keeping Requirements:

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

A. Control of Visible Emissions

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The Permittee shall retain records of preventive maintenance on site for at least five years and make these records available to the Department upon request. [Reference: COMAR 26.11.03.06C]

#### B. Control of Sulfur Oxide Emissions

The Permittee shall maintain records of fuel supplier's certification and shall make records available to the Department upon request. [Reference: COMAR 26.11.03.06C].

#### C. Control of Nitrogen Oxide Emissions

- (1) The Permittee shall maintain a record of the calculated capacity factor.
- (2) For any engine that operates more than 500 hours in a calendar year, the Permittee shall maintain records of the results of the combustion analyses on site for at least five years and make them available to the Department and EPA upon request. [Reference: COMAR 26.11.09.08G(1)(c) & COMAR 26.11.03.06C].
- (3) The Permittee shall maintain record of training program attendance for each operator on site for at least five years and make the records available to the Department upon request. [Reference: COMAR 26.11.09.08G(e) & COMAR 26.11.03.06C].

#### 12.5 Reporting Requirements:

#### A. Control of Visible Emissions

The Permittee shall report incidents of visible emissions in accordance with permit condition 4, Section III, Plant Wide Conditions, "Report of Excess Emissions and Deviations".

#### B. Control of Sulfur Oxide Emissions

The Permittee shall report fuel supplier certification to the Department upon request [Reference: COMAR 26.11.09.07C].

#### C. Control of Nitrogen Oxide Emissions

The Permittee shall submit records of combustion analysis and combustion analysis performed and capacity factor of the equipment to the Department as part of the April 1 certification report. [Reference: COMAR 26.11.03.06C].

The Permittee shall submit a list of trained operators to the Department upon request. [Reference: COMAR 26.11.09.08G(e) and COMAR 26.11.03.06C].

<sup>&</sup>quot;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)				Space heaters utilizing direct heat transfer and used solely for fort heat;
(2)	No. <u>5</u>	<u>;                                    </u>		eated VOC dispensing containers or unheated VOC rinsing ainers of 60 gallons (227 liters) capacity or less;
			Mac whic com	affected units [including U3-1: Garage Parts Washer & U11-1: hine Shop Parts Washer] are subject to COMAR 26.11.19.09D, h requires that the Permittee control emissions of volatile organic pounds (VOC) from cold degreasing operations by meeting the wing 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.
			shall	Permittee shall maintain on site for at least five (5) years, and make available to the Department upon request, the following rds 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.
(3)	(a)		Con	tainers, reservoirs, or tanks used exclusively for: Storage of butane, propane, or liquefied petroleum, or natural gas;

Storage of lubricating oils;

(b) No. <u>4</u>

	(C) NO. <u>1</u>	engine fuel;
	(d) No. <u>1</u>	Storage of motor vehicle gasoline and having individual tank capacities of 2,000 gallons (7.6 cubic meters) or less;
	(e) No. <u>1</u>	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;
(4)		✓ Charbroilers and pit barbecues as defined in COMAR 5.11.18.01 with a total cooking area of 5 square feet (0.46 square eter) or less;
(5)	in	✓ First aid and emergency medical care provided at the facility, cluding related activities such as sterilization and medicine reparation used in support of a manufacturing or production process;
(6)		∠ Comfort air conditioning subject to requirements of Title VI of the lean Air Act;
(7)		✓ Grain, metal, or mineral extrusion presses;
(8)		✓ Breweries with an annual beer production less than 60,000 arrels;
(9)	po	✓ Natural draft hoods or natural draft ventilators that exhaust air bllutants into the ambient air from manufacturing/industrial or ommercial processes;
(10)		∠ Laboratory fume hoods and vents;
For the	e following, att	ach additional pages as necessary:
(11)	any other em than the "de units):	issions unit, not listed in this section, with a potential to emit less minimus" levels listed in COMAR 26.11.02.10X (list and describe
	No. <u>2</u>	Aerosol can puncturing equipment
	No. <u>1</u>	Maintenance Welding (U11-3)
	No 1	Maintenance Steel Cutting (U11-4)

#### SECTION VI STATE-ONLY ENFORCEABLE CONDITIONS

This section of the permit contains state-only enforceable requirements. The requirements in this section will not be enforced by the U.S. Environmental Protection Agency. The requirements in this section are not subject to COMAR 26.11.03 10 - Public Petitions for Review to EPA Regarding Part 70 Permits.

- 1. Applicable Regulations:
  - (A) **COMAR 26.11.06.08** <u>Nuisance</u>. An installation or premises may not be operated or maintained in such a manner that nuisance or air pollution is created. Nothing in this regulation relating to the control of emissions may in any manner be consumed as authorizing or permitting the creation of, or maintenance of, nuisance or air pollution."
  - (B) **COMAR 26.11.06.09** <u>Odors.</u> "A person may not cause or permit the discharge into the atmosphere of gases, vapors, or odors beyond the property line in such a manner that a nuisance or air pollution is created."
  - (C) **COMAR 26.11.15.05** –<u>Control Technology Requirements.</u> "A person who complies with the ambient impact requirement in Regulation .06 of this chapter may not be affected by the amount of the installation's stack height that exceeds good engineering practice (GEP), or by any other dispersion technique.
    - (2) Unless an existing installation is controlled using T-BACT, the degree of emission limitation required in order to demonstrate compliance with Regulation .06 of this chapter may not be affected by the amount of the installation's stack height that exceeds good engineering practice (GEP), or by any other dispersion technique."
  - (D) **COMAR 26.11.15.06B** <u>Ambient Impact Requirement Requirements for Existing Installations, Sources, or Premises.</u>
    - (1) "Except as provided in §B(3) of this regulation, a person may not cause or permit the discharge of a toxic air pollutant listed in COMAR 26.11.16.07 from an existing installation or source if total allowable emissions of that TAP from the premises will unreasonably endanger human health
    - (2) A person shall demonstrate compliance with §B(1) of this regulation using the procedures established in Regulation .07 of this chapter and COMAR 26.11.16.
    - (3) A person who owns or operates an existing premises shall meet the requirements of §B(1) and (2) of this regulation for each TAP listed in COMAR 26.11.16.07 by the applicable compliance dates listed in COMAR 26.11.16.07, or not later than 2 years after becoming subject to this chapter, whichever is later."

Condition (E) applies only to four (4) boilers (Emissions Units C1 through C4) (MDE-ARA Registration Nos. 510-0314-5-1444 through 5-1447)

(E) COMAR 26.11.01.11C – Quality Assurance for CEMS. "A CEM used to monitor a gas concentration shall meet the quality assurance criteria of 40 CFR Part 60, Appendix F, as amended, which is incorporated by reference, or, if applicable, the quality assurance criteria of 40 CFR Part 75, Appendix B, as amended."

#### {Conditions (F) & (G) apply to Emission Unit No. C6}

- (F) **COMAR 26.11.40.03 -** NOx Ozone Season Emission Caps.
  - A. The total combined NOx ozone season emissions for all non-trading large NOx units subject to this chapter may not exceed 1013 tons in accordance with the 40 CFR Part 97, Subpart E, Appendix C.
  - B. NOx Ozone Season Emission Caps.
  - (1) The total combined ozone season NOx emissions from all the affected units at an affected source as identified in Regulation .02C of this chapter may not exceed the NOx ozone season emission caps in §B(2) of this regulation.
  - (2) American Sugar NOx Ozone Season Emission Cap 24 tons
- (G) **COMAR 26.11.40.03** Monitoring and Reporting Requirements.
  - A. For non-trading large NOx units subject to this chapter, the owner or operator shall:
  - (1) Continuously monitor NOx emissions with a CEM system in accordance with 40 CFR Part 75, Subpart H and 40 CFR §51.121(i)(4); and
  - (2) Maintain records and submit reports regarding NOx emissions in accordance with 40 CFR Part 75.
  - B. The owner or operator of a non-trading large NOx unit subject to this regulation shall include emissions data obtained from a CEM system pursuant to §A of this regulation in the CEM quarterly reports submitted to the Department pursuant to COMAR 26.11.01.11E(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.

#### **BACKGROUND**

American Sugar Refining, Inc. (ASR) operates a sugar manufacturing plant which produces granulated and confectioner's sugars from raw cane sugar in bulk quantities and in various package sizes. The facility also manufactures bulk quantities of liquid cane sugars and syrups for industrial consumption. The sugar manufacturing process consists of two principle processes: decolorization and sugar production. The facility also operates a centralized steam and electrical cogeneration energy production facility (boiler house). There are four (4) boilers (each rated at 130 million Btu/hr) which fire natural gas and that fire fuel oil (No. 2 or No. 6) in curtailment and testing situations. There is also one (1) boiler rated at 300 million Btu/hr, which fires natural gas only. All five (5) boilers vent through a single stack.

The primary SIC code for this facility is 2062, cane sugar refining.

The following table summarizes the actual emissions from American Sugar Refining, Inc. based on its Annual Emission Certification Reports:

**Table 1: Actual Emissions** 

Year	NO <sub>X</sub>	SO <sub>X</sub>	PM <sub>10</sub> /PM <sub>2.5</sub>	CO	VOC	Total HAP
	(TPY)	(TPY)	(TPY)	(TPY)	(TPY)	(TPY)
2016	52.6	0.54	22.4 / 5.8	78.7	8.8	0
2015	45.3	1.35	24.9 / 13.1	76.3	8.9	0
2014	49.6	7.55	223 / 65.5	77.1	8.7	0
2013	34.4	0.5	208 / 131	72.7	9.6	0
2012	52.3	0.49	155.4/150.9	79.1	7.4	0

The major source threshold for triggering Title V permitting requirements in Baltimore City is 25 tons per year for VOC, 25 tons for  $NO_X$ , and 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 actual  $NO_X$  and  $PM_{10}$  emission from the facility are greater than the major source threshold, ASR is required to obtain a Title V – Part 70 Operating Permit under COMAR 26.11.03.01.

The Department received the ASR, Inc's Part 70-permit renewal application on November 1, 2017. An administrative completeness review was conducted and the application was deemed complete. A completeness determination letter was sent to ASR, Inc on December 11, 2017 granting ASR, Inc. an application shield.

#### CHANGES AND MODIFICATIONS TO THE PART 70 OPERATING PERMIT

The following changes and/or modifications that have occurred since the previous permit was issued have been incorporated into the renewal Title V – Part 70 Operating Permit for American Sugar Refining, Inc.

Mar. 12, 2018: Permit to Construct (PTC #510-0314-8-0223) for modification of the Bulk Loading Operations with the installation of a Schenck Process LLC (model 78 MCFC128-103 Style III) dry cartridge style dust collection system, to control the bulk and rail loading activities. Once constructed the new dust control system will replace the existing Entoleter Scrubber (RP-C-31). {Note: This project is pending per capital funding in order to proceed with construction}

Nov. 2, 2017: Per the Part 70 operating permit renewal application the char filtration process (including EU #s D3-1, D3-2, D3-2M, D3-3, and D3-4) is no longer used and is removed from the permit.

<u>Feb. 3, 2016</u>: Permit to Construct (PTC #510-0314-8-0223) for modification of the Bulk Loading Operations with the installation of three dry dust collectors for control of the truck unloading equipment. As part of this installation, the truck unloading equipment no longer vents to the Entoleter Scrubber system (RP-C-31).

Nov. 18, 2013: Permit to Construct (PTC #510-0314-8-0386) for installation of an Ion Exchange System, consisting of an HCI tank equipped with a water scrubber, a resin acid wash tank, a CIP tank, four (4) de-ashing resin beds, four (4) decolorizing resin beds, and two (2) salt saturators controlled by a water spray chamber. The Ion Exchange system is intended to improve the syrup purification process. The Ion Exchange System uses dilute hydrochloric acid (HCI) to regenerate the ion-exchange resins.

The following changes are recent historical amendments to the plant and operating permit:

ASR, Inc. negotiated a District Court Consent Decree with EPA Region III involving the operation of ASR's steam boilers. The District Court Consent Decree was signed and entered into the court docket July 2, 2012. The District Court Consent Decree required ASR to do the following:

- Install ultra low NO<sub>X</sub> burners (ULNB) and continuous emissions monitoring systems (CEMS) on Boilers 2 & 4 and commence operation thereof by September 1, 2012.
- Install ULNB and CEMS on Boilers 1 & 3 and commence operation thereof by February 28, 2013.
- Install ULNB and CEMS on Boiler 6 and commence operation thereof by April 1, 2013.

**Note:** Per the District Court Order Modifying Consent Decree dated August 5, 2013, the letter from ASR to the EPA dated March 14, 2014, and the response from the EPA dated April 2, 2014, the requirement to install a ULNB on Boiler 6 was removed.

 Restrict NO<sub>X</sub> emissions from Boilers 1-4 & 6 to 624 lbs/day, on a 30-day rolling average, by the earlier of April 1, 2013, or the date on which ULNB are operational on Boilers 1-4 & 6 the time which all ULNBs are installed whichever comes first.

**Note:** Per the District Court Order Modifying Consent Decree dated August 5, 2013, this requirement was modified to include operating scenarios in which Boilers 1-4 and 6 must meet a NOx emissions limit of 500 lbs/day.

 Restrict NO<sub>X</sub> emissions from Boilers 1-4 & 6 to 62 tons during any consecutive 12-month period or 6.0 tons in any calendar month, beginning on April 1, 2013, or the time which all ULNBs are installed whichever comes first.

<u>Note:</u> Per the District Court Order Modifying Consent Decree dated August 5, 2013, the letter from ASR to the EPA dated March 14, 2014, and the response from the EPA dated April 2, 2014, this requirement was modified to limit ASR to NOx emissions of 60 tons during any consecutive 12-month period.

- Restrict the combined hours of operation of Boilers 1-4 during any consecutive 12-month period to 20,220 hours, beginning 90 days following the effective date of the District Court Consent Decree, and
- Submit an application to MDE no later than 120 days after the establishment of emission limits pursuant to the District Court Consent Decree to incorporate the limit into a federally enforceable permit.

June 12, 2012, MDE issued a Permit to Construct to ASR to authorize the ULNBs in Boilers 1-4.

January 18, 2013, MDE issued a Permit to Construct to ASR to authorize the ULNB on Boiler 6 and re-rating the boiler from 249 million Btu per hour to 300 million Btu per hour.

Operation of Boilers 2 & 4 with the ULNBs and the CEMS commenced on August 11, 2012. Operation of Boiler 3 with the ULNB and CEMS commenced on November 26, 2012 and operation of Boiler 1 with the ULNB and CEMS commenced on December 3, 2012.

November 1, 2013, MDE issued Permits to Construct for the following: Packaging Video Inject Printing Lines & Packaging Adhesive Fugitives Lines; Scrap Melter 2 and Remelt Screw Conveyors.

November 18, 2013, MDE issued a Permit to Construct for an Ion Exchange System.

August 5, 2013, the EPA filed a District Court Order Modifying Consent Decree (Civil Action No. JKB-12-1408) to include the following changes:

- 1. Daily NOx emission limits of either 500 lbs/day or 624 lbs/day based on operating scenarios to be developed by ASR and approved by the EPA.
- 2. Yearly NOx emission limit of 60 tons per year
- 3. Boiler 6 is no longer required to install a ULNB.

March 14, 2014, ASR submitted proposed structure for operating scenarios to determine when each daily NOx emission limit (500 lbs/day or 624 lbs/day) applies.

April 2, 2014, the EPA approved the proposed structure from the March 14, 2014 letter.

### National Emission Standard for Hazardous Air Pollutants (NESHAP) – 40 CFR Part 63

ASR, Inc is not a major HAP Emissions Source. Instead it is an area HAP emission source and is subject to the following MACTs:

Subpart ZZZZ—Requirements for Existing Stationary RICE Located at Area Sources of HAP Emissions.

#### COMPLIANCE ASSURANCE MONITORING

ASR, Inc. conducted a Compliance Assurance Monitoring (CAM) analysis for the facility and determined that the facility is not subject to the (CAM) Rule 40 CFR Subpart 64. CAM is intended to provide a reasonable assurance of compliance with applicable requirements under the Clean Air Act for large emission units that rely on air pollution control (APC) equipment to achieve compliance. The CAM approach establishes monitoring for the purpose of: (1) documenting continued operation of the control measures within ranges of specified indicators of performance (such as emissions, control device parameters, and process parameters) that are designed to provide a reasonable assurance of compliance with applicable requirements; (2) indicating any excursions from these ranges; and (3) responding to the data so that the cause or causes of the excursions are corrected. In order for a unit to be subject to CAM, the unit must be located at a major source, be subject to an emission limitation or standard; use a control device to achieve compliance; have post-control emissions of at least 100% of the major source amount (for initial CAM submittals); and must not otherwise be exempt from CAM. Applicability determinations are made on a pollutant-by-pollutant basis for each emission unit.

Emissions units at the refinery do not use "control devices" (as defined in 40 CFR Part 64) to meet emission limits or standards. The refinery baghouses, cyclones, dust collectors, and venture scrubbers/rotoclones are "inherent process equipment" as defined. Thus, the refinery does not have pre-control device emissions and is not subject to the applicability criteria of 40 CFR Part 64.2(a)(3) and 64.5(A).

#### **GREENHOUSE GAS (GHG) EMISSIONS**

ASR, Inc 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., internal combustion engines, and boilers) contained within the facility premises applicable to ASR Inc. The facility has not triggered Prevention of Significant Deterioration (PSD) requirements for GHG emissions; therefore, there are no applicable GHG Clean Air Act requirements. While there may be no applicable requirements as a result of PSD, emission certifications reports showed that ASR, Inc exceeded the major source (threshold: 100,000tpy CO<sub>2</sub>e) for GHG's (see Table 3 shown

below). 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 ASR, Inc based on its Annual Emission Certification Reports:

**Table 3: Greenhouse Gases Emissions Summary** 

GHG	2014	2015	2016
	tpy CO₂e	tpy CO₂e	tpy CO₂e
Total GHG CO <sub>2eq</sub>	112,845	110,396	112,914

#### **EMISSION UNIT IDENTIFICATION**

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

**Table 2: Emission Unit Identification** 

Emissions Unit Number	MDE Registration Number	Emissions Unit Name and Description	Date of Installation
C1	5-1444	Combustion Engineering Boiler No. 1 rated at 130 million Btu/hr firing natural gas and fuel oil (No. 2 or No. 6).	1966 Modified June 12, 2012
C2	5-1445	Combustion Engineering Boiler No. 2 rated at 130 million Btu/hr firing natural gas and fuel oil (No. 2 or No. 6).	1966 Modified June 12, 2012
C3	5-1446	Combustion Engineering Boiler No. 3 rated at 130 million Btu/hr firing natural gas and fuel oil (No. 2 or No. 6).	1966 Modified June 12, 2012
C4	5-1447	Combustion Engineering Boiler No. 4 rated at 130 million Btu/hr firing natural gas and fuel oil (No. 2 or No. 6).	1966 Modified June 12, 2012
C6	5-1476	Babcock & Wilcox boiler rated at 300 million Btu/hr firing natural gas and equipped with a low-NO <sub>X</sub> burner and flue gas recirculation.	July 2000 Modified Jan 18, 2013
R29-1	6-2019	Raw Sugar Unloading and Conveying.	1921
R29-2	6-2019	Raw Sugar Shed.	1968

Emissions Unit Number	MDE Registration Number	Emissions Unit Name and Description	Date of Installation
R29-3		Melter Feed.	1971
R29-4		Diatomite Fugitives.	1971
D28-1	8-0301	Carbonatation Process – Lime silo equipped with a baghouse (RP-C-1).	1995
D10-1	8-0301	Carbonatation Process – Saturator 1 equipped with a demister and a scrubber (RP-C-2).	1995
D10-2	8-0301	Carbonatation Process – Saturator 1 equipped with a demister and a scrubber (RP-C-3).	1995
D10-3	8-0301	Carbonatation Process – Saturator 1 equipped with a demister and a scrubber (RP-C-4).	1995
D2-1	8-0301	Mud Loading.	1964
S5-1	8-0226	Scrap Melter 1, equipped with a Rotoclone scrubber (RP-C-10)	1922
S5-2	8-0382	Scrap Melter 2	1991
S5-3	8-0382	Remelt Screw Conveyors	1991
S5-4	6-2022	Invert System consisting of the following equipment:  S5-4A: Invert Cloudy Tank (5-3-16)  S5-4B: Invert Precoat Tank (5-3-17)  S5-4C: Sucrose Cloudy Tank (5-3-13)  S5-4D: Sucrose Precoat Tank (5-3-14)  S5-4E: Clear Sucrose Tank (5-3-12)  S5-4F: Clear Inver Tank  This system is controlled by a Rotoclone scrubber (RP-C-10).	1958
S5-5	6-2022	Caustic fugitives associated with the Invert System.	1958
S5-6	6-2020	Soft Sugar Shredder.	1969
S5-7	6-2021	Ten (10) Evaporation Pans (Pan #1-9 and 11).	1950
S6-4	8-0115	BMA Granulator equipped with an Entoleter scrubber (RP-C-11).	1969
S6-5	8-0225	Sugar Packaging Line and Conveying System consists of the following equipment: S6-5A: Remelt Shredder. S6-5B: Maltrin Tank. S6-5C: Sugar Tank. S6-5D: MFB Feeder. S6-5E: Sugar Feed to Mill 1.	November 2008

Emissions Unit Number	MDE Registration Number	gistration Emissions Unit Name and Description	
		S6-5F: Sugar Feed to Mill 2. S6-5G: Sugar Feed to Mill 3. S6-5H: 6-5-1200 Receiver. S6-5I: UB-1 South Hood. S6-5J: UB-1 Tail End. This equipment is all controlled by a Wheelabrator dry filter (6-5-1) (RP-C-12).	
S6-6	8-0115	Sugar Packaging Line and Conveying System consists of the following equipment: S6-6A: Oscillator S6-6B: DSE-1 (9-25-10) S6-6C: US-2 Scroll S6-6D: UB-1 North This equipment is controlled by a Wheelabrator dry filter (6-5-2) (RP-C-13).	November 2008
S6-7	8-0296	Sugar Packaging Line and Conveying System consists of the following equipment: S6-7A: Receiver 1300 2# S6-7B: Old V. Bag Packaging System S6-7C: Receiver 1250 S6-7D: Receiver 6-4-1300 S6-7E: 2# Poly Filler System S6-7F: New V.B. Filler System S6-7G: Old V. B. Filler System S6-7H: Packet Grinder S6-7I: 1-4 10X Filler System This equipment is controlled by a Wheelabrator dry filter (6-5-3) (RP-C-14).	November 2008
S1-1	8-0320	FEECO Rotary sugar dryer equipped with an Entoleter, Inc. vortex scrubber (RP-C-15).	1999
S6-1	8-0209	Sugar Mill 1 equipped with MAC dry filter (RP-C-16).	November 2008
S6-1A	8-0209	Starch Receiver 1 equipped with dry filter (RP-C-17).	November 2008
S6-2	8-0209	Sugar Mill 2 equipped with MAC dry filter (RP-C-18).	November 2008
S6-2A	8-0209	Starch Receiver 2 equipped with dry filter (RP-C-19).	November 2008
S6-3	8-0125	Sugar Mill 3 equipped with MAC dry filter (RP-C-20).	November 2008
S6-3A	8-0125	Starch Receiver 3 equipped with dry filter (RP-C-21).	November 2008

Emissions Unit Number	MDE Registration Number	Emissions Unit Name and Description	Date of Installation
S6-9	8-0209	Starch Bin equipped with a dry filter (RP-C-22).	November 2008
S6-8	8-0266	Sugar Pulverizer (Mill 7) equipped with a baghouse (RP-C-24).	1988
S7A-1	8-0212	Bulk Sugar Conveying System consists of the following equipment:  S7A-RE1: Bucket Elevator RE-1 S7A-XE1: Bucket Elevator XRS-1 S7A-VE1: Bucket Elevator UE-1 S7A-UE2A: Bucket Elevator UE-2A S7A-UE2B: Bucket Elevator UE-2B S7A-UE2B: Bucket Elevator UE-2B S7A-RE2: Bucket Elevator RE-2 S7A-U1: Storage Bin U1 S7A-U2: Storage Bin U2 S7A-U3: Storage Bin U3 S7A-U4: Storage Bin U5 S7A-U6: Storage Bin U6 S7A-XF1 Storage Bin XF-1 S7A-XF2: Storage Bin XF-2 S7A-V1: Storage Bin V1 S7A-V2: Storage Bin V2 S7A-V3: Storage Bin V3 S7A-V4: Storage Bin V4 S7A-V5: Storage Bin V5 S7A-V6: Storage Bin V6 S7A-C1: Storage Bin C1 S7A-F1: Storage Bin F1 S7A-AR1: Storage Bin AR1 S7A-AR2: Storage Bin AR2 S7A-AR3: Storage Bin AR3 S7A-AR4: Storage Bin AR4 S7A-AR5: Storage Bin AR5 S7A-AR6: Storage Bin AR6 S7A-AR7: Storage Bin AR7 S7A-AR8: Storage Bin AR8 S7A-RJX: Screw Conveyor Rejects Transfer This equipment is controlled by a scrubber (RP-C-25).	1966
S7-5	8-0265	Packaging Feed Tank 1 equipped with a filter (RP-C-26).	January 2001

Emissions Unit Number	MDE Registration Number	Emissions Unit Name and Description	Date of Installation
S7-6	8-0265	Packaging Feed Tank 2 equipped with a filter (RP-C-27).	January 2001
S7-7	8-0265	Packaging Feed Tank 3 equipped with a filter (RP-C-28).	January 2001
S7-8	8-0265	Packaging Operations consists of the following equipment: S7-8A: Fawema Packaging System S7-8B: Paxall Packaging System S7-8C: Clouds Packaging System S7-8D: Handi Pak System This equipment is controlled by a Rotoclone scrubber (7-6-1)(RP-C-29).	January 2001
S7-10	8-0265	Packaging System consisting of the following equipment: S7-10A: Hesser Bagging System S7-10B: Supersack Unloading System  Note: Thiele, Tubline, and Supersacks are controlled by Wheelabrator dust collector 7-5-1 (RP-C-30). Hessers are controlled by Wheelabrator dust collector 7-5-2 (RP-C-32).	January 2001
S7B-1	8-0223	The truck unloading operations are equipped with three (3) dust collection systems.  Bulk Loading System equipped with an Entoleter scrubber (RP-C-31).	1966 / updated 2016
S7-11	8-0287	The "Super-Sack" Sugar Packing Line consists of the following equipment: S7-11A: Thiele Supersack System S7-11B: Tub Packaging Line Note: Thiele, Tub line, and Supersacks controlled by Wheelabrator Dust collector 7-5-1 (RP-C-30). S7-11C: Simplex Packaging Line Note: Simplex controlled by Wheelabrator dust collector 6-5-1 (RP-C-12).	1990
S7B-2	8-0212	Bin Tower Rejects Box.	1966
S7-12	8-0266	Maltodex Supersack Unloading System.	1982
S7-13	3 3230	Remelt Shredder Fugitives.	1989
S7-14	8-0223	Magnets Tailings Fugitives	1966
S7-15	6-2018	Packaging Video Inkjet Printers	1990
S7-16	9-1298	Packaging Adhesive Fugitives	1990

Emissions Unit Number	MDE Registration Number	Emissions Unit Name and Description	Date of Installation
S5-8	8-0332	Dryer #1 (Powdered Specialty Sugars) equipped with a venturi scrubber (DW-1)(RP-C-33).	February 2004
S5-8B	8-0332	Dryer #2 (Powdered Specialty Sugars) equipped with venturi scrubbers (DW-2)(RP-C-34)	February 2004
S5-8D	8-0332	Liquid Sugar Cooler (Powdered Specialty Sugars) controlled by a Sly venturi scrubber (WS-3)(RP-C-35).	February 2004
S5-8E	8-0332	Three Centrifugal Separators (Powdered Specialty Sugars) controlled by a Sly venturi scrubber (WS-1)(RP-C-36).	February 2004
S5-8F	8-0332	Washout Tanks and Beater (Powdered Specialty Sugars) controlled by a Rotoclone scrubber.	February 2004
S5-8G	8-0332	Packaging and Conveying Equipment (Powdered Specialty Sugars) controlled by a Sly venturi scrubber (WS-1)(RP-C-36).	February 2004
U5-1	8-0383	Cooling Tower CT-3	Unknown
D3-6A and D3-6	-8-0386	One (1) 8,450 gallon HCl tank (D3-6A) equipped with a once through 25 gpm scrubber (D3-6).	
D3-7	-8-0386	One (1) 12,924 gallon Resin Acid Wash Tank.	
D3-8	-8-0386	One (1) 734 gallon CIP Tank.	
D3-9a, D3- 9b, D3-9c, and D3-9d	-8-0386	Four (4) De-ashing Resin Beds, each with a capacity of 10,574 gallons.	Dec. 2013
D3-10a, D3- 10b, D3- 10c, and D3-10d	-8-0386	Four (4) Decolorized Resin Beds, each with a capacity of 23,603 gallons.	Dec. 2013
D3-11, D3- 11a, and D3-11b	-8-0386	Two (2) salt saturators (D3-11a and D3-11b) controlled by a 16" diameter, 24" high field erected water spray chamber (D3-11).	
D3-12	-8-0386	HCl equipment leak components, valves/pumps/connectors.	
		One (1) discal fined governor rated at 100	
U11-2	9-1293	One (1) diesel fired generator rated at 100 kilowatts (160 horsepower) for emergency and emergency demand response purposes.	1975

#### 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.

#### REGULATORY REVIEW/TECHNICAL REVIEW/COMPLIANCE METHODOLOGY

#### **Emission Unit: C1 thru C4**

C1 - C4 – Four (4) Combustion Engineering Boilers each rated at 130 MMBtu/hr firing natural gas and fuel oil (No. 2 or No. 6) (only during periods of natural gas curtailment) Each boiler C1-C4 is equipped with an ultra low  $NO_X$  burner.

(MDE Registration Nos. 510-0314-5-1444, 5-1445, 5-1446, and 5-1447)

A permit to construct was issued June 12, 2012 for the addition of an Ultra Low  $NO_X$  Burner (ULNB) to each of the four (4) boilers. The addition of these burners is mandated by a District Court Consent Decree with the EPA (Civil Action No. JBK-12-1048, dated May 7, 2012).

A Permit to Construct was issued on August 28, 2014, to incorporate the changes from the District Court Order Modifying Consent Decree dated August 5, 2013.

### <u>40 CFR 60, Subpart Db - Standards Of Performance For Industrial-Commercial-Institutional Steam Generating Units:</u>

This regulation does not apply because the boilers were constructed prior to 1984 (40 CFR  $\S60.40b(a)$ ) and the change made to the boilers does not meet the definition of a modification found in 40 CFR  $\S60.2$ . The definition of a modification indicates that the emissions must increase or something must be emitted after the modification that was not emitted prior to the modification. The ultra low NO<sub>X</sub> burners will decrease NO<sub>X</sub> emissions from these units without increasing any other regulated pollutants.

40 CFR 63, Subpart DDDDD - National Emission Standards For Hazardous Air Pollutants For Industrial, Commercial, And Institutional Boilers And Process Heaters: This regulation does not apply because the facility is not a major source of Hazardous Air Pollutants (40 CFR §63.7485).

### 40 CFR 63, Subpart JJJJJJ - National Emission Standards For Hazardous Air Pollutants For Industrial, Commercial, And Institutional Boilers Area Sources:

These boilers are exempt from this regulation because they burn natural gas with fuel oil (No. 2 or No. 6) only being burned during times of natural gas curtailment (40 CFR §63.11195(e)). Gas fired boilers are defined in 40 CFR §63.11237.

#### Compliance Status:

In compliance.

#### **Applicable Standards and limits:**

- A. Control of Visible Emissions
- (1) COMAR 26.11.09.05A(2) <u>Visible Emissions</u>. "Areas III and IV. In Areas III and IV, a person 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 except that, for the purpose of demonstrating compliance using COM data, emissions that are visible to a human observer are those that are equal to or greater than 10 percent opacity."
  - **COMAR 26.11.09.05A(3) -** Exceptions. "Section A(1) and (2) of this regulation do 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 sixty minute period."

### **Compliance Demonstration:**

During stack testing periods, the Permittee shall conduct an opacity observation of the exhaust gases exiting the stack for a period of at least one hour in order to demonstrate compliance with the no visible emissions requirement of COMAR 26.11.09.05A(2) when burning fuel oil (No. 2 or No. 6). The opacity observation shall be conducted in accordance with US EPA Method 9, Method 22 or an equivalent method approved by the Department. [Reference: COMAR 26.11.03.06C & MDE Permit to Construct 510-5-1444 through 5-1447 issued on August 28, 2014

The Permittee shall:

- (a) Properly operate and maintain the boilers in a manner to prevent visible emissions; and
- (b) Verify no visible emissions when burning fuel oil (No. 2 or No. 6).

The Permittee shall perform a visual observation for a 6-minute once for each 168-hour period when the boiler burns fuel oil (No. 2 or No. 6). If a boiler does not burn fuel oil (No. 2 or No. 6) for more than 100 hours in a calendar year, the visible emission observation requirement is waived for that boiler.

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

- (a) inspect combustion system and boiler operation;
- (b) 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 inspections, adjustments, and/or repair to the boiler; and
- (d) after 48 hours, if required adjustments and/or repair had not eliminated the visible emissions, perform a Method 9 observation for a 18-minute period once per day until corrective actions have eliminated the visible emissions.

The Permittee shall maintain an operational manual and preventive maintenance plan on site; maintain the test result of the Method 9 performed; maintain records of the results of the monthly inspections; maintain a record of the maintenance performed that relates to combustion performance; maintain a log of visible emissions observations performed and make it available to the Department upon request; maintain a record of the hours that No.6 fuel oil is burned. [Reference: COMAR 26.11.03.06C].

The Permittee shall report, in accordance with requirements under COMAR 26.11.01.07, occurrences of excess emissions to the Compliance Program of the Air and Radiation Management Administration.

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- B. <u>Control of Particulate Matter</u>
- (1) COMAR 26.11.09.06B(1)(a) Control of Particulate Matter Areas III and IV Dust Collector Devices Required. "A person may not cause or permit the combustion of residual fuel oil in fuel burning equipment unless the equipment is fitted with a dust collector which is so designed that it can reasonably be expected to produce sufficient dust particle force, residence time, and particle retention to satisfy the requirements of Table 1. This paragraph does not apply to fuel burning equipment where by-product gases or by-product gases in combination with residual fuel oil are burned and where the effluent gases do not contain particulate matter in excess of the requirements of Table 1, as applicable to residual oil burning."
- (2) COMAR 26.11.09.06B(2) Control of Particulate Matter Areas III and IV Residual Fuel-Oil-Burning Equipment. "A person may not cause or permit particulate matter caused by the combustion of residual fuel oil to be discharged into the atmosphere in excess of the amounts shown in Table 1."
- (3) **COMAR 26.11.09.09:** Table 1 <u>Emission Standards and Dust Collector Performance Standards for Fuel-Burning Equipment.</u>

Table 1 Emission Standards and Dust Collector Performance Standards for Fuel-Burning Equipment				
Equipment Description	Max. Rated Heat Input in million Btu (gigajoules) per hour per furnace	Max. Allowable Emissions of Part. Matter – gr/scfd (mg/dscm)		
Existing and new equipment burning residual oil	Less than 13 (13.7) 13 – 50 (13.7 – 52.8) <b>50 – 250 (52.8 – 265)</b>	No requirement (a) 0.03 (69) <b>0.020 (46)</b>		

(4) No. 6 fuel oil is limited to a maximum of 0.068% ash content. [Reference: MDE letter dated November 8, 2005 & MDE Permit to Construct 510-5-1444 through 5-1447 issued on August 28, 2014]

### **Compliance Demonstration:**

Stack emissions tests shall be conducted at least once every two-year period to demonstrate compliance with the 0.020 gr/scfd particulate matter emission limit when the boiler burns fuel oil (No. 2 or No. 6) with a pre-determined ash content weight percent.

Stack emissions tests shall be conducted to demonstrate compliance with the 0.020 gr/scfd particulate matter emission limit can be achieved during either of the following operating conditions:

- (a) Burning only fuel oil (No. 2 or No. 6) with a pre-determined ash content weight percent in boilers 1 thru 4; and
- (b) Burning the lowest possible ratio of natural gas to fuel oil (No. 2 or No. 6) in boilers 1 thru 4.

Boilers 1 thru 4 shall each be operated at 90% or higher of their rated capacity during all stack emissions tests.

[Reference: COMAR 26.11.03.06C]

The Permittee is not required to conduct stack testing on Boilers 1-4 when fuel oil (No. 2 or No. 6) has not been utilized at any time during the preceding two (2) years.

The Permittee shall obtain an analysis from the fuel supplier of each load of fuel oil received indicating that the No. 6 fuel oil has an ash content equal to or less than 0.068% by weight. [Reference: MDE letter dated November 8, 2005 & COMAR 26.11.03.06C]

The Permittee shall maintain records of all stack emissions test documents and the fuel supplier certification for each shipment of fuel oil (No. 2 or No. 6) stating the ash content in weight percent.

At least 30 days prior to the projected date of the stack emission test, the Permittee shall submit a test protocol to the Department for review and approval. Within 45 days after the emission test, the Permittee shall submit to the Department, a stack test report that includes the stack emissions test results and opacity observations results. [Reference: COMAR 26.11.03.06C]

### C. Control of Sulfur Oxides

**COMAR 26.11.09.07A(2)** - <u>Sulfur Content Limitations for Fuel.</u> "A person may not burn, sell, or make available for sale any fuel with a sulfur content by weight in excess of or which otherwise exceeds the following limitations:

- (2) In Areas III and IV:
  - (b) Distillate fuel oils, 0.3 percent
  - (c) Residual fuel oils, 1.0 percent."

No. 6 fuel oil is limited to a maximum of **0.5% sulfur** content.

[Reference: MDE letter dated November 8, 2005 & MDE Permit to Construct 510-5-1444 through 5-1447 issued on August 28, 2014]

### **Compliance Demonstration:**

The Permittee shall obtain an analysis from the fuel supplier of each load of oil received indicating that the oil has a sulfur content equal to or less than 0.5% by weight for No. 6 fuel oil. [Reference: MDE letter dated November 8, 2005 & COMAR 26.11.03.06C]

The Permittee shall maintain records of the annual fuel supplier certifications stating that the No. 6 fuel oil used in Boilers 1 thru 4 is in compliance with the 1.0% by weight sulfur limitation required by COMAR 26.11.09.07A(2). [NOTE: Per November 8, 2005 letter from MDE, based on stack testing data, sulfur content of fuel oil is not to exceed 0.5%]

The Permittee shall maintain records of the annual fuel supplier certifications stating that the No. 2 fuel oil used in Boilers 1 thru 4 is in compliance with the 0.3% by weight sulfur limitation required by COMAR 26.11.09.07A(2)(b).

The Permittee shall maintain records of the certification from the supply company of all natural gas curtailment events, including date and duration of the event. [Reference: MDE Permit to Construct 510-5-1444 through 5-1447 issued on August 28, 2014]

The Permittee shall make records of certification from the supplier available to the Department upon request. [Reference: COMAR 26.11.03.06C]

D. Control of Nitrogen Oxides

(1) COMAR 26.11.09.08B(1)(c) - Control of NO<sub>X</sub> for Major Stationary Sources

- Emissions Standards and Requirements. "Emission Standards in Pounds of NO<sub>X</sub> per Million Btu of heat input."

Fuel	Tangential-Fired	Wall-Fired
Gas only	0.20	0.20
Gas/Oil	0.25	0.25
Coal (dry bottom)	0.38	0.38
Coal (wet bottom)	1.00	1.00

- (2) **COMAR 26.11.09.08B(5)** Control of NO<sub>X</sub> for Major Stationary Sources Operator Training.
  - (a) "For purposes of this regulation, the equipment operator to be trained may be the person who maintains the equipment and makes the necessary adjustments for efficient operation.
  - (b) The operator training course sponsored by the Department shall include an in-house training course that is approved by the Department."
- (3) COMAR 26.11.09.08D(1)(b) Requirements for Fuel-Burning Equipment with a Rated Heat Input Capacity of Less than 250 Million Btu Per Hour and Greater than 100 Million Btu Per Hour. "All other fuel burning equipment with a rated heat input capacity of less than 250 Million Btu per hour and greater than 100 Million Btu per hour shall meet the NO<sub>χ</sub> emission rates set forth in §B(1)(c) of this regulation."

(4) No. 6 fuel oil is limited to a maximum of 0.5% nitrogen content. [Reference: MDE letter dated November 8, 2005 & MDE Permit to Construct 510-5-1444 through 5-1447 issued on August 28, 2014]

### **Compliance Demonstration:**

The Permittee shall obtain an analysis from the fuel supplier of each load of oil received indicating that the oil has a nitrogen content equal to or less than 0.5% by weight. [Reference: MDE letter dated November 8, 2005 & COMAR 26.11.03.06C]

At a point in each stack prior to a point at which boiler flue gas combines with flue gas from any other boiler, the Permittee shall install and make operational, concurrent with commencement of operations of the Ultra Low  $NO_X$  Burners, an  $NO_X$  continuous emissions monitoring system (CEMS) to monitor  $NO_X$  emissions in accordance with the requirements of 40 CFR Part 60. [Reference: District Court Consent Decree, Civil Action No. JKB-12-1408, Section V(15 & MDE Permit to Construct 510-5-1444 through 5-1447 issued on August 28, 2014]

The required CEMS shall monitor and record the applicable  $NO_X$  Emission Rate for each boiler to demonstrate compliance with the established  $NO_X$  Emissions Rates and shall be continuously operated, except during CEMS breakdowns, repairs, calibration checks, and zero span adjustments. [Reference: District Court Consent Decree, Civil Action No. JKB-12-1408, Section V(16) & MDE Permit to Construct 510-5-1444 through 5-1447 issued on August 28, 2014]

If the Permittee is unable to obtain emissions data from the CEMS because of a malfunction of the CEM for more than 2 hours in duration, the Permittee shall use the alternative measurement method approved by the Department and EPA. [Reference: COMAR 26.11.01.11B(4) & MDE Permit to Construct 510-5-1444 through 5-1447 issued on August 28, 2014]

A CEMS used to monitor a gas concentration shall record not less than four equally spaced data points per hour and automatically reduce data in terms of averaging times consistent with the applicable emission standard per COMAR 26.11.01.11D. [Reference: MDE Permit to Construct 510-5-1444 through 5-1447 issued on August 28, 2014]

All emissions of  $NO_X$  shall be measured by the CEMS. During any periods of time when any CEMS is inoperable or not measuring  $NO_X$  emissions from any boiler, the Permittee shall apply the missing data substitution procedures provided in 40 CFR Part 75, Subpart D. [Reference: District Court Consent Decree, Civil Action No. JKB-12-1408, Section V(18) & MDE Permit to Construct 510-5-1444 through 5-1447 issued on August 28, 2014]

The Permittee shall maintain records of the following and make available to the Department upon request:

(a) The fuel supplier certification for each shipment of No. 6 fuel oil stating the nitrogen content in weight percent.

(b) All training and combustion analysis records required by COMAR 26.11.09.08B(5).

[Reference: COMAR 26.11.03.06C]

The Permittee shall submit: a record of training program attendance for each operator to the Department upon request.

The Permittee shall comply with the CEM System Downtime Reporting Requirements of COMAR 26.11.01.11E as follows:

- (a) All CEM system downtime that lasts or is expected to last more than 24 hours shall be reported to the Department by telephone before 10 a.m. of the first regular business day following the breakdown.
- (b) The system breakdown report required by §E(1)(a) of this regulation shall include the reason, if known, for the breakdown and the estimated period of time that the CEM will be down. The owner or operator of the CEM shall notify the Department by telephone when an out-of-service CEM is back in operation and producing data that has met performance specifications for accuracy, reliability, and durability of acceptable monitoring systems, as provided in COMAR 26.11.31, and is producing data.

The Permittee shall comply with the CEM Data Reporting Requirements of COMAR 26.11.01.11E as follows:

- (a) All test results shall be reported in a format approved by the Department.
- (b) Certification testing shall be repeated when the Department determines that the CEM data may not meet performance specifications because of component replacement or other conditions that affect the quality of generated data.
- (c) A quarterly summary report shall be submitted to the Department not later than 30 days following each calendar quarter. The report shall be in a format approved by the Department, and shall include the following:
  - (i) The cause, time periods, and magnitude of all emissions which exceed the applicable emission standards;
  - (ii) The source downtime including the time and date of the beginning and end of each downtime period and whether the source downtime was planned or unplanned;
  - (iii) The time periods and cause of all CEM downtime including records of any repairs, adjustments, or maintenance that may affect the ability of the CEM to meet performance specifications of emission data;
  - (iv) Quarterly totals of excess emissions, installation downtime, and CEM downtime during the calendar quarter;
  - (v) Quarterly quality assurance activities;
  - (vi) Daily calibration activities that include reference values, actual values, absolute or percent of span differences, and drift status; and
  - (vii) Other information required by the Department that is determined to be necessary to evaluate the data, to ensure that compliance is achieved, or to determine the applicability of this regulation.

(d) All information required by this regulation to be reported to the Department shall be retained and made available for review by the Department for a minimum of 2 years from the time the report is submitted."

The Permittee must report orally or by electronic or facsimile transmission to the U.S. EPA and MDE, no later than 24 hours after the Permittee knew or should have known of any violation of the District Court Consent Decree, any permit regulations, or any event that may pose an immediate threat to the public health or welfare or the environment.

The Permittee shall submit within 30 days following each January 1<sup>st</sup> and July 1<sup>st</sup> a semi-annual report to the U.S. EPA for the immediately preceding half-calendar year period. This report shall:

- (a) Identify any and all dates on which the Permittee has installed, or describe the progress of installation of, each Ultra Low NO<sub>X</sub> burner required for NO<sub>X</sub> control, emission limits, CEMS, and monitoring requirements, and describe any problems encountered or anticipated during such installation, together with implemented or proposed solutions;
- (b) Provide all CEMS data collected for each Boiler #1 through #4 including an explanation of any periods of CEMS downtime together with any missing data for which American Sugar applied missing data substitution procedures, under Section VI.B of the Consent Order.
- (c) Demonstrate compliance with all applicable 30-day rolling average emission limits in Section V of the District Court Consent Decree.
- (d) Describe the status of any operation and maintenance work relating to activities required under the District Court Consent Decree.

[Reference: MDE Permit to Construct 510-5-1444 through 5-1447 issued on August 28, 2014]

### E. Operational Limitations

The Permittee shall operate the boilers such that the combined hours of operation for Boilers #1 through #4 do not exceed 20,220 hours in any consecutive 12-month period. [Reference: District Court Consent Decree, Civil Action No. JKB-12-1408, Section V(12) & MDE Permit to Construct 510-5-1444 through 5-1447 issued on August 28, 2014]

- (1) In accordance with COMAR 26.11.09.06B(2), particulate matter emissions from the stack services Boilers #1 through #4 shall not exceed 0.020 grains per SCFD (corrected to 50% excess oxygen). [Reference: MDE Permit to Construct 510-5-1444 through 5-1447 issued on August 28, 2014]
- (2) In order to meet the 0.020 grains per SCFD (corrected to 50% excess oxygen) particulate matter emissions limit of COMAR 26.11.09.06B(2), the Permittee shall:
- (a) Use only fuel oil (No. 2 or No. 6) in Boilers #1 through #4 with an ash content weight percent that will not cause total particulate matter emissions from the

- single powerhouse stack to exceed 0.020 grains per SCFD (corrected to 50% excess oxygen);
- (b) Use natural gas and fuel oil (No. 2 or No. 6) in separate operating boilers that will not cause total particulate matter emissions from the single powerhouse stack to exceed 0.020 grains per SCFD (corrected to 50% excess oxygen); or
- (c) Install a dust collector device designed to meet the 0.020 grains per SCFD (corrected to 50% excess oxygen) particulate matter emissions limit per COMAR 26.11.09.06B(1)(a).

[Reference: MDE Permit to Construct 510-5-1444 through 5-1447 issued on August 28, 2014]

- (3) The Permittee shall design and operate the ultra low NO<sub>X</sub> burners on Boilers 1-4 and the low NO<sub>X</sub> burner on Boiler 6 to meet the emission rate of 500 lbs/day (or 624 lbs/day, when appropriate) on a 30-day rolling average. [Reference: District Court Consent Decree, Civil Action No. JKB-12-1408, Sections V(11)(a) & V(10)(d & MDE Permit to Construct 510-5-1476 issued on August 28, 2014. Modified by the District Court Order Modifying Consent Decree dated August 5, 2013 and the emission rates proposed in a letter to the EPA dated March 14, 2014 and approved by the EPA in a letter on April 2, 2014.]
- (4) The primary combined NOx emission limit that applies to the operation of boilers 1-4 and 6 is 500 lbs/day, calculated on a 30-day rolling average as described in the District Court Consent Decree. This limit applies at all times, except in the circumstances described below when the limit of 624 lbs/day applies.
  - (a) Any day in which:
    - (1) Boiler 6 operates at any point in time;
    - (2) Boiler 6 operates in conjunction with any of the CE boilers; or
    - (3) Boiler 6 does not operate and only three (3) of the CE boilers operate would count toward the 500 lbs/day 30 day rolling average.
  - (b) If there are seven calendar days within a 30 day period in which Boiler 6 does not operate and each of the four CE boilers operates for some period of time in that calendar day, then the combined NOx emission limit is 624 lbs/day. The seven days do not need to be consecutive.
  - (c) ASR will calculate the 30 rolling average each day. If all four CE boilers operated for six days or less within the previous 30 calendar day period, the limit of 500 lbs/day applies. If all four CE boilers operated seven days or more during the previous 30-calendar day period, the limit of 624 lbs/day applies.

[Reference: District Court Consent Decree, Civil Action No. JKB-12-1408, Section V(11)(a) & MDE Permit to Construct 510-5-1444 through 5-1447 issued on August 28, 2014. Modified by the District Court Order Modifying Consent Decree dated August 5, 2013 and the emission rates proposed in a letter to the EPA dated March 14, 2014 and approved by the EPA in a letter on April 2, 2014.]

- (5) The Permittee shall continuously operate the NO<sub>X</sub> control technology at all times of boiler operation. [Reference: District Court Consent Decree, Civil Action No. JKB-12-1408, Section V(11)(b) & MDE Permit to Construct 510-5-1444 through 5-1447 issued on August 28, 2014]
- (6) The total combined NO<sub>X</sub> emissions from Boilers 1-4 & 6 in any consecutive 12 month period shall not exceed 60 tons. [Reference: District Court Consent Decree, Civil Action No. JKB-12-1408, Section V(13) & MDE Permit to Construct 510-5-1444 through 5-1447 issued on August 28, 2014. Modified by the District Court Order Modifying Consent Decree dated August 5, 2013 and the emission rates proposed in a letter to the EPA dated March 14, 2014 and approved by the EPA in a letter on April 2, 2014.]
- (7) The total combined NO<sub>X</sub> emissions from Boilers 1-4 & 6 in any calendar month shall not exceed 6.0 tons. [Reference: District Court Consent Decree, Civil Action No. JKB-12-1408, Section V(14) & MDE Permit to Construct 510-5-1444 through 5-1447 issued on August 28, 2014]

### **Compliance Demonstration:**

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

- (a) Monthly No. 6 fuel oil usage in gallons per month and the total No. 6 fuel usage for the previous rolling 12-month period. [Reference: MDE Permit to Construct 510-5-1444 through 5-1447 issued on August 28, 2014]
- (b) To comply with the annual emissions cap the Permittee shall convert the monitored CEMS data to a mass emission (tons) and sum the total amount of NO<sub>X</sub> emissions for the current month and the previous eleven months. [Reference: District Court Consent Decree, Civil Action No. JKB-12-1408, Section V(20) & MDE Permit to Construct 510-5-1444 through 5-1447 issued on August 28, 2014]
- (c) To comply with the monthly emissions cap the Permittee shall convert the monitored CEMS data to a mass emission (tons) and sum the amount of NO<sub>X</sub> emissions for each operating day during the month. [Reference: District Court Consent Decree, Civil Action No. JKB-12-1408, Section V(21) & MDE Permit to Construct 510-5-1444 through 5-1447 issued on August 28, 2014]
- (d) All stack emissions test documents. [Reference: MDE Permit to Construct 510-5-1444 through 5-1447 issued on August 28, 2014]

To comply with the limit on combined total hours of operation for Boilers #1 through #4, the Permittee shall maintain electronically for at least five (5) years, and shall make available to the Department upon request, monitoring records of the hours of operation of each boiler. [Reference: District Court Consent Decree, Civil Action No. JKB-12-1408, Section V(19) & MDE Permit to Construct 510-5-1444 through 5-1447 issued on August 28, 2014]

### **Emission Unit: C6**

C6 – One (1) Babcox and Wilcox boiler rated at 300 MMBtu/hr firing natural gas and equipped with a low  $NO_X$  burner and flue gas recirculation. (MDE Registration No. 510-0314-5-1476)

January 18, 2013, a permit to construct was issued for the addition of an Ultra Low NO<sub>X</sub> Burner (ULNB) to Boiler 6. The addition of this burner is mandated by a District Court Consent Decree with the EPA (Civil Action No. JBK-12-1048). Also the Permit to Construct included the re-rate of Boiler 6 from 249 MMBtu/hr to 300 MMBtu/hr and to limit the fuel use in Boiler 6 to natural gas only. Note: Per the District Court Consent Decree modified by the District Court Order Modifying Consent Decree dated August 5, 2013 and the emission rates proposed in a letter to the EPA dated March 14, 2014 and approved by the EPA in a letter on April 2, 2014, ASR does not need to install a ULNB on Boiler 6.

A Permit to Construct was issued on August 18, 2014, to incorporate the changes from the District Court Order Modifying Consent Decree dated August 5, 2013.

### <u>40 CFR 60, Subpart Db - Standards Of Performance For Industrial-Commercial-Institutional Steam Generating Units:</u>

This regulation applies to Boiler 6 because the boiler was constructed after June 19, 1984 and has a heat input capacity greater than 100 MMBtu/hr (40 CFR §60.40b(a)). While the addition of the ULNB does not meet the definition of "modification" found in 40 CFR §60.2, the re-rating of Boiler 6 from 249 MMBtu/hr to 300 MMBtu/hr does meet this definition. The definition of a modification indicates that the emissions must increase or that a pollutant will be emitted after the modification that was not emitted prior to the modification.

Boiler 6 is exempt from SO<sub>2</sub> requirements in this regulation per §60.42b(k)(2).

40 CFR 63, Subpart DDDDD - National Emission Standards For Hazardous Air Pollutants For Industrial, Commercial, And Institutional Boilers And Process Heaters: This regulation does not apply because the facility is not a major source of Hazardous Air Pollutants (40 CFR §63.7485).

40 CFR 63, Subpart JJJJJJ - National Emission Standards For Hazardous Air Pollutants For Industrial, Commercial, And Institutional Boilers Area Sources:

This boiler is exempt from this regulation because it will be burning natural gas only. Gas fired boilers are defined in 40 CFR §63.11237 and exempted in 40 CFR §63.11195(e).

Compliance Status:

In compliance.

### **Applicable Standards and limits:**

### A. Control of Visible Emissions

**COMAR 26.11.09.05A(2)** - <u>Visible Emissions – Areas III and IV.</u> "In Areas III and IV, a person 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 except that, for the purpose of demonstrating compliance using COM data, emissions that are visible to a human observer are those that are equal to or greater than 10 percent opacity."

**COMAR 26.11.09.05A(3)** - Exceptions. "Section A(1) and (2) of this regulation do 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 sixty minute period.

### **Compliance Demonstration:**

The Permittee shall report, in accordance with requirements under COMAR 26.11.01.07, occurrences of excess emissions to the Compliance Program of the Air and Radiation Management Administration.

### B. Control of Nitrogen Oxides

- (1) COMAR 26.11.09.08B(1)(a), Control of NOx Emissions for Major Stationary Sources General Requirements and Conditions. "Emission Standards and Requirements. A person who owns or operates an installation that causes NOx emissions subject to this regulation is in compliance with this regulation if the person establishes compliance with the emissions standards in §B(1)(c) of this regulation."
- (2) COMAR 26.11.09.08B(1)(c), Control of NO<sub>x</sub> Emissions for Major Stationary Sources General Requirements and Conditions. "Emission Standards in Pounds of NO<sub>x</sub> per Million Btu of heat input."

Fuel	Tangential- Fired	Wall-Fired
Gas only	0.20	0.20
Gas/Oil	0.25	0.25
Coal (dry bottom)	0.38	0.38
Coal (wet bottom)	1.00	1.00

- (3) COMAR 26.11.09.08B(2)(a)(i) and (b), (c), and (d), Control of NO<sub>x</sub> Emissions for Major Stationary Sources Demonstration of Compliance.
  - (a) "A person subject to a NO<sub>x</sub> emission standard in this regulation shall demonstrate compliance as follows:

- (i) For installations equipped with a CEM, compliance with the NO<sub>x</sub> emissions standards in this regulation shall be established using CEM data; or"
- (ii) Not applicable.
- (b) "CEMs shall be certified in accordance with 40 CFR Part 60, Appendix B, or Part 75, Appendix A."
- (c) "CEMs shall meet the quality assurance criteria in 40 CFR Part 60, Appendix F, or, for sources subject to Title IV of the Clean Air Act (Acid Rain), the quality assurance criteria in 40 CFR Part 75, Appendix B."
- (d) "Except as otherwise established by the Department and approved by the EPA, for a person who establishes compliance with the NO<sub>x</sub> emissions standards in this regulation using a CEM, compliance shall be determined as 30-day rolling averages."
- (e) Not applicable.
- (4) COMAR 26.11.09.08B(5) Operator Training.
  - (a) "For purposes of this regulation, the equipment operator to be trained may be the person who maintains the equipment and makes the necessary adjustments for efficient operation.
  - (b) The operator training course sponsored by the Department shall include an in-house training course that is approved by the Department."
- (5) COMAR 26.11.09.08C(3), Requirements for Fuel-Burning Equipment with a Rated Heat Input Capacity of 250 Million Btu Per Hour or Greater. "A person who owns or operates fuel burning equipment with a rated heat input capacity of 250 Million Btu per hour or greater shall install, operate, calibrate, and maintain a certified NOx CEM or an alternative NOx monitoring method approved by the Department and the EPA on each installation."
- (6) The Permittee shall design and operate the ultra low NO<sub>X</sub> burners on Boilers 1-4 and the low NOx burner on Boiler 6 to meet the emission rate of 500 lbs/day (or 624 lbs/day, when appropriate) on a 30-day rolling average. [Reference: District Court Consent Decree, Civil Action No. JKB-12-1408, Sections V(11)(a) & V(10)(d & MDE Permit to Construct 510-5-1476 issued on August 28, 2014. Modified by the District Court Order Modifying Consent Decree dated August 5, 2013 and the emission rates proposed in a letter to the EPA dated March 14, 2014 and approved by the EPA in a letter on April 2, 2014.]
- (7) The primary combined NOx emission limit that applies to the operation of boilers 1-4 and 6 is 500 lbs/day, calculated on a 30-day rolling average as described in the District Court Consent Decree. This limit applies at all times, except in the circumstances described below when the limit of 624 lbs/day applies.
  - (a) Any day in which:
    - (1) Boiler 6 operates at any point in time;
    - (2) Boiler 6 operates in conjunction with any of the CE boilers; or

- (3) Boiler 6 does not operate and only three (3) of the CE boilers operate would count toward the 500 lbs/day 30 day rolling average.
- (b) If there are seven calendar days within a 30 day period in which Boiler 6 does not operate and each of the four CE boilers operates for some period of time in that calendar day, then the combined NOx emission limit is 624 lbs/day. The seven days do not need to be consecutive.
- (c) ASR will calculate the 30 rolling average each day. If all four CE boilers operated for six days or less within the previous 30 calendar day period, the limit of 500 lbs/day applies. If all four CE boilers operated seven days or more during the previous 30-calendar day period, the limit of 624 lbs/day applies.

[Reference: District Court Consent Decree, Civil Action No. JKB-12-1408, Section V(11)(a) & MDE Permit to Construct 510-5-1444 through 5-1447 issued on August 28, 2014. Modified by the District Court Order Modifying Consent Decree dated August 5, 2013 and the emission rates proposed in a letter to the EPA dated March 14, 2014 and approved by the EPA in a letter on April 2, 2014.]

- (8) The Permittee shall continuously operate the NO<sub>x</sub> control technology at all times of boiler operation. [Reference: District Court Consent Decree, Civil Action No. JKB-12-1408, Section V(11)(b) & MDE Permit to Construct 510-5-1444 through 5-1447 issued on August 28, 2014]
- (9) The total combined NO<sub>X</sub> emissions from Boilers 1-4 & 6 in any consecutive 12 month period shall not exceed 60 tons. [Reference: District Court Consent Decree, Civil Action No. JKB-12-1408, Section V(13) & MDE Permit to Construct 510-5-1444 through 5-1447 issued on August 28, 2014. Modified by the District Court Order Modifying Consent Decree dated August 5, 2013 and the emission rates proposed in a letter to the EPA dated March 14, 2014 and approved by the EPA in a letter on April 2, 2014.]
- (10) The total combined NO<sub>x</sub> emissions from Boilers 1-4 & 6 in any calendar month shall not exceed 6.0 tons. [Reference: District Court Consent Decree, Civil Action No. JKB-12-1408, Section V(14) & MDE Permit to Construct 510-5-1476 issued on August 28, 2014]
- (11) The Permittee shall not cause to be discharged into the atmosphere any gases that contain NO<sub>X</sub> (expressed as NO<sub>2</sub>) in excess of 86 ng/J (0.20 lb/MMBtu) heat input. This limit applies at all times including periods of startup, shutdown, or malfunction. Compliance with this emission limit is determined on a 30-day rolling average basis. [Reference: 40 CFR §60.44b(I)(1), 40 CFR §60.44b(h), and 40 CFR §60.44b(i) & MDE Permit to Construct 510-5-1476 issued on August 28, 2014]

(12) The Permittee shall continuously operate the low NO<sub>X</sub> burner at all times of boiler operation. [Reference: District Court Consent Decree, Civil Action No. JKB-12-1408, Section V(11)(b) & MDE Permit to Construct 510-5-1476 issued on August 28, 2014. Modified by the District Court Order Modifying Consent Decree dated August 5, 2013 and the emission rates proposed in a letter to the EPA dated March 14, 2014 and approved by the EPA in a letter on April 2, 2014.]

### **Compliance Demonstration:**

- (1) The Permittee shall conduct the performance test as required under §60.8 using the continuous system for monitoring NO<sub>X</sub> under §60.48b to determine compliance with the NO<sub>X</sub> emission limit as follows:
  - (a) For the initial compliance test, NO<sub>X</sub> from the steam generating unit are monitored for 30 successive steam generating unit operating days and the 30-day average emission rate is used to determine compliance with the NO<sub>X</sub> emission standards under §60.44b. The 30-day average emission rate is calculated as the average of all hourly emission data recorded by the monitoring system during the 30-day test period.
  - (b) Following the date on which the initial performance test is completed or is required to be completed under  $\S60.8$ , whichever date comes first, the Permittee shall determine compliance with the  $NO_X$  standards under  $\S60.44b$  on a continuous basis through the use of a 30-day rolling average emission rate. A new 30-day rolling average emission rate is calculated each steam generating unit operating day as the average of all of the hourly  $NO_X$  emission data for the preceding 30 steam generating unit operating days.

[Reference: 40 CFR §60.46b(c) and 40 CFR §60.46b(e)(1) and (3)]

- (2) The Permittee shall repeat certification testing when the Department determines that the CEM data may not meet performance specifications because of component replacement or other conditions that affect the quality of generated data. [Reference: COMAR 26.11.01.11E(2)(b)]
- (3) At a point in the stack prior to a point at which boiler flue gas combines with flue gas from any other boiler, American Sugar shall install and make operational, concurrent with commencement of operations of the low NO<sub>X</sub> burner a NO<sub>X</sub> continuous emissions monitoring system (CEMS) to monitor NO<sub>X</sub> emissions in accordance with the requirements of 40 CFR Part 60. The CEMS shall be installed and operated in accordance with the plan approved by the Department and EPA under the provisions of COMAR 26.11.01.11B(1)(a).

  [Reference: District Court Consent Decree, Civil Action No. JKB-12-1408,
  - Section V(15) and COMAR 26.11.01.11B(1)(a) & MDE Permit to Construct No. 510-0314-5-1476 issued August 28, 2014]
- (4) The Permittee shall calibrate, maintain, and operate a continuous emissions monitoring system, and record the output of the system for measuring NO<sub>X</sub> emissions in accordance with 40 CFR §60.48b(b)(1).

- (5) Each CEMs shall be installed, certified, calibrated, maintained, and operated in accordance with the applicable requirements of 40 CFR Part 60, and any requirements established by applicable Maryland regulations. [Reference: District Court Consent Decree, Civil Action No. JKB-12-1408, Section V(17) & MDE Permit to Construct No. 510-0314-5-1476 issued August 28, 2014]
- (6) The Permittee shall install, calibrate, maintain, and operate CEMS for measuring NO<sub>X</sub> and O2 (or CO2) emissions discharged to the atmosphere, and shall record the output of the system. [Reference: 40 CFR §60.48b(b)(1)]
- (7) The procedures under §60.13 shall be followed for installation, evaluation, and operation of the continuous monitoring system. The span value for NO<sub>X</sub> is 500 ppm. [Reference: 40 CFR §60.48b(e)(2)(i)]
- (8) The CEMS shall monitor and record the applicable NO<sub>X</sub> Emission Rate for Boiler 6 to demonstrate compliance with the NO<sub>X</sub> emission rates and shall be continuously operated, except during CEMS breakdowns, repairs, calibration checks, and zero span adjustments. [Reference: District Court Consent Decree, Civil Action No. JKB-12-1408, Section V(16) & MDE Permit to Construct No. 510-0314-5-1476 issued August 28, 2014]
- (9) The CEMS shall be operated and data recorded during all periods of operation of Boiler 6 except for CEMS breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments. [Reference: 40 CFR §60.48b(c)]
- (10) The Permittee shall measure all emissions of NO<sub>X</sub> with the CEMS. During any period of time when any CEMS is inoperable or not measuring NO<sub>X</sub> emissions from Boiler 6, the Permittee shall apply the missing data substitution procedures in 40 CFR Part 75, Subpart D. [Reference: District Court Consent Decree, Civil Action No. JKB-12-1408, Section V(18) and 40 CFR §60.48b(f) & MDE Permit to Construct No. 510-0314-5-1476 issued August 28, 2014]
- (11) To comply with the annual emission cap, the Permittee shall convert the monitored CEMS data to a mass emission (tons) and sum the total amount of NO<sub>X</sub> emissions for the current month and the previous eleven months. [Reference: District Court Consent Decree, Civil Action No. JKB-12-1408, Section V(20) & MDE Permit to Construct No. 510-0314-5-1476 issued August 28, 2014]
- (12) To comply with the monthly emissions cap, the Permittee shall convert the monitored CEMS data to a mass emission (tons) and sum the amount of NO<sub>X</sub> emissions for each Operating Day during the month. [Reference: District Court Consent Decree, Civil Action No. JKB-12-1408, Section V(21) & MDE Permit to Construct No. 510-0314-5-1476 issued August 28, 2014]
- (13) The 1-hour average NO<sub>X</sub> emission rates measured by the continuous NO<sub>X</sub> monitor required by 40 CFR §60.48b(b) and required under §60.13(h) shall be expressed in ng/J or lb/MMBtu heat input and shall be used to calculate the average emission

rates under §60.44b. The 1-hour averages shall be calculated using the data points required under §60.13(h)(2). [Reference: 40 CFR §60.48b(d)]

- (14) The Permittee shall use the alternative measurement method approved by the Department and the EPA if the Permittee is unable to obtain emissions data from CEMS because of a malfunction of the CEMS for more than 2 hours in duration. [Reference: COMAR 26.11.01.11B(4)]
- (15) The Permittee shall ensure that the CEMS used to monitor a gas concentration shall meet the quality assurance criteria of 40 CFR Part 60, Appendix F, as amended, which is incorporated by reference, or, if applicable, the quality assurance criteria of 40 CFR Part 75, Appendix B, as amended. [Reference: COMAR 26.11.01.10C]
- (16) The CEM used to monitor a gas concentration shall record not less than four equally spaced data points per hour and automatically reduce data in terms of averaging times consistent with the applicable emission standard. [Reference: COMAR 26.11.01.11D(2)]
- (17) The Permittee shall maintain records for at least two (2) years of the following information for Boiler 6 for each operating day.
  - (a) Calendar date;
  - (b) The average hourly NO<sub>X</sub> emission rates (expressed as NO<sub>2</sub>) (ng/J) or lb/MMBtu heat input) measured or predicted;
  - (c) The 30-day average NO<sub>X</sub> emission rates (ng/J or lb/MMBtu heat input) calculated at the end of each Boiler 6 operating day from the measured or predicted hourly nitrogen oxide emission rates for the preceding 30 Boiler 6 operating days;
  - (d) Identification of the Boiler 6 operating days when the calculated 30-day average  $NO_X$  emission rates are in excess of the  $NO_X$  emissions standards under §60.44b, with the reasons for such excess emissions as well as a description of corrective actions taken;
  - (e) Identification of the Boiler 6 operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken;
  - (f) Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data;
  - (g) Identification of the "F" factor used for calculations, method of determination, and type of fuel combusted;
  - (h) Identification of the times when the pollutant concentration exceeded full span of the CEMS;
  - (i) Description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specification 2 or 3 in appendix B of 40 CFR Part 60; and
  - (j) Results of daily CEMS drift tests and quarterly accuracy assessments as required under appendix F, Procedure 1 of 40 CFR Part 60.

[Reference: 40 CFR §60.49b(g), (i) and (o)]

- (18) The Permittee shall maintain for at least five (5) years, and shall make available to the Department upon request, records of the following information:
  - (a) Annual fuel use records for Boiler 6;
  - (b) Log of operation and maintenance of the CEMs including duration and reason of any malfunctions; and
  - (c) Records of operator training.

[Reference: MDE Permit to Construct No. 510-0314-5-1476 issued August 28, 2014]

- (19) The Permittee must submit excess emission reports for any excess emissions that occurred during the reporting period. The Permittee must maintain these records on site for at least two (2) years. [Reference: 40 CFR §60.49b(h)(2)(i) and (o)]
- (20) The Permittee must submit notification of the date of initial startup of Boiler 6, as provided by §60.7. This notification shall include the following:
  - (a) The design heat input capacity of Boiler 6 and identification of the fuel to be combusted;
  - (b) If applicable, a copy of any federally enforceable requirements that limits the annual capacity factor for any fuel or mixture of fuel under §§60. 44b(c), (d), (e), (i), (j), (k), 60.46b(h), or 60.48b(i); and
  - (c) The annual capacity factor at which the Permittee anticipates operating the facility based on the natural gas fired.

[Reference: 40 CFR §60.49b(a)]

- (21) The Permittee shall submit to the Department the performance test data from the initial performance test and the performance evaluation of the CEMS using the applicable performance specifications in appendix B of 40 CFR Part 60. [Reference: 40 CFR §60.49b(b)]
- (22) The Permittee must report orally or by electronic or facsimile transmission to the U.S. EPA and MDE, no later than 24 hours after the Permittee knew or should have known of any violation of the District Court Consent Decree, any permit regulations, or any event that may pose an immediate threat to the public health or welfare of the environment. [Reference: District Court Consent Decree, Civil Action No. JKB-12-1408, Section IX(40) & MDE Permit to Construct No. 510-0314-5-1476 issued August 28, 2014]
- (23) COMAR 26.11.09.08K Reporting Requirements.
  - (1) "When demonstration of compliance with the NO<sub>X</sub> emission standards in this regulation is based on CEM data, quarterly emission reports shall be submitted to the Department on or before the thirtieth day of the month following the end of each calendar quarter.
  - (2) When compliance with this regulation is demonstrated by a stack test, the results of the stack tests required by this regulation shall be submitted to the Department within 45 days after completion of the test.
  - (3) A person subject to this regulation shall maintain annual fuel use records on site for not less than 3 years, and make these records available to the Department upon request."

- (24) The Permittee must report to the Department, by telephone, any CEM system downtime that lasts or is expected to last more than 24 hours, by 10 a.m. of the first regular business day following the breakdown. The Permittee must also notify the Department, by telephone, when an out-of-service CEMS is back in operation. [Reference: COMAR 26.11.01.11E(1)(a) and (b)]
- (25) The Permittee shall comply with the CEM system downtime reporting requirements of COMAR 26.11.01.11E:
  - (a) All CEM system downtime that lasts or is expected to last more than 24 hours shall be reported to the Department by telephone before 10 a.m. of the first regular business day following the breakdown.
  - (b) The system breakdown report required by COMAR 26.11.01.11E(1)(a) shall include the reasons, if known, for the breakdown and the estimated period of time that the CEMS will be down. The Permittee shall notify the Department by telephone when an out-of-service CEM is back in operation and producing valid data.

[Reference: COMAR 26.11.01.11E(1)]

- (26) The Permittee shall submit to the Department quarterly, a CEMs summary report not later than 30 days following each calendar quarter to demonstrate compliance with the NO<sub>X</sub> emissions limits. The report shall include the following information:
  - (i) The cause, time periods, and magnitude of all emissions which exceed the applicable emission standards;
  - (ii) The source downtime including the time and date of the beginning and end of each downtime period and whether the source downtime was planned or unplanned;
  - (iii) The time periods and cause of all CEM downtime including records of any repairs, adjustments, or maintenance that may affect the ability of the CEM to meet performance specifications of emission data;
  - (iv) Quarterly totals of excess emissions, installation downtime, and CEM downtime during the calendar quarter;
  - (v) Quarterly quality assurance activities;
  - (vi) Daily calibration activities that include reference values, actual values, absolute or percent of span differences, and drift status; and
  - (vii) Other information required by the Department that is determined to be necessary to evaluate the data, to ensure that compliance is achieved, or to determine the applicability of this regulation.

[Reference: COMAR 26.11.01.11E(2)(c)]

- (27) The Permittee shall submit within 30 days following each January 1<sup>st</sup> and July 1<sup>st</sup>, a semi-annual report to the U.S. EPA for the immediately preceding half-calendar year period. This report shall:
  - (a) Identify any and all dates on which the Permittee has installed, or describe the progress of installation of the low NO<sub>X</sub> burner required for NO<sub>X</sub> control, emission limits, CEMs, and monitoring requirements and describe any problems encountered or anticipated during such installation, together with implemented or proposed solutions;

- (b) Provide all CEMS data collected for Boiler 6 including an explanation of any periods of CEMS downtime together with any missing data for which the Permittee applied and missing data substitution procedures under Section VI.B of the District Court Consent Decree;
- (c) Demonstrate compliance with all applicable 30-day rolling average emission limits in Section V of the District Court Consent Decree; and
- (d) Describe the status of any operation and maintenance work relating to activities under the District Court Consent Decree.

[Reference: District Court Consent Decree, Civil Action No. JKB-12-1408, Section IX(38) & MDE Permit to Construct No. 510-0314-5-1476 issued August 28, 2014]

C. Operational Limitations

- (1) The Permittee shall burn only natural gas in this boiler. [Reference: MDE Permit to Construct 510-5-1476 issued on August 28, 2014]
- (2) The Permittee must use gaseous fuels with potential SO<sub>2</sub> emissions rates of 26 ng/J (0.060 lb/MMBtu) or less and shall not use a post-combustion technology to reduce SO<sub>2</sub> or PM emissions. The Permittee must meet these requirements in order to not be required to install or operate a COMS. [Reference: 40 CFR §60.48b(j)(2) & MDE Permit to Construct 510-5-1476 issued on August 28, 2014]

### **Compliance Demonstration:**

The Permittee shall install meters to record the hours of operation of this boiler and shall maintain the monitoring records in an electronic format for at least five (5) years. [Reference: District Court Consent Decree, Civil Action No. JKB-12-1408, Section V(19) & MDE Permit to Construct No. 510-0314-5-1476 issued August 28, 2014]

The Permittee shall record and maintain records of the amounts of natural gas combusted during each day and calculate the annual capacity factor for natural gas for the reporting period. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month. The records must be maintained on-site for at least two (2) years and be made available to the Department upon request. [Reference: 40 CFR §60.49b(d)(1) and (o)]

**Emission Unit: R29-1** 

R29-1 – Raw Sugar Unloading and Conveying (MDE Registration No.6-2019).

The Raw Sugar Unloading and Conveying to the Raw Sugar Shed occurs on covered conveyors. This equipment facilitates the unloading of raw sugar from ships to storage in the raw sugar shed. This equipment is now registered with the Department in 2013.

### **Applicable Standards and limits:**

A. Control of Visible Emissions

COMAR 26.11.06.02C(2) - Visible Emission Standards. "In Areas III and IV a person may not cause or permit the discharge of emissions from any installation or building, other than water in an uncombined form, which is visible to human observers."

COMAR 26.11.06.02 A(2), General Exceptions. "The visible emissions standards in §C of this regulation do 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."

### **Compliance Demonstration:**

The Permittee shall perform a walk-through inspection once a month of the facility to look for sources of visible emissions.

The Permittee shall visually inspect the exhaust gases from each stack that exhausts outside a building and look at openings in buildings through which visible emissions can escape to the outside. The Permittee shall record the results of each observation.

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

- (1) Inspect all process and/or control equipment that may affect visible emissions;
- Perform all necessary repairs and/or adjustments to all processes and/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
- If visible emissions have not 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 the log of inspection and maintenance for at least five (5) years and make them available to the Department upon request. [Reference: COMAR 26.11.03.06]

B. Control of Particulate Matter

COMAR 26.11.06.03C(1) - Particulate Matter from Unconfined Sources.

"A person may not cause or permit emissions from an unconfined source without taking reasonable precautions to prevent particulate matter from becoming airborne. These reasonable precautions shall include, when appropriate as determined by the Department, the installation and use of hoods, fans, and dust collectors to enclose, capture, and vent emissions. In making this determination, the Department shall consider technological feasibility, practicality, economic impact, and the environmental consequences of the decision."

### Compliance Demonstration:

The Permittee shall develop and maintain a preventative maintenance plan for each control device that describes the maintenance activity and time schedule for completing each activity. The Permittee shall perform maintenance activities within the time frame established in the plan. [Reference: COMAR 26.11.03.06]

The Permittee shall maintain the following records on site for at least five (5) years and shall be made available to the Department upon request:

- (1) a copy of the preventative maintenance plan for equipment installed to minimize dusting; and
- (2) a log with records of the dates and description of maintenance activity performed. [Reference: COMAR 26.11.03.06C]

### Emission Unit: R29-2, 3, 4; S7B-2; S7-12; S7-13; S7-14

R29-2: Raw Sugar Shed (MDE Registration No. 6-2019)

R29-3: Melter Feed

R29-4: Diatomite Fugitives

S7B-2: Bin Tower Rejects Box (MDE Registration No. 8-0212)

S7-12: Maltodex Supersack Unloading System (MDE Registration No. 8-0266)

S7-13: Remelt Shredder Fugitives

S7-14: Magnets Tailings Fugitives (MDE Registration No. 8-0223)

### **Applicable Standards and limits:**

A. Control of Visible Emissions

**COMAR 26.11.06.02C(2)** - <u>Visible Emission Standards.</u> "In Areas III and IV a person may not cause or permit the discharge of emissions from any installation or building, other than water in an uncombined form, which is visible to human observers."

COMAR 26.11.06.02 A(2), <u>General Exceptions</u>. "The visible emissions standards in §C of this regulation do 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."

### **Compliance Demonstration:**

The Permittee shall perform a walk-through inspection once a month of the facility to look for sources of visible emissions. The Permittee shall visually inspect the exhaust gases from each stack that exhausts outside a building and look at openings in buildings through which visible emissions can escape to the outside. The Permittee shall record the results of each observation.

If visible 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 all processes and/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 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.

[Reference: COMAR 26.11.03.06]

B. Control of Particulate Matter

**COMAR 26.11.06.03B(2)** - Particulate Matter from Confined Sources. "(2) Areas III and IV. (a) A person may not cause or permit to be discharged into the outdoor atmosphere from any other installation, particulate matter in excess of 0.03 gr/SCFD (68.7 mg/dscm)."

### **Compliance Demonstration:**

The Permittee shall develop and maintain a preventative maintenance plan for each control device that describes the maintenance activity and time schedule for completing each activity. The Permittee shall perform maintenance activities within the time frame established in the plan. [Reference: COMAR 26.11.03.06]

The Permittee shall maintain the following records on site for at least five (5) years and shall be made available to the Department upon request:

- (1) a copy of the preventative maintenance plan for equipment installed to minimize dusting; and
- (2) a log with records of the dates and description of maintenance activity performed. [Reference: COMAR 26.11.03.06C]

### Emission Unit: D28-1, D10-1, D10-2, and D10-3

### Carbonation System:

D28-1 (formerly S-D1-1) - Carbonation Process – Lime silo equipped with a baghouse (RP-C-1). (MDE Registration No. 510-0314-8-0301)

D10-1 (formerly S-D1-2) – Carbonation Process – Saturator 1 equipped with a demister and a scrubber (RP-C-2). (MDE Registration No. 510-0314-8-0301)

D10-2 (formerly S-D1-3) – Carbonation Process – Saturator 2 equipped with a demister and a scrubber (RP-C-3). (MDE Registration No. 510-0314-8-0301)

D10-3 (formerly S-D1-4) – Carbonation Process – Saturator 3 equipped with a demister and a scrubber (RP-C-4). (MDE Registration No. 510-0314-8-0301)

### **Applicable Standards and limits:**

A. Control of Visible Emissions

**COMAR 26.11.06.02C(2)** - <u>Visible Emission Standards.</u> "In Areas III and IV a person may not cause or permit the discharge of emissions from any installation or building, other than water in an uncombined form, which is visible to human observers."

COMAR 26.11.06.02 A(2), <u>General Exceptions</u>. "The visible emissions standards in §C of this regulation do 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."

### **Compliance Demonstration:**

The Permittee shall perform a walk-through inspection once a month of the facility to look for sources of visible emissions. The Permittee shall visually inspect the exhaust gases from each stack that exhausts outside a building and look at openings in buildings through which visible emissions can escape to the outside. The Permittee shall record the results of each observation.

If visible 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 all processes and/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 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 the log of inspection and maintenance for at least five (5) years and make them available to the Department upon request. [Reference: COMAR 26.11.03.06]

### B. Control of Particulate Matter

**COMAR 26.11.06.03B(2)** - <u>Particulate Matter from Confined Sources.</u> "(2) Areas III and IV. (a) A person may not cause or permit to be discharged into the outdoor atmosphere from any other installation, particulate matter in excess of 0.03 gr/SCFD (68.7 mg/dscm)."

### **Compliance Demonstration:**

The Permittee shall develop and maintain a preventative maintenance plan for each control device that describes the maintenance activity and time schedule for completing each activity. The Permittee shall perform maintenance activities within the time frame established in the plan.

The Permittee shall maintain the following records on site for at least five (5) years and shall be made available to the Department upon request:

(1) a copy of the preventative maintenance plan for each dust collector;

- (2) records of the dust collector malfunctions and the corrective actions taken to bring it back into proper operation; and
- (3) a log with records of the dates and description of maintenance activity performed.

[Reference: COMAR 26.11.03.06C]

### Emission Unit: D2-1, U5-1

D2-1: Mud Loading (MDE Registration No.8-0301).

U5-1: Cooling Tower (MDE Registration No. 8-0383)

### **Applicable Standards and limits:**

A. Control of Visible Emissions

**COMAR 26.11.06.02C(2)** - <u>Visible Emission Standards.</u> "In Areas III and IV a person may not cause or permit the discharge of emissions from any installation or building, other than water in an uncombined form, which is visible to human observers."

COMAR 26.11.06.02 A(2), <u>General Exceptions</u>. "The visible emissions standards in §C of this regulation do 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."

### **Compliance Demonstration:**

The Permittee shall perform a walk-through inspection once a month of the facility to look for sources of visible emissions. The Permittee shall visually inspect the exhaust gases from each stack that exhausts outside a building and look at openings in buildings through which visible emissions can escape to the outside. The Permittee shall record the results of each observation.

If visible 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 all processes and/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 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 the log of inspection and maintenance for at least five (5) years and make them available to the Department upon request. [Reference: COMAR 26.11.03.06]

### B. Control of Particulate Matter

### COMAR 26.11.06.03C. - Particulate Matter from Unconfined Sources.

(1) "A person may not cause or permit emissions from an unconfined source without taking reasonable precautions to prevent particulate matter from becoming airborne. These reasonable precautions shall include, when appropriate as determined by the Department, the installation and use of hoods, fans, and dust collectors to enclose, capture, and vent emissions. In making this determination, the Department shall consider technological feasibility, practicality, economic impact, and the environmental consequences of the decision."

### **Compliance Demonstration:**

The Permittee shall develop and maintain a preventative maintenance plan for each control device that describes the maintenance activity and time schedule for completing each activity. The Permittee shall perform maintenance activities within the time frame established in the plan.

The Permittee shall maintain the following records on site for at least five (5) years and shall be made available to the Department upon request:

- (1) a copy of the preventative maintenance plan for equipment installed to minimize dusting; and
- (2) a log with records of the dates and description of maintenance activity performed. [Reference: COMAR 26.11.03.06C]

### Emission Unit: S5-1, S5-2, S5-3, S5-4, S5-5, S5-6, S5-8A, S5-8B, S5-8D, S5-8E, S5-8F, S5-8G, S1-1, S7A-1, S7-5, S7-6, S7-7, S7-8A, S7-8B, S7-8C, S7-10A, S7-10B, S7-10C, S7B-1, S7-11A, S7-11B, S7-11C

S5-1 (formerly S-S1-1): Scrap Melter 1 equipped with a rotoclone scrubber (RP-C-10). (MDE Registration No. 8-0226)

S5-2: Scrap Melter 2 (MDE Registration No. 8-0382)

S5-3: Remelt Screw Conveyors (MDE Registration No. 8-0382)

S5-4: Invert system controlled by a rotoclone scrubber (RP-C-10). This system consists of the following equipment:

S5-4A – Invert Cloudy Tank (5-3-16)

S5-4B – Invert Precoat Tank (5-3-17)

S5-4C - Sucrose Cloudy Tank (5-3-13)

S5-4D – Sucrose Precoat Tank (5-3-14)

S5-4E – Clear Sucrose Tank (5-3-12)

S5-4F – Clear Invert Tank (5-3-15)

(ARMA Registration No. 6-2022)

S5-5: Caustic Fugitives associated with the invert system. (MDE Registration No. 6-2022)

S5-6: Soft Sugar Shredder. (MDE Registration No. 510-0314-6-2020)

S5-8 (formerly S-S5-1 through S-S5-5): Specialty Sugar Refining Process. This process consists of the following equipment:

S5-8A (formerly S-S5-1): Dryer #1 (Powdered Specialty Sugars) equipped with a venturi scrubber (RP-C-33) (DW-1).

S5-8B (formerly S-S5-1): Dryer # 2 (Powdered Specialty Sugars) equipped with a venturi scrubber (RP-C-34) (DW-2).

S5-8D (formerly S-S5-2): Liquid Sugar Cooler (Powdered Specialty Sugars) equipped with a Sly venturi scrubber (RP-C-35) (WS-3).

S5-8E (formerly S-S5-3): Three (3) Centrifugal Separators (Powdered Specialty Sugars) equipped with a Sly venturi scrubber (RP-C-36) (WS-1).

S5-8F (formerly S-S5-4): Washout Tanks and Beater (Powdered Specialty Sugars) equipped with a Rotoclone scrubber.

S5-8G (formerly S-S5-5): Packaging and Conveying Equipment (Powdered Specialty Sugars) equipped with a Sly venturi scrubber (RP-C-36) (WS-1). (MDE Registration No. 8-0332)

S1-1 (formerly S-S2-7): One (1) 80 ton per hour FECO rotary sugar dryer equipped with an Entoleter, Inc. vortex scrubber (RP-C-15) (MDE Registration No. 0320)

S7A-1 (formerly S-S4-1) Bulk Sugar Conveying System equipped with a scrubber (RP-C-25). This system consists of the following equipment:

S7A-RE1 – Bucket Elevator RE-1,

S7A-XE1 - Bucket Elevator XE-1,

S7A-XRS1 - Bucket Elevator XRS-1,

S7A-UE1 - Bucket Elevator UE-1,

S7A-UE2A - Bucket Elevator UE-2A,

S7A-UE2B - Bucket Elevator UE-2B,

S7A-RE2 – Bucket Elevator RE-2,

S7A-U1 – Storage Bin U1,

S7A-U2 – Storage Bin U2,

S7A-U3 – Storage Bin U3,

S7A-U4 – Storage Bin U4,

S7A-U5 – Storage Bin U5,

S7A-U6 – Storage Bin U6,

S7A-XF1 – Storage Bin XF1,

S7A-XF2 – Storage Bin XF2,

S7A-V1 – Storage Bin V1,

S7A-V2 – Storage Bin V2,

S7A-V3 – Storage Bin V3,

S7A-V4 – Storage Bin V4,

S7A-V5 – Storage Bin V5, S7A-V6 – Storage Bin V6,

S7A-C1 - Storage Bin C1,

S7A-F1 – Storage Bin F1,

S7A-AR1 – Storage Bin AR1, S7A-AR2 – Storage Bin AR2, S7A-AR3 – Storage Bin AR3, S7A-AR4 – Storage Bin AR4, S7A-AR5 – Storage Bin AR5, S7A-AR6 – Storage Bin AR6, S7A-AR7 – Storage Bin AR7, S7A-AR8 – Storage Bin AR8, and S7A-RJX – Screw Conveyor Rejects Transfer. (MDE Registration No. 8-0212)

S7-5 (formerly S-S4-6A): Packaging Feed Tank 1 equipped with a filter (RP-C-26) (MDE Registration No. 8-0265)

S7-6 (formerly S-S4-6B): Packaging Feed Tank 2 equipped with a filter (RP-C-27) (MDE Registration No. 8-0265)

S7-7 (formerly S-S4-6C): Packaging Feed Tank 3 equipped with a filter (RP-C-28) (MDE Registration No. 8-0265)

S7-8 (formerly S-S4-7): Packaging Operations controlled by a rotoclone scrubber (RP-C-29). This system consists of the following equipment:

S7-8A: Fawema Packaging System,

S7-8B: Paxall Packaging System,

S7-8C: Clouds Packaging System, and

S7-8D: Handi Pak System

(MDE Registration No. 8-0265)

S7-10 (formerly S-S4-8): Wheelabrator Dust Collector (RP-C-30) (7-5-1). Note: Wheelabrator controls emissions from Thiele, Supersacks and Tubline systems.

S7-10B: Supersack Unloading System.

S7-10A:Hesser Bagging System,

Note: Hessers are controlled by Wheelabrator 6-5-2 (RP-C-32)

(MDE Registration No. 8-0265)

S7B-1 (formerly S-S4-12): Bulk Loading System equipped with an Entoleter scrubber (RP-C-31). The truck unloading operations equipped with three (3) dust collection systems.

(MDE Registration No. 8-0223)

S7-11 (formerly S-S4-14): One "Super-Sack" Sugar Packaging Line controlled by a Sly baghouse (RP-C-30). This line consists of the following equipment:

S7-11A: Thiele Supersack System,

S7-11B: Tub Packaging Line, and

S7-11C: Simplex Packaging Line.

(MDE Registration No. 8-0287)

### **Applicable Standards and limits:**

### A. Control of Visible Emissions

**COMAR 26.11.06.02C(2),** <u>Visible Emission Standards.</u> "In Areas III and IV a person may not cause or permit the discharge of emissions from any installation or building, other than water in an uncombined form, which is visible to human observers."

COMAR 26.11.06.02A(2), <u>General Exceptions</u>. "The visible emissions standards in §C of this regulation do 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."

### **Compliance Demonstration:**

The Permittee shall perform a walk-through inspection once a month of the facility to look for sources of visible emissions. The Permittee shall visually inspect the exhaust gases from each stack that exhausts outside a building and look at openings in buildings through which visible emissions can escape to the outside. The Permittee shall record the results of each observation.

If 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 all processes and/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 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 the log of inspection and maintenance for at least five (5) years and make them available to the Department upon request. [Reference: COMAR 26.11.03.06C]

### B. Control of Particulate Matter

- (1) COMAR 26.11.06.03B Particulate Matter from Confined Sources. "(2) Areas III and IV. (a) A person may not cause or permit to be discharged into the outdoor atmosphere from any other installation, particulate matter in excess of 0.03 gr/SCFD (68.7 mg/dscm)."
- (2) COMAR 26.11.06.03D Particulate Matter from Materials Handling and Construction. "A person may not cause or permit any material to be handled, transported, or stored, or a 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."

### **Compliance Demonstration:**

The Permittee shall develop and maintain a preventative maintenance plan for each control device that describes the maintenance activity and time schedule for completing each activity. The Permittee shall perform maintenance activities within the timeframe established in the plan. [Reference: COMAR 26.11.03.06C]

The exhaust gases from two liquid sugar dryers (VD1 and VD-2), the liquid sugar coolers (VC-1) and three centrifugal separators (SK-1, SK-2, and SK-3) shall be vented through the cyclonic separator and the venturi scrubber, when the specialty sugar refining process is operating.

The exhaust gases from the washout tanks/beater shall be vented through the rotoclone scrubber, when the specialty sugar refining process is operating.

The exhaust gases from the packing and conveying equipment shall be vented through the rotoclone and the venturi scrubber, when the specialty sugar refining process is operating.

Records of the amount and type of specialty sugar produced each month for the specialty sugar refining process equipped with four venturi scrubbers shall be kept at the site for at least five (5) years and shall be made available to the Department upon request.

[Reference: Permit to Construct #510-8-0332 issued on July 10, 2003]

The Permittee shall maintain the following records on site for at least five (5) years and shall be made available to the Department upon request:

- (a) a copy of the preventative maintenance plan for each dust collector;
- (b) records of the dust collector malfunctions and the corrective actions taken to bring it back into proper operation; and
- (c) a log with records of the dates and description of maintenance activity performed.

[Reference: COMAR 26.11.03.06C]

### Emission Unit: S6-4, S6-5, S6-5, S6-7

S6-4 (formerly S-S2-6A): BMA Granulator equipped with an Entoleter Scrubber (RP-C-11). (MDE Registration No. 8-0115)

S6-5 (formerly S-S2-6A): Sugar Packaging Line and Conveying Systems controlled by a shared Wheelabrator dry filter (RP-C-12, RP-C-13, and RP-C-14). This line consists of the following equipment:

S6-5A: Remelt Shredder.

S6-5B: Maltrin Tank,

S6-5C: Sugar Tank,

S6-5D: MFB Feeder,

S6-5E: Sugar Feed to Mill 1,

S6-5F: Sugar Feed to Mill 2. S6-5G: Sugar Feed to Mill 3, S6-5H: 6-5-1200 Receiver, S6-5I: UB-1 South Hood, and S6-5J: UB-1 Tail End.

(MDE Registration No. 8-0222)

S6-6 (formerly S-S2-6A): Sugar Packaging Line and Conveying Systems controlled by a shared Wheelabrator dry filter (RP-C-12, RP-C-13, and RP-C-14). This line consists of the following equipment:

S6-6A: Oscillator,

S6-6B: DSE-1 (9-25-10), S6-6C: US-2 Scroll, and S6-6D: UB-1 North.

(MDE Registration No. 8-0296)

S6-7 (formerly S-S2-6A): Sugar Packaging Line and Conveying Systems controlled by a shared Wheelabrator dry filter (RP-C-12, RP-C-13, and RP-C-14). This line consists of the following equipment:

S6-7A: Receiver 1300 2#,

S6-7B: Old V. Bag Packaging System,

S6-7C: Receiver 1250,

S6-7D: Receiver 6-4-1300,

S6-7E: 2# Poly Filler System,

S6-7F: New V.B. Filler System,

S6-7G: Old V.B. Filler System,

S6-7H: Packet Grinder, and

S6-7I: 1-4 10X Filler System.

(MDE Registration No. 8-0225)

### Applicable Standards and limits:

Control of Visible Emissions

COMAR 26.11.06.02C(2) - Visible Emission Standards. "In Areas III and IV a person may not cause or permit the discharge of emissions from any installation or building, other than water in an uncombined form, which is visible to human observers."

COMAR 26.11.06.02A(2) - General Exceptions. "The visible emissions standards in §C of this regulation do not apply to emissions during start-up and process modifications or adjustments, or occasional cleaning of control equipment, if:

- 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."

### **Compliance Demonstration:**

The Permittee shall perform a walk-through inspection once a month of the facility to look for sources of visible emissions. The Permittee shall visually inspect the exhaust gases from each stack that exhausts outside a building and look at openings in buildings

through which visible emissions can escape to the outside. The Permittee shall record the results of each observation.

If 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 all processes and/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 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 the log of inspection and maintenance for at least five (5) years and make them available to the Department upon request. [Reference: COMAR 26.11.03.06C]

### B. Control of Particulate Matter

**COMAR 26.11.06.03B(2)** - <u>Particulate Matter from Confined Sources.</u> "(2) Areas III and IV. (a) A person may not cause or permit to be discharged into the outdoor atmosphere from any other installation, particulate matter in excess of 0.03 gr/SCFD (68.7 mg/dscm)."

**COMAR 26.11.06.03D -** <u>Particulate Matter from Materials Handling and Construction.</u> "A person may not cause or permit any material to be handled, transported, **or** stored, or a 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. These reasonable precautions shall include, but not be limited to, the following when appropriate as determined by the control officer:

- (1) Use of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land.
- (2) Application of asphalt, oil, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which can create airborne dusts.
- (3) Installation and use of hoods, fans, and dust collectors to enclose and vent the handling of dusty materials. Adequate containment methods shall be employed during sandblasting of buildings or other similar operations.
- (4) Covering, at all times when in motion, open-bodied vehicles transporting materials likely to create air pollution. Alternate means may be employed to achieve the same results as would covering the vehicles.
- (5) The paving of roadways and their maintenance in clean condition.
- (6) The prompt removal from paved streets of earth or other material which has been transported there by trucks or earth moving equipment or erosion by water."

### **Compliance Demonstration:**

The Permittee shall develop and maintain a preventative maintenance plan for each control device that describes the maintenance activity and time schedule for completing each activity. The Permittee shall perform maintenance activities within the timeframe established in the plan. [Reference: COMAR 26.11.03.06C]

The exhaust gases from the packing and conveying equipment shall be vented through the rotoclone and the venturi scrubber, when the specialty sugar refining process is operating. [Reference: MDE Permit to Construct #510-8-0332 issued on July 10, 2003]

Records of the amount and type of specialty sugar produced each month for the specialty sugar refining process equipped with four venturi scrubbers shall be kept at the site for at least five (5) years and shall be made available to the Department upon request. [Reference: MDE Permit to Construct #510-8-0332 issued on July 10, 2003]

The Permittee shall maintain the following records on site for at least five (5) years and shall be made available to the Department upon request:

- (a) a copy of the preventative maintenance plan for each dust collector;
- records of the dust collector malfunctions and the corrective actions taken to bring it back into proper operation; and
- (c) a log with records of the dates and description of maintenance activity performed. [Reference: COMAR 26.11.03.06C]

### Emission Unit: S6-1, S6-1A, S6-2, S6-2A, S6-3, S6-3A, S6-8, S6-9

S6-1 (formerly S-S3-1): Sugar Mill Process consisting of the following equipment:

S6-1 (formerly S-S3-1): Sugar Mill 1 equipped with MAC dry filter (RP-C-16) (MDE Registration No. 8-0209).

S6-1A (formerly S-S3-1): Starch Receiver 1 equipped with a dry filter (RP-C-17). (MDE Registration No. 8-0209)

S6-2 (formerly S-S3-2): Sugar Mill 2 equipped with MAC dry filter (RP-C-18) (MDE Registration No. 8-0209).

S6-2A (formerly S-S3-2): Starch Receiver 2 equipped with a dry filter (RP-C-19). (MDE Registration No. -8-0209)

S6-3 (formerly S-S3-3): Sugar Mill 3 equipped with MAC dry filter (RP-C-20) (MDE Registration No. 8-0125).

S6-3A (formerly S-S3-3): Starch Receiver 3 equipped with a dry filter (RP-C-21). (MDE Registration No. 8-0125)

S6-8 (formerly S-S3-7): Sugar Pulverizer (Mill 7) equipped with a Mikropul baghouse (RP-C-24). (MDE Registration No. 8-0266)

S6-9 (formerly S-S3-8): Starch Bin equipped with a vent filter (RP-C-22). (MDE Registration No. 8-0125)

### **Applicable Standards and limits:**

A. Control of Visible Emissions

**COMAR 26.11.06.02C(2)** - <u>Visible Emission Standards.</u> "In Areas III and IV a person may not cause or permit the discharge of emissions from any installation or building, other than water in an uncombined form, which is visible to human observers."

**COMAR 26.11.06.02A(2)** - General Exceptions. "The visible emissions standards in §C of this regulation do 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."

### **Compliance Demonstration:**

The Permittee shall perform a walk-through inspection once a month of the facility to look for sources of visible emissions. The Permittee shall visually inspect the exhaust gases from each stack that exhausts outside a building and look at openings in buildings through which visible emissions can escape to the outside. The Permittee shall record the results of each observation.

If 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 all processes and/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 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.

[Reference: COMAR 26.11.03.06C]

The Permittee shall maintain records of the results of the monthly inspections and the log of inspection and maintenance for at least five (5) years and make them available to the Department upon request. [Reference: COMAR 26.11.03.06C]

B. Control of Particulate Matter

**COMAR 26.11.06.03B(2)** - Particulate Matter from Confined Sources. "(2) Areas III and IV. (a) A person may not cause or permit to be discharged into the outdoor atmosphere from any other installation, particulate matter in excess of 0.03 gr/SCFD (68.7 mg/dscm)."

**COMAR 26.11.06.03D** - <u>Particulate Matter from Materials Handling and Construction.</u> "A person may not cause or permit any material to be handled,

transported, or stored, or a 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."

### **Compliance Demonstration:**

The Permittee shall develop and maintain a preventative maintenance plan for each control device that describes the maintenance activity and time schedule for completing each activity. The Permittee shall perform maintenance activities within the timeframe established in the plan.

The Permittee shall maintain the following records on site for at least five (5) years and shall be made available to the Department upon request:

- (a) a copy of the preventative maintenance plan for each dust collector;
- (b) records of the dust collector malfunctions and the corrective actions taken to bring it back into proper operation; and
- (c) a log with records of the dates and description of maintenance activity performed. [Reference: COMAR 26.11.03.06C]

### **Emission Unit: S5-7, S7-15, S7-16**

S5-7: Ten (10) Evaporation Pans (Pan 1 thru 9 and 11) (MDE Registration No. 6-2021)

S7-15: Packaging Video Inkiet Printers (MDE Registration No. 6-0218)

S7-16: Packaging Adhesive Fugitives (MDE Registration No. 9-1298).

### **Applicable Standards and limits:**

A. Control of Visible Emissions

**COMAR 26.11.06.02C(2)** - <u>Visible Emissions Standards.</u> "In Areas III and IV a person may not cause or permit the discharge of emissions from any installation or building, other that water in an uncombined form, which is visible to human observers."

**COMAR 26.11.06.02 A(2)**, <u>General Exceptions</u>. "The visible emissions standards in §C of this regulation do 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."

### **Compliance Demonstration:**

The Permittee shall report all occurrences of excess emissions to the Department.

[Reference: COMAR 26.11.01.07]

### B. Control of VOC Emissions

Conditions B(1) through B(5) apply only to the Video Inkjet Packaging Lines (MDE Registration No. 510-0314-6-2018)

- (1) **COMAR 26.11.19.02I** <u>Good Operating Practices, Equipment Cleanup, and VOC Storage.</u>
  - (1) "Applicability. The requirements in this section apply to a person who owns or operates an installation that is subject to any requirement in this chapter.
  - (2) Good Operating Practices.
    - (a) A person who is subject to this section shall implement good operating practices to minimize VOC emissions into the atmosphere.
    - (b) Good operating practices shall, at a minimum, include the following:
      - (i) Provisions for training of operators on practices, procedures, and maintenance requirements that are consistent with the equipment manufacturers' recommendations and the source's experience in operating the equipment, with the training to include proper procedures for maintenance of air pollution control equipment;
      - (ii) Maintenance of covers on containers and other vessels that contain VOC and VOC-containing materials when not in use:
      - (iii) Minimize spills of VOC-containing cleaning materials;
      - (iv) Convey VOC-containing cleaning materials from one location to another in closed containers or pipelines;
      - Minimize VOC emissions from cleaning of storage, mixing, and conveying equipment;
      - (vi) As practical, scheduling of operations to minimize color or material changes when applying VOC coatings or other materials by spray gun;
      - (vii) For spray gun applications of coatings, use of high volume low pressure (HVLP) or other high efficiency application methods where practical; and
      - (viii) As practical, mixing or blending materials containing VOC in closed containers and taking preventive measures to minimize emissions for products that contain VOC.
    - (c) A person subject to this regulation shall:
      - (i) Establish good operating practices in writing;
      - (ii) Make the written operating practices available to the Department upon request; and
      - (iii) Display the good operating practices so that they are clearly visible to the operator or include them in operator training.
  - (3) Equipment Cleanup.
    - (a) A person subject to this section shall take all reasonable precautions to prevent or minimize the discharge of VOC into the

atmosphere when cleaning process and coating application equipment, including containers, vessels, tanks, lines, and pumps.

- (b) Reasonable precautions for equipment cleanup shall, at a minimum, include the following:
  - (i) Storing all wastes and waste materials, including cloth and paper that are contaminated with VOC, in closed containers;
  - (ii) Preparing written standard operating procedures for frequently cleaned equipment, including when practical, provisions for the use of low-VOC or non-VOC materials and procedures to minimize the quantity of VOC materials used;
  - (iii) Using enclosed spray gun cleaning, VOC-recycling systems and other spray gun cleaning methods where practical that reduce or eliminate VOC emissions; and
  - (iv) Using, when practical, detergents, high-pressure water, or other non-VOC cleaning options to clean coating lines, containers, and process equipment.
- (4) VOC Storage and Transfer.
  - (a) A person subject to this section who stores VOCs shall, at a minimum, install conservation vents or other vapor control measures on storage tanks with a capacity of 2,000 gallons or more to minimize VOC emissions.
  - (b) A person subject to this section shall, at a minimum, utilize vapor balance, vapor control lines, or other vapor control measures when VOCs are transferred from a tank truck into a stationary storage tank with a capacity greater than 10,000 gallons and less than 40,000 gallons that store VOCs or materials containing VOCs, other than gasoline, that have a vapor pressure greater than 1.5 psia."

### **Compliance Demonstration:**

The Permittee shall conduct facility-wide inspections at least once per calendar month to determine the compliance status of facility operations with regard to implementation of "good operating practices" designed to minimize emissions of VOC. [Reference: COMAR 26.11.03.06C]

The Permittee shall maintain:

- (1) Written descriptions of all "good operating practices" designed to minimize emissions of VOC from facility-wide operations. [Reference: COMAR 26.11.19.02I]
- (2) Records of all inspections conducted to determine the facility's compliance status with regard to implementation of "good operating practices" designed to minimize emissions of VOC from facility-wide operations. The records shall include for each inspection the name of the inspector, the date and time of the inspection, and an account of the findings. [Reference: COMAR 26.11.03.06C]

Good operating practices information as required by COMAR 26.11.19.02I shall be made available to the Department upon request

**COMAR 26.11.19.16C** - <u>Control of VOC Equipment Leaks - General</u>
<u>Requirements</u>. "A person subject to this regulation shall comply with all of the following requirements:

- (1) Visually inspect all components on the premises for leaks at least once each calendar month.
- (2) Tag any leak immediately so that the tag is clearly visible. The tag shall be made of a material that will withstand any weather or corrosive conditions to which it may be normally exposed. The tag shall bear an identification number, the date the leak was discovered, and the name of the person who discovered the leak. The tag shall remain in place until the leak has been repaired.
- (3) Take immediate action to repair all observed VOC leaks that can be repaired within 48 hours.
- (4) Repair all other leaking components not later than 15 days after the leak is discovered. If a replacement part is needed, the part shall be ordered within 3 days after discovery of the leak, and the leak shall be repaired within 48 hours after receiving the part.
- (5) Maintain a supply of components or component parts that are recognized by the source to wear or corrode, or that otherwise need to be routinely replaced, such as seals, gaskets, packing, and pipe fittings.
- (6) Maintain a log that includes the name of the person conducting the inspection and the date on which leak inspections are made, the findings of the inspection, and a list of leaks by tag identification number. The log shall be made available to the Department upon request. Leak records shall be maintained for a period of not less than 2 years from the date of their occurrence.

**COMAR 26.11.19.16D** – <u>Exceptions.</u> "Components that cannot be repaired as required in this regulation because they are inaccessible, or that cannot be repaired during operation of the source, shall be identified in the log and included within the source's maintenance schedule for repair during the next source shutdown."

### **Compliance Demonstration:**

The Permittee shall:

- (1) Visually inspect all components (process equipment, storage tanks, pumps, compressors, valves, flanges, pipeline fittings, pressure relief valves) at the facility for VOC leaks at least once each calendar month;
- (2) Tag any VOC leak immediately with I.D. Number, the date VOC leak was discovered, and the name of the person who discovered the VOC leak. The tag is to remain in place until the VOC leak is repaired;
- (3) Take immediate action to repair/control all observed VOC leaks that can be repaired within 48 hours;

- (4) Repair all other VOC leaking components not later than 15 days after the VOC leak is discovered in accordance with COMAR 26.11.19.16C(4);
- (5) If a replacement part is needed, it shall be ordered within 3 days after discovery of the VOC leak and the leak shall be repaired within 48 hours after receiving the part;
- (6) Maintain a supply of components or component parts that are recognized by the source to wear or corrode, or that otherwise need to be routinely replaced; and
- (7) Identify in a log components that cannot be repaired as required by this regulation because they are inaccessible, or that cannot be repaired during operation of the source, and include them within the source's maintenance schedule for repair during the next source shutdown.

[Reference: COMAR 26.11.19.16C and D]

### The Permittee shall:

- (1) Maintain a log that includes the name of the person conducting the inspection, the date on which VOC leak inspection was made, the findings of the inspection, a list of VOC leaks by tag identification number, the date the part was ordered, and the date the VOC leak was repaired; and
- (2) Make the log available to the Department upon request and shall be maintained for a period of not less than two years from the date of the VOC leaks' occurrence.

[Reference: COMAR 26.11.19.16C(6)]

VOC Leak inspection logs as required by COMAR 26.11.19.16 shall be made available to the Department upon request.

- (2) **COMAR 26.11.19.18B(1)(d)** <u>Applicability.</u> "This regulation applies to a person, owner or operator who: (d) Performs digital imaging at a premises that causes VOC emissions of 20 pounds or more per day from all digital imaging at the premises."
- (3) COMAR 26.11.19.18F General Requirements for Digital Imaging.

  "A person who owns or operates digital imaging that is subject to this regulation may not cause the discharge of VOC emissions into the atmosphere in excess of 100 pounds on any day from all digital printing at the premises."

### **Compliance Demonstration:**

**COMAR 26.11.19.18G** - Record Keeping. "A person subject to this regulation shall maintain the following records for not less than 3 years, and make the records available to the Department upon request: (3) The VOC content of each ink, coating, cleanup material, or any other material containing VOC that is used at the premises."

The following conditions B(6) through B(11) apply only to the Packaging Adhesive Fugitives lines (MDE Registration No. 510-0314-9-1298)

- (4) **COMAR 26.11.35.01E** <u>Applicability and Exemptions.</u> "The provisions of Regulation .04A and D of this chapter do not apply to the use of adhesives, sealants, adhesive primers, sealant primers, cleanup solvents, and surface preparation solvents if:
  - (1) The total volume of noncomplying adhesives, sealants, primers, cleanup solvents, and surface preparation solvents applied facility-wide does not exceed 55 gallons per calendar year; and
  - (2) The person claiming the usage exemption under §E(1) of this regulation maintains monthly operational records sufficient to demonstrate compliance as required by Regulation .05A of this chapter.

**Note:** In any calendar year in which ASR uses more than 55 gallons of packaging adhesives, ASR must meet the requirements of COMAR 26.11.35.04A and D.

- (5) COMAR 26.11.35.04A Standards. "Except as provided in §E of this regulation and Regulation .01 of this chapter, on and after January 1, 2009, a person may not: (3) Use or apply an adhesive, sealant, adhesive primer, or sealant primer within the State that exceeds the applicable VOC content limits specified in Table 1."
- (6) **COMAR 26.11.35.04G** <u>Table 1.</u>

Porous material	120	1.00
Adhesives Applied to the Listed Substrate		
Category	VOC (grams per liter*)	VOC (pounds per gallon*)
Adhesive, sealant, adhesive primer, or sealant primer	VOC content limit	
VOC Content Limits for Adhesives, Sealants, Adhesive Primers, Sealant Primers, and Adhesives Applied to Particular Substrates		

<sup>\*</sup> The VOC content is determined as the weight of volatile compounds, less water and exempt compounds, as specified in Regulation .06 of this chapter.

- (7) **COMAR 26.11.35.04C Surface Preparation or Cleanup Solvent.** 
  - (1) "This section applies to a person subject to this chapter using a surface preparation or cleanup solvent.
  - (2) Except as provided in §C(3) of this regulation for single-ply roofing, a person may not use materials for surface preparation containing VOCs unless the VOC content of the surface preparation solvent is less than 70 grams per liter.
  - (3) If a surface preparation solvent is used in applying single-ply roofing, a person may not use materials for surface preparation containing VOCs unless the composite vapor pressure, excluding water and exempt compounds, of the surface preparation solvent does not exceed 45 millimeters of mercury at 20°C.
  - (4) Except as provided in §C(5) of this regulation, a person may not use materials containing VOCs for the removal of adhesives, sealants, or adhesive or sealant primers from surfaces, other than spray application equipment, unless the composite vapor pressure of the solvent used is less than 45 millimeters of mercury at 20°C.
  - (5) Removal of an adhesive, sealant, adhesive primer, or sealant primer from the parts of spray application equipment shall be performed as follows:
    - In an enclosed cleaning system or equivalent cleaning system as determined by the test method identified in Regulation .06H of this chapter;
    - (b) Using a solvent with a VOC content less than or equal to 70 grams of VOC per liter of material; or
    - (c) Parts containing dried adhesive may be soaked in a solvent if the composite vapor pressure of the solvent, excluding water and exempt compounds, is less than or equal to 9.5 millimeters of mercury at 20°C and the parts and solvent are in a closed container that remains closed except when adding parts to or removing parts from the container."
- (8) COMAR 26.11.35.04E Standards. "A person using adhesives, sealants, adhesive primers, sealant primers, surface preparation solvents, or cleanup solvents subject to this chapter shall store or dispose of all absorbent materials, such as cloth or paper, that are moistened with adhesives, sealants, primers, or solvents subject to this chapter in nonabsorbent containers that are closed except when placing materials in or removing materials from the container."
- (9) **COMAR 26.11.35.04F** <u>Standards.</u> "A person may not solicit, require the use, or specify the application of an adhesive, sealant, adhesive primer, sealant primer, surface preparation solvent, or cleanup solvent if the use or application results in a violation of this chapter. This requirement applies to all written or oral contracts under which an adhesive, sealant, adhesive primer, sealant primer, surface preparation solvent, or cleanup solvent subject to this chapter is to be used at a location in the State."

### **Compliance Demonstration:**

The Permittee shall not use any adhesive with a VOC content of greater than 1.0 pound per gallon (120 grams per liter). The VOC content is determined as the weight of volatile compounds, less water and exempt compounds as specified in COMAR 26.11.36.06.

[Reference: COMAR 26.11.35.04G, Table 1, footnote]

The Permittee shall not use materials for surface preparation containing VOCs unless the VOC content of the surface preparation solvent is less than 70 grams per liter.

[Reference: COMAR 26.11.36.04C(2)]

The Permittee shall not use materials containing VOCs for the removal of adhesives, sealants, or adhesive or sealant primers from surfaces other than spray application equipment, unless the composite vapor pressure of the solvent used is less than 45 millimeters of mercury at 20°C. Removal of an adhesive sealant, adhesive primer, or sealant primer from the parts of spray application equipment shall be performed according to COMAR 26.11.36.04C(5). [Reference: COMAR 26.11.36.04C(4) and (5)]

The Permittee shall store or dispose of all absorbent materials, such as cloth or paper, that are moistened with adhesives, sealants, primers, or solvents subject to COMAR 26.11.36 in nonabsorbent containers that are closed except when placing materials in or removing materials from the container. [Reference: COMAR 26.11.36.04E]

The Permittee shall report all occurrences of excess emissions to the Department.

[Reference: COMAR 26.11.01.07]

### **Emission Unit: Ion Exchange System**

Ion Exchange System consisting of the following equipment:

One (1) 8,450 gallon HCl tank (D3-6A) equipped with a once through 25 gpm scrubber (D3-6)

One (1) 12,924 gallon Resin Acid Wash Tank (D3-7).

One (1) 734 gallon Clean in Place (CIP) Tank (D3-8).

Four (4) Deashing Resin Beds, each with a capacity of 10, 574 gallons (D3-9a, -9b, -9c, and -9d).

Four (4) Decolorized Resin Beds, each with a capacity of 23,603 gallons (D3-10a, -10b, -10c, and -10d).

Two (2) salt saturators (D3-11a and D3-11b) controlled by a 16" diameter, 24" high field erected water spray chamber (D3-12).

HCl equipment leak components, valves/pumps/ connectors (D3-12).

(MDE Registration No. 510-0314-8-0386).

The Ion Exchange system is used to improve the syrup purification process. The Ion Exchange system uses dilute hydrochloric (HCI) to regenerate the ion-exchange resins. This system was permitted in November 2013.

### **Applicable Standards and limits:**

### A. Control of Visible Emissions

**COMAR 26.11.06.02C(2)** - <u>Visible Emissions.</u> "In Areas III and IV a person may not cause or permit the discharge of emissions from any installation or building, other than water in an uncombined form, which is visible to human observers."

**COMAR 26.11.06.02 A(2)**, <u>General Exceptions</u>. "The visible emissions standards in §C of this regulation do 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."

### **Compliance Demonstration:**

The Permittee shall submit to the Department by April 1 of each year a certification of emissions for the previous calendar year.

The Permittee shall report all occurrences of excess emissions to the Department.

[Reference: COMAR 26.11.01.07]

B. Control of Particulate Matter

**COMAR 26.11.06.03B(2)(a)** - <u>Particulate Matter from Confined Sources.</u>
"A person may not cause or permit to be discharged into the outdoor atmosphere from any other installation, particulate matter in excess of 0.03 gr/SCFD (68.7 mg/dscm)."

COMAR 26.11.06.03C(1) - Particulate Matter from Unconfined Sources. "A person may not cause or permit emissions from an unconfined source without taking reasonable precautions to prevent particulate matter from becoming airborne. These reasonable precautions shall include, when appropriate as determined by the Department, the installation and use of hoods, fans, and dust collectors to enclose, capture, and vent emissions. In making this determination, the Department shall consider technological feasibility, practicality, economic impact, and the environmental consequences of the decision."

COMAR 26.11.06.03D - Particulate Matter from Materials Handling and Construction. "A person may not cause or permit any material to be handled, transported, or stored, or a 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."

### **Compliance Demonstration:**

The Permittee shall submit to the Department by April 1 of each year a certification of emissions for the previous calendar year.

The Permittee shall report all occurrences of excess emissions to the Department.

[Reference: COMAR 26.11.01.07]

### **Emission Unit: U11-2**

100 kW emergency generator (MDE Registration No. 510-0314-9-1293). The engine was manufactured in 1975.

### **Applicable Standards and limits:**

A. Control of Visible Emissions

**COMAR 26.11.09.05E** - <u>Stationary Internal Combustion Engine Powered Equipment</u>.

- (2) "Emissions During Idle Mode. A person may not cause or permit the discharge of emissions from any engine, operating at idle, greater than 10 percent opacity.
- (3) Emissions During Operating Mode. A person may not cause or permit the discharge of emissions from any engine, operating at other than idle conditions, greater than 40 percent opacity.
- (4) Exceptions.
  - (a) Section E(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.
  - (b) Section E(2) does not apply to emissions resulting directly from cold engine start-up and warm-up for the following maximum periods:
    - (i) Engines that are idled continuously when not in service: 30 minutes:
    - (ii) All other engines: 15 minutes.
  - (c) Section E(2) and (3) does not apply while maintenance, repair, or testing is being performed by qualified mechanics."

### **Compliance Demonstration:**

The Permittee shall properly operate and maintain the engines in a manner to minimize visible emissions. [Reference: COMAR 26.11.03.06C]

The Permittee shall retain records of preventive maintenance on site for at least five years and make these records available to the Department upon request. [Reference: COMAR 26.11.03.06C]

The Permittee shall report incidents of visible emissions in accordance with permit condition 4, Section III, Plant Wide Conditions, "Report of Excess Emissions and Deviations".

B. <u>Control of Sulfur Oxide Emissions</u> **COMAR 26.11.09.07A(2)** - <u>Sulfur Content Limitations for Fuel</u>. "A person may not burn, sell, or make available for sale any fuel with a sulfur content by weight in

excess of or which otherwise exceeds the following limitations: In Areas III and IV: (b) Distillate fuel oils, 0.3 percent."

### **Compliance Demonstration:**

The Permittee shall obtain a certification from the fuel supplier indicating that the oil complies with the limitation on the sulfur content of the fuel oil.

The Permittee shall maintain records of fuel supplier's certification and shall make records available to the Department upon request. [Reference: COMAR 26.11.03.06C].

The Permittee shall report fuel supplier certification to the Department upon request [Reference: COMAR 26.11.09.07C].

C. Control of Nitrogen Oxide Emissions

**COMAR 26.11.09.08G**- Requirements for Fuel-Burning Equipment with a Capacity Factor of 15 Percent or Less, and Combustion Turbines with a Capacity Factor Greater than 15 Percent.

- (1) "A person who owns or operates fuel-burning equipment with a capacity factor (as defined in 40 CFR Part 72.2) of 15 percent or less shall:
  - (a) Provide certification of the capacity factor of the equipment to the Department in writing;
  - (b) For fuel-burning equipment that operates more than 500 hours during a calendar year, perform a combustion analysis and optimize combustion at least once annually;
  - (c) Maintain the results of the combustion analysis at the site for at least 2 years and make these results available to the Department and the EPA upon request;
  - (d) Require each operator of an installation, except combustion turbines, to attend operator training programs at least once every 3 years, on combustion optimization that are sponsored by the Department, the EPA, or equipment vendors; and
  - (e) Maintain a record of training program attendance for each operator at the site, and make these records available to the Department upon request."

<u>Note</u>: COMAR 26.11.09.08B(5)(a) states that "for the purpose of this regulation, the equipment operator to be trained may be the person who maintains the equipment and makes the necessary adjustments for efficient operation".

### **Compliance Demonstration:**

The Permittee shall perform a combustion analysis and optimize combustion at least once annually for any of the engines that operates more than 500 hours during a calendar year. [Reference: COMAR 26.11.09.08G(1)(b)].

The Permittee shall calculate the capacity factor within 30 days after the end of each month. If any engine operates more than 500 hours during a calendar year, the

Permittee shall perform a combustion analysis and optimize combustion at least once every year. [Reference: COMAR 26.11.03.06C].

The Permittee shall maintain a record of the calculated capacity factor. For any engine that operate more than 500 hours in a calendar year, the Permittee shall maintain records of the results of the combustion analyses on site for at least five years and make them available to the Department and EPA upon request. [Reference: COMAR 26.11.09.08G(1)(c) & COMAR 26.11.03.06C].

The Permittee shall maintain record of training program attendance for each operator on site for at least five years and make the records available to the Department upon request. [Reference: COMAR 26.11.09.08G(e) & COMAR 26.11.03.06C].

The Permittee shall submit records of combustion analysis and combustion analysis performed and capacity factor of the equipment to the Department as part of the April 1 certification report. [Reference: COMAR 26.11.03.06C].

The Permittee shall submit a list of trained operators to the Department upon request. [Reference: COMAR 26.11.09.08G(e) and COMAR 26.11.03.06C].

**Note:** The emergency generator is exempt from the RICE MACT - Subpart ZZZZ— National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines per 40 CFR §63.6585 (f) which states: "The emergency stationary RICE listed in paragraphs (f)(1) through (3) of this section <u>are not</u> subject to this subpart. The stationary RICE must meet the definition of an emergency stationary RICE in §63.6675, which includes operating according to the provisions specified in §63.6640(f).(3): Existing institutional emergency stationary RICE located at an area source of HAP emissions that do not operate or are not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) and that do not operate for the purpose specified in §63.6640(f)(4)(ii).

"Emergency stationary RICE" means any stationary reciprocating internal combustion engine that meets all of the criteria in paragraphs (1) through (3) of this definition. All emergency stationary RICE must comply with the requirements specified in §63.6640(f) in order to be considered emergency stationary RICE. If the engine does not comply with the requirements specified in §63.6640(f), then it is not considered to be an emergency stationary RICE under this subpart.

(1) The stationary RICE is operated to provide electrical power or mechanical work during an emergency situation. Examples include stationary RICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary RICE used to pump water in the case of fire or flood, etc.

- (2) The stationary RICE is operated under limited circumstances for situations not included in paragraph (1) of this definition, as specified in §63.6640(f).
- (3) The stationary RICE operates as part of a financial arrangement with another entity in situations not included in paragraph (1) of this definition only as allowed in §63.6640(f)(2)(ii) or (iii) and §63.6640(f)(4)(i) or (ii).

### **COMPLIANCE SCHEDULE**

ASR, Inc. is currently in compliance with all applicable air quality regulations.

### TITLE IV - ACID RAIN

Not Applicable.

### <u>TITLE VI – OZONE DEPLETING SUBSTANCES</u>

ASR, Inc. is subject to Title VI requirements.

### SECTION 112(r) - ACCIDENTAL RELEASE

ASR, Inc. is not subject to the requirements of Section 112(r).

### **PERMIT SHIELD**

ASR, Inc. did request a permit shield. The ASR, Inc 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**

(3)

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) \_\_\_\_ Space heaters utilizing direct heat transfer and used solely for comfort heat;
- (2) No. <u>5</u> Unheated VOC dispensing containers or unheated VOC rinsing containers of 60 gallons (227 liters) capacity or less;

The affected units [including U3-1: Garage Parts Washer & U11-1: Machine Shop Parts Washer] are 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.
- (a) \_\_\_✓ Storage of butane, propane, or liquefied petroleum, or natural gas;

Containers, reservoirs, or tanks used exclusively for:

	(b) No. <u>4</u>	Storage of lubricating oils;		
	(c) No. <u>1</u>	Storage of Numbers 1, 2, 4, 5, and 6 fuel oil and aviation jet engine fuel;		
	(d) No. <u>1</u>	Storage of motor vehicle gasoline and having individual tank capacities of 2,000 gallons (7.6 cubic meters) or less;		
	(e) No. <u>1</u>	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;		
(4)	26	✓ Charbroilers and pit barbecues as defined in COMAR 26.11.18.01 with a total cooking area of 5 square feet (0.46 square meter) or less;		
(5)	inc	✓ 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;		
(6)		✓ Comfort air conditioning subject to requirements of Title VI of the Clean Air Act;		
(7)		✓ Grain, metal, or mineral extrusion presses;		
(8)		Breweries with an annual beer production less than 60,000 rels;		
(9)	ро	Natural draft hoods or natural draft ventilators that exhaust air lutants into the ambient air from manufacturing/industrial or nmercial processes;		
(10)		Laboratory fume hoods and vents;		
For the	e following, atta	ach additional pages as necessary:		
(11)		ny other emissions unit, not listed in this section, with a potential to emit less nan the "de minimus" levels listed in COMAR 26.11.02.10X (list and describe nits):		
	No. <u>2</u>	Aerosol can puncturing equipment		
	No. <u>1</u>	Maintenance Welding (U11-3)		
	No. 1 M	Maintenance Steel Cutting (U11-4)		

### STATE ONLY ENFORCEABLE REQUIREMENTS

This section of the permit contains state-only enforceable requirements. The requirements in this section will not be enforced by the U.S. Environmental Protection Agency. The requirements in this section are not subject to COMAR 26.11.03 10 - Public Petitions for Review to EPA Regarding Part 70 Permits.

### 1. Applicable Regulations:

- (A) **COMAR 26.11.06.08** <u>Nuisance</u>. An installation or premises may not be operated or maintained in such a manner that nuisance or air pollution is created. Nothing in this regulation relating to the control of emissions may in any manner be consumed as authorizing or permitting the creation of, or maintenance of, nuisance or air pollution."
- (B) COMAR 26.11.06.09 Odors. "A person may not cause or permit the discharge into the atmosphere of gases, vapors, or odors beyond the property line in such a manner that a nuisance or air pollution is created."
- (C) **COMAR 26.11.15.05** <u>Control Technology Requirements.</u> "A person who complies with the ambient impact requirement in Regulation .06 of this chapter may not be affected by the amount of the installation's stack height that exceeds good engineering practice (GEP), or by any other dispersion technique.
  - (2) Unless an existing installation is controlled using T-BACT, the degree of emission limitation required in order to demonstrate compliance with Regulation .06 of this chapter may not be affected by the amount of the installation's stack height that exceeds good engineering practice (GEP), or by any other dispersion technique."
- (D) **COMAR 26.11.15.06B** <u>Ambient Impact Requirement Requirements for</u> Existing Installations, Sources, or Premises.
  - (1) "Except as provided in §B(3) of this regulation, a person may not cause or permit the discharge of a toxic air pollutant listed in COMAR 26.11.16.07 from an existing installation or source if total allowable emissions of that TAP from the premises will unreasonably endanger human health.
  - (2) A person shall demonstrate compliance with §B(1) of this regulation using the procedures established in Regulation .07 of this chapter and COMAR 26.11.16.
  - (3) A person who owns or operates an existing premises shall meet the requirements of §B(1) and (2) of this regulation for each TAP listed in COMAR 26.11.16.07 by the applicable compliance dates listed in COMAR 26.11.16.07, or not later than 2 years after becoming subject to this chapter, whichever is later."

### Condition (E) applies only to four (4) boilers (Emissions Units C1 through C4) (MDE-ARA Registration Nos. 510-0314-5-1444 through 5-1447)

(E) COMAR 26.11.01.11C – Quality Assurance for CEMS. "A CEM used to monitor a gas concentration shall meet the quality assurance criteria of 40 CFR Part 60, Appendix F, as amended, which is incorporated by reference, or, if applicable, the quality assurance criteria of 40 CFR Part 75, Appendix B, as amended."

### {Conditions (F) & (G) apply to Emission Unit No. C6}

- (F) COMAR 26.11.40.03 NOx Ozone Season Emission Caps.
  - A. The total combined NOx ozone season emissions for all non-trading large NOx units subject to this chapter may not exceed 1013 tons in accordance with the 40 CFR Part 97, Subpart E, Appendix C.
  - B. NOx Ozone Season Emission Caps.
  - (1) The total combined ozone season NOx emissions from all the affected units at an affected source as identified in Regulation .02C of this chapter may not exceed the NOx ozone season emission caps in §B(2) of this regulation.
  - (2) American Sugar NOx Ozone Season Emission Cap 24 tons
- (G) **COMAR 26.11.40.03** Monitoring and Reporting Requirements.
  - A. For non-trading large NOx units subject to this chapter, the owner or operator shall:
  - (1) Continuously monitor NOx emissions with a CEM system in accordance with 40 CFR Part 75, Subpart H and 40 CFR §51.121(i)(4); and
  - (2) Maintain records and submit reports regarding NOx emissions in accordance with 40 CFR Part 75.
  - B. The owner or operator of a non-trading large NOx unit subject to this regulation shall include emissions data obtained from a CEM system pursuant to §A of this regulation in the CEM quarterly reports submitted to the Department pursuant to COMAR 26.11.01.11E(2).
- 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.