Mr. William Blow, Plant Manager
Buckeye Terminals, LLC
6200 Pennington Avenue
Baltimore, MD 21226

JAN 1 3 2024

Dear Mr. Blow:

Re: Renewal Part 70/ Title V Operating Permit #24-510-0918

Enclosed, please find the renewal Part 70/Title V Operating Permit and Fact Sheet for the Buckeye Terminals, LLC facility located in Baltimore City, MD. Also included is a copy of the comments submitted during the comment period, and the Department's Response to Comments document. The Permit will expire on September 30, 2028.

The Code of Maryland Regulations (COMAR) 26.11.03.11 states the following:

If the Department denies a Part 70 permit or issues it with terms and conditions that are objectionable to the applicant, the applicant may request that a contested case hearing be held regarding the Permit. This request shall be made to the Department in writing not later than 15 days after the applicant receives notice that the Permit has been denied or of the objectionable terms and conditions. The request shall include the basis for the request and refer to any objectionable terms and conditions.

Please note the following revised condition in the Permit under Section II, General Conditions, Number 5, Permit Renewal:

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

If you have any questions, please feel free to contact Ms. Janay Mendez, at jmendez@maryland.gov, or (410) 537-3230.

Sincerely,

Suna Yi Sariscak, Manager
Air Quality Permits Program
Air & Radiation Administration

SYS/jm

Enclosures

cc: EPA Region III (w/encl)
Frances Lindsley-Matthews
Cynthia Campbell
Martha Maloney

KEEP PERMIT AT SITE

CONTROL NO. B - 07565

Wes Moore
Governor

State of Maryland

Serena McIlwain
Secretary

DEPARTMENT OF THE ENVIRONMENT

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

[ ] Construction Permit

[X] Part 70 Operating Permit

PERMIT NO. 24-510-0918

DATE ISSUED JAN 13 2024

PERMIT FEE To be paid in accordance with COMAR 26.11.02.19B

EXPIRATION DATE September 30, 2028

LEGAL OWNER & ADDRESS

Buckeye Terminals, LLC - Baltimore Terminal
6200 Pennington Avenue
Baltimore, Maryland 21226
Attn: Mr. William Blow

SITE

Buckeye Terminals, LLC - Baltimore Terminal
6200 Pennington Avenue
Baltimore, Maryland 21226
AI #20813

SOURCE DESCRIPTION

Bulk Petroleum Marketing Terminal.

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

Program Manager

Director, Air and Radiation Administration

MDE/ARMA/PER.009 (REV. 10-08-03)

(NOT TRANSFERABLE)

BUCKEYE TERMINALS, LLC
6200 PENNINGTON AVENUE
BALTIMORE, MARYLAND 21226
PART 70 OPERATING PERMIT NO. 510-0918

SECTION I SOURCE IDENTIFICATION

1. DESCRIPTION OF FACILITY

Buckeye Terminals, LLC (Buckeye) operates a bulk petroleum marketing terminal located at 6200 Pennington Avenue within the limits of both Baltimore City and Anne Arundel County, Maryland. Both of these areas are located in Maryland Air Quality Region III. The primary SIC code for this terminal is 4226.

2. FACILITY INVENTORY LIST

Emission Unit Identification

Emissions Unit Number	Emissions Unit Name and Description	ARA Registration Number	Date of Installation
EU-1	Tank No.1967: a 4,337,046 gallon, external floating roof equipped storage tank to store gasoline and/or ethanol	510-0918-9-0102	1960
EU-2	Tank No 1973: a 5,821,746 gallon external floating roof equipped storage tank to store gasoline and/or ethanol		1977
EU-3	Tank No.1953: a 391,524 gallon, internal floating roof equipped storage tank to store gasoline and/or ethanol		1959
	Tank No.1961: a 3,084,774 gallon, internal floating roof equipped storage tank to store gasoline and/or ethanol		1941
	Tank No.1972: a 4,980,948 gallon, internal floating roof equipped storage tank to store gasoline and/or ethanol		1969
	Tank No.1966: a 2,136,036 gallon, internal floating roof storage tank equipped with a geodesic dome roof to store gasoline or ethanol		1960 Modified in 2006
	Tank No.1964: a 4,469,808 gallon, internal floating roof equipped storage tank to store gasoline and/or ethanol		1961 Modified in 2018
EU-4	Boiler 191: 21 million Btu per hour Boiler burning natural gas as a primary fuel and No. 2 fuel oil as a backup only for process heat	510-0918- 4-1239	1959 Modified in 2014

Emissions Unit Number	Emissions Unit Name and Description	ARA Registration Number	Date of Installation
	Boiler 192: 25 million Btu per hour Boiler burning natural gas as a primary fuel and No. 2 fuel oil as a backup only for process heat	510-0918- 4-1241	1960 Modified in 2014
	Boiler 194: 29 million Btu per hour Boiler burning natural gas as a primary fuel and No. 2 fuel oil as a backup only for process heat	510-0918- 4-1242	1968 Modified in 2014
	Boiler 195: 29 million Btu per hour Boiler burning No. 6 oil for process heat	003-0283-4-0329	1971
	Boiler 196: 29 million Btu per hour Boiler burning No. 6 oil for process heat 003-0283-4-0330 1971	003-0283-4-0330	1971
EU-5	Boiler 193: 2 million Btu per hour Boiler burning No. 2 oil for comfort heat in garage	510-0918- 4-1240	1962
EU-6	500 kW diesel-powered Emergency Generator	510-0918-9-1002	2004
EU-7	Truck loading rack with four (4) bottom-loading bays for the loading of gasoline/ethanol, and two (2) bottom-loading bays for distillates controlled by a primary John Zink Carbon Adsorption/Absorption Vapor Recovery Unit Control Device or a John Zink Vapor Combustion Unit Control Device as a back-up	510-0918-9-0102	1958 Modified in 2000, 2004, 2017, and 2018
EU-8	Marine Transfer Operations	510-0918-9-0102	1958 Modified in 2018

SECTION II GENERAL CONDITIONS

1. DEFINITIONS

[COMAR 26.11.01.01] and [COMAR 26.11.02.01]

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

2. ACRONYMS

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

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

3. EFFECTIVE DATE

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

4. PERMIT EXPIRATION

[COMAR 26.11.03.13B(2)]

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

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

5. PERMIT RENEWAL

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

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

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

6. CONFIDENTIAL INFORMATION

[COMAR 26.11.02.02G]

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

7. PERMIT ACTIONS

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

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

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

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

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

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

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

8. PERMIT AVAILABILITY

[COMAR 26.11.02.13G]

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

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

[COMAR 26.11.03.20B]

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

10. TRANSFER OF PERMIT

[COMAR 26.11.02.02E]

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

11. REVISION OF PART 70 PERMITS – GENERAL CONDITIONS

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

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

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

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

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

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

12. SIGNIFICANT PART 70 OPERATING PERMIT MODIFICATIONS

[COMAR 26.11.03.17]

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

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

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

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

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

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

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

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

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

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

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

13. MINOR PERMIT MODIFICATIONS

[COMAR 26.11.03.16]

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

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

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

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

(a) Adding new requirements,

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

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

(3) Does not require or modify a:

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

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

(c) Visibility or increment analysis;

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

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

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

(5) Is not a Title I modification; and

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

b. Application for a Minor Permit Modification

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

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

(2) The proposed minor permit modification;

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

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

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

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

c. Permittee's Ability to Make Change

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

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

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

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

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

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

14. ADMINISTRATIVE PART 70 OPERATING PERMIT AMENDMENTS

[COMAR 26.11.03.15]

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

a. An application for an administrative permit amendment shall:

(1) Be in writing;

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

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

b. An administrative permit amendment:

(1) Is a correction of a typographical error;

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

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

(4) Allows for a change in ownership or operational control of a source for which the Department determines that no other revision to the permit is necessary and is documented as per COMAR 26.11.03.15B(4);

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

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

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

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

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

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

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

15. OFF-PERMIT CHANGES TO THIS SOURCE

[COMAR 26.11.03.19]

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

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

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

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

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

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

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

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

d. The Permittee shall keep a record describing:

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

(2) The emissions resulting from those changes.

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

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

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

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

16. ON-PERMIT CHANGES TO SOURCES

[COMAR 26.11.03.18]

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

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

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

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

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

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

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

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

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

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

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

(1) A description of the proposed change;

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

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

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

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

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

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

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

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

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

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

17. FEE PAYMENT

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

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

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

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

18. REQUIREMENTS FOR PERMITS-TO-CONSTRUCT AND APPROVALS

[COMAR 26.11.02.09]

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

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

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

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

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

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

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

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

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

19. CONSOLIDATION OF PROCEDURES FOR PUBLIC PARTICIPATION

[COMAR 26.11.02.11C] and [COMAR 26.11.03.01K]

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

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

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

20. PROPERTY RIGHTS

[COMAR 26.11.03.06E(4)]

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

21. SEVERABILITY

[COMAR 26.11.03.06A(5)]

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

22. INSPECTION AND ENTRY

[COMAR 26.11.03.06G(3)]

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

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

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

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

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

23. DUTY TO PROVIDE INFORMATION

[COMAR 26.11.03.06E(5)]

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

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

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

24. COMPLIANCE REQUIREMENTS

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

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

a. Enforcement action,

b. Permit revocation or revision,

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

d. Any combination of these actions.

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

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

25. CREDIBLE EVIDENCE

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

26. NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE

[COMAR 26.11.03.06E(2)]

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

27. CIRCUMVENTION

[COMAR 26.11.01.06]

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

28. PERMIT SHIELD

[COMAR 26.11.03.23]

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

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

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

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

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

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

29. ALTERNATE OPERATING SCENARIOS

[COMAR 26.11.03.06A(9)]

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

SECTION III PLANT WIDE CONDITIONS

1. PARTICULATE MATTER FROM CONSTRUCTION AND DEMOLITION

[COMAR 26.11.06.03D]

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

2. OPEN BURNING

[COMAR 26.11.07]

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

3. AIR POLLUTION EPISODE

[COMAR 26.11.05.04]

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

4. REPORT OF EXCESS EMISSIONS AND DEVIATIONS

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

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

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

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

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

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

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

5. ACCIDENTAL RELEASE PROVISIONS

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

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

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

6. GENERAL TESTING REQUIREMENTS

[COMAR 26.11.01.04]

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

7. EMISSIONS TEST METHODS

[COMAR 26.11.01.04]

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

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

a. 40 CFR 60, appendix A

b. 40 CFR 51, appendix M

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

8. EMISSIONS CERTIFICATION REPORT

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

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

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

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

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

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

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

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

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

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

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

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

(a) Significant maintenance performed,

(b) Malfunctions and downtime, and
(c) Episodes of reduced efficiency of all equipment;

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

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

9. COMPLIANCE CERTIFICATION REPORT

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

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

a. The compliance certification shall include:

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

(2) The compliance status;

(3) Whether the compliance was continuous or intermittent;

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

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

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

10. CERTIFICATION BY RESPONSIBLE OFFICIAL

[COMAR 26.11.02.02F]

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

The certification shall be in the following form:

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

11. SAMPLING AND EMISSIONS TESTING RECORD KEEPING

[COMAR 26.11.03.06C(5)]

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

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

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

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

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

e. The analytical techniques and methods used; and

f. The results of each analysis.

12. GENERAL RECORDKEEPING

[COMAR 26.11.03.06C(6)]

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

These records and support information shall include:

a. All calibration and maintenance records;

b. All original data collected from continuous monitoring instrumentation;

c. Records which support the annual emissions certification; and

d. Copies of all reports required by this permit.

13. GENERAL CONFORMITY

[COMAR 26.11.26.09]

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

14. ASBESTOS PROVISIONS

[40 CFR 61, Subpart M]

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

15. OZONE DEPLETING REGULATIONS

[40 CFR 82, Subpart F]

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

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

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

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

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

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

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

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

16. ACID RAIN PERMIT

Not applicable

SECTION IV PLANT SPECIFIC CONDITIONS

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

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

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

Table IV - 1	
1.0	**Emissions Unit Number** EU-1: Tank No. 1967: a 4,337,046 gallon, external floating roof storage tank for gasoline or ethanol installed in 1960 EU-2: Tank No. 1973: a 5,821,746 gallon, external floating roof storage tank for gasoline or ethanol installed in 1977 **(ARA Registration No. 510-0918-9-0102)**
1.1	**Applicable Standards/Limits** A. Control of VOC (1) **COMAR 26.11.13.03B(2)(a)-(d)** which requires the Permittee to meet the following equipment requirements: (a) The external floating roof shall be equipped with a primary and secondary seal. (b) Openings in the external floating roof, except for automatic bleeder vents, rim space vents, and leg sleeves, shall be equipped with a projection below the liquid surface. The opening with projections shall also be equipped with a cover, seal, or lid,

Table IV - 1

which shall be maintained in a closed position at all times, except when the device is in actual use.

(c) Automatic bleeder vents shall be closed at all times except when the roof is resting on the roof supports. Rim vents shall be set to the open position when the roof is being floated off the leg supports or at the manufacturer's recommended setting.

(d) Roof drains shall be provided with a slotted membrane fabric or equivalent cover that encapsulates at least 90 percent of the area of the drain opening.

(2) **COMAR 26.11.13.03B(3)(a)-(c)** which requires the Permittee to meet the following seal requirements:

(a) There shall be no visible holes, tears, or other openings in a seal or seal fabric.

(b) Each seal shall be intact and uniformly in place around the circumference of the floating roof between the floating roof and the tank wall.

(c) The accumulated area of the gaps between the secondary seal and the tank wall that are greater than 1/8 inch in width may not exceed 1.0 square inch per foot of tank diameter.

(3) **40 CFR 60.112(a)(1)** which requires the Permittee to equip Storage Tank No. 1973 with a floating roof, a vapor recovery system or their equivalents.

B. Control of HAP

40 CFR 63, Subpart BBBBBB which requires the Permittee to meet emission limits and management practices for gasoline storage tanks by equipping each tank with an external floating roof meeting the following specifications:

(1) Each external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge. The closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal, and the upper seal is referred to as the secondary seal.

Table IV - 1

(a) The primary seal shall be either a mechanical shoe seal or a liquid-mounted seal. Except as provided in 40 CFR §60.113b(b)(4), the seal shall completely cover the annular space between the edge of the floating roof and tank wall.

(b) The secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion except as allowed in §60.113b(b)(4).

[Authority: 40 CFR §60.112b(a)(2)(i), §63.11087(a), and Table 1 to 40 CFR 63, Subpart BBBBBB].

(2) If a tank does not meet the requirements of 40 CFR §60.112b(a)(2)(i):

(a) Except for automatic bleeder vents and rim space vents, each opening in a noncontact external floating roof shall provide a projection below the liquid surface.

(b) Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof is to be equipped with a gasketed cover, seal, or lid that is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use.

(c) Automatic bleeder vents are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.

(d) Rim vents are to be set to open when the roof is being floated off the roof legs supports or at the manufacturer's recommended setting.

(e) Automatic bleeder vents and rim space vents are to be gasketed.

(f) Each emergency roof drain is to be provided with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening.

[Authority: 40 CFR §60.112b(a)(2)(ii), §63.11087(a), and Table 1 to 40 CFR 63, Subpart BBBBBB]

Table IV - 1	
	(3) The roof shall be floating on the liquid at all times (i.e., off the roof leg supports) except during initial fill until the roof is lifted off leg supports and when the tank is completely emptied and subsequently refilled. The process of filling, emptying, or refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible. **[Authority: 40 CFR §60.112b(a)(2)(iii), §63.11087(a), and Table 1 to 40 CFR 63, Subpart BBBBBB]**
1.2	**Testing Requirements:** A. Control of VOC At least once a year, the Permittee shall determine the total secondary seal gap between the secondary seal and tank wall over the entire circumference of the tank by summing the areas of the individual gaps. The lengths and widths of the gaps are measured by passing a 1/8 inch diameter probe between the seal and the tank wall and other obstructions in the tank. The probe should move freely without forcing or binding against the seal. **[Authority: COMAR 26.11.13.03B(4)(b)]** B. Control of HAP The Permittee shall meet the following requirements for each tank storing gasoline: (1) Determine the gap areas and maximum gap widths, between the primary seal and the wall of the storage vessel and between the secondary seal and the wall of the storage vessel according to the following frequency. (a) Measurements of gaps between the tank wall and the primary seal (seal gaps) shall be performed at least once every 5 years. (b) Measurements of gaps between the tank wall and the secondary seal shall be performed at least once per year. **[Authority: 40 CFR §60.113b(b)(1) and §63.11092(e)(2)]** (2) Determine gap widths and areas in the primary and secondary seals individually by the following procedures: (a) Measure seal gaps, if any, at one or more floating roof levels when the roof is floating off the roof leg supports.

Table IV - 1

(b) Measure seal gaps around the entire circumference of the tank in each place where a 0.32-cm diameter uniform probe passes freely (without forcing or binding against seal) between the seal and the wall of the storage vessel and measure the circumferential distance of each such location.

(c) The total surface area of each gap shall be determined by using probes of various widths to measure accurately the actual distance from the tank wall to the seal and multiplying each such width by its respective circumferential distance.

[Authority: 40 CFR §60.113b(b)(2) and §63.11092(e)(2)]

(3) Add the gap surface area of each gap location for the primary seal and the secondary seal individually and divide the sum for each seal by the nominal diameter of the tank and compare each ratio to the respective standards and make necessary repairs or empty the storage vessel within 45 days of identification in any inspection for seals not meeting the following requirements:

(a) The accumulated area of gaps between the tank wall and the mechanical shoe or liquid-mounted primary seal shall not exceed 212 cm^2 per meter of tank diameter, and the width of any portion of any gap shall not exceed 3.81 cm.

(i) One end of the mechanical shoe is to extend into the stored liquid, and the other end is to extend a minimum vertical distance of 61 cm above the stored liquid surface.

(ii) There are to be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

(b) The secondary seal is to meet the following requirements:

(i) The secondary seal is to be installed above the primary seal so that it completely covers the space between the roof edge and the tank wall except as provided in 40 CFR §60.113 (b)(2)(iii).

(ii) The accumulated area of gaps between the tank wall and the secondary seal shall not exceed 21.2 cm^2 per meter of tank diameter, and the width of any portion of any gap shall not exceed 1.27 cm.

Table IV - 1	
	(iii) There are to be no holes, tears, or other openings in the seal or seal fabric. (c) If a failure that is detected during inspections required in 40 CFR §60.113b(b)(1) cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Department in the inspection report required in 40 CFR §60.115b(b)(4). Such extension request must include a demonstration of unavailability of alternate storage capacity and a specification of a schedule that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible. **[Authority: 40 CFR §60.113b(b)(3) and (4) and §63.11092(e)(2)]**
1.3	**Monitoring Requirements:** A. Control of VOC The Permittee shall perform semiannual visual inspections of the primary and secondary seals. **[Authority: COMAR 26.11.13.03B(4)(a)]** B. Control of HAP For each tank storing gasoline, the Permittee shall visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed. If the external floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, the Permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with gasoline. **[Authority: 40 CFR §60.113b(b)(6) and (b)(6)(i) and §63.11092(e)(2)]**
1.4	**Record Keeping Requirements:** A. Control of VOC The Permittee shall keep records of the results of all inspections of floating roofs and seals and a record of all repairs or replacement of the seals, including the date and the action taken. For each tank, the

Table IV - 1	
	Permittee shall record the average monthly storage temperature and throughput. All records shall be kept on site for at least five years. **[Authority: COMAR 26.11.13.03C(1),(2), and (3) and COMAR 26.11.03.06C]** B. Control of HAP The Permittee shall keep a record of each gap measurement performed as required by 40 CFR §60.113b(b). Each record shall identify the storage vessel in which the measurement was performed and shall contain: (a) The date of measurement. (b) The raw data obtained in the measurement. (c) The calculations described in 40 CFR §60.113b (b)(2) and (b)(3). **[Authority: 40 CFR §60.115b(b)(3), §63.11087(e) and §63.11094(a)]**
1.5	**Reporting Requirements:** A. Control of VOC The Permittee shall notify the Department of an intended tank inspection at least 15 days before the proposed inspection date and make all records available to the Department upon request. **[Authority: COMAR 26.11.13.03B(4)(c)]** Note: Meeting the reporting requirements of NSPS Kb satisfies the reporting requirements of COMAR 26.11.13.03B(4)(c). B. Control of HAP (1) The Permittee shall notify the Department at least 30 days in advance of any gap measurements required by paragraph 40 CFR §60.113b(b)(1) to afford the Department the opportunity to have an observer present. **[Authority: 40 CFR §60.113b(b)(5) and §63.11092(e)(2)]** (2) For all the inspections required by 40 CFR §60.113b(b)(6), the Permittee shall notify the Department in writing at least 30 days prior to the filling or refilling of each storage vessel to afford the Department the opportunity to inspect the storage vessel prior to

Table IV - 1	
	refilling. If the inspection required is not planned and Permittee could not have known about the inspection 30 days in advance of refilling the tank, the Permittee shall notify the Department at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Department at least 7 days prior to the refilling. **[Authority: 40 CFR §60.113b(b)(6)(ii) and §63.11092(e)(2)]** (3) After each seal gap measurement that detects gaps exceeding the limitations specified by 40 CFR §60.113b(b)(4), the Permittee shall submit a report to the Department within 30 days of the inspection. The report will identify the vessel and contain the information specified in 40 CFR §60.115b(b)(2) and the date the vessel was emptied or the repairs made and date of repair. **[Authority: 40 CFR §60.115b(b)(4), §63.11087(e) and §63.11094(a)]** (4) The Permittee shall submit a semiannual compliance report to the Department. The report shall include: (a) The information specified in 40 CFR §60.115b(b); and (b) For any tank complying with 40 CFR §63.11087(b) after the January 10, 2011 compliance date, the Notification of Compliance Status information for each tank that achieves compliance with 40 CFR 63, Subpart BBBBBB during the reporting period. **[Authority: 40 CFR §60.11095(a)(1) and (4)]**

Table IV - 2	
2.0	**Emissions Unit Number(s)** EU-3: Tank No. 1953, 1961, 1972, 1966, 1964 Tank No. 1953: a 391,524 gallon, internal floating roof equipped storage tank for gasoline and/or ethanol installed in 1959 Tank No. 1961: a 3,084,744 gallon, internal floating roof equipped storage tank for gasoline and/or ethanol installed in 1941

Table IV - 2	
	Tank No. 1972: a 4,980,948 gallon, internal floating roof equipped storage tank for gasoline and/or ethanol installed in 1969 Tank No. 1966: a 2,136,036 gallon, internal floating roof equipped storage tank for gasoline and/or ethanol installed in 1960 and modified in 2006 by the installation of a geodesic dome roof. Tank No. 1964: a 4,469,808 gallon, internal floating roof equipment storage tank for gasoline and/or ethanol installed in 1961 and modified in 2018 **(ARA Registration No. 510-0918-9-0102)**
2.1	**Applicable Standards/Limits** Control of VOC and HAP (1) **COMAR 26.11.13.03A(1)(a) and (b)** which requires the Permittee to meet the following equipment requirements: (a) Each tank's gauging and sampling devices shall be gas tight except when in use. (b) Each tank shall be equipped with one of the following properly installed, operating, and well maintained emission control systems except as exempted under COMAR 26.11.13.02C(2): i. An internal floating roof equipped with a primary and secondary seal, ii. A pressure tank system that maintains a pressure at all times to prevent loss of vapors to the atmosphere, or iii. A vapor control system capable of collecting the vapors from the tank and disposing of these vapors to prevent their emission to the atmosphere. (2) **COMAR 26.11.13.03A(2)** which requires the Permittee to meet the following seal requirements: (a) There shall be no visible holes, tears, or other openings in the seal or seal fabric.

Table IV - 2	
	(b) Each seal shall be intact and uniformly in place around the circumference of the floating roof between the floating roof and the tank wall. (c) The accumulated area of the gaps between the secondary seal and the tank wall and between the seal and other obstructions inside the tank (that is, ladder, roof supports, gauging and sampling devices) that are greater than 1/8 inch in width may not exceed 1.0 square inch per foot of tank diameter. (3) **40 CFR 60.112b(a)(1)** which requires the Permittee to equip the storage vessel with a fixed roof in combination with an internal floating roof meeting the specifications listed in 40 CFR §60.112b(a)(1)(i), §60.112b(a)(1)(ii)(A), §60.112b(a)(1)(ii)(C), and §60.112b(a)(1)(iii). **[Authority: 40 CFR §60.112b(a)(1), §63.11087(a), and Table 1 to 40 CFR, Part 63, Subpart BBBBBB, requirement 2(b)]** The internal floating roof shall be floating on the liquid surface (but not necessarily in complete contact with it) inside the storage vessel at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible. **[Authority: 40 CFR §60.112b(a)(1)(i), §63.11087(a), and Table 1 to 40 CFR, Part 63, Subpart BBBBBB, requirement 2(b)]** <u>For Tank 1964 only</u> (4) **40 CFR §60.112b(a)(1)** which requires the Permittee to equip the internal floating roof with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof listed in 40 CFR §60.112b(a)(1)(ii)(A-C). **[Authority: 40 CFR §60.112b(a)(1)(ii-ix) and ARA Permit to Construct issued April 3, 2018]** **[Note: These requirements also satisfy the requirements of COMAR 26.11.13.03A(1)(b) and COMAR 26.11.13.03A(2).]**
2.2	**<u>Testing Requirements:</u>**

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	Control of VOC and HAP (1) See Monitoring, Record Keeping, and Reporting Requirements. (2) During all internal tank inspections, the Permittee shall determine the total seal gap by summing the areas of the individual gaps. The lengths and widths of the gaps shall be measured by passing a 1/8 inch diameter probe between the seal and the tank wall and other obstructions in the tank. (The probe should move freely without forcing or binding against the seal). **[Authority: COMAR 26.11.13.03A(4)]** (3) and (4) See Monitoring, Record Keeping, and Reporting Requirements.
2.3	**Monitoring Requirements:** Control of VOC and HAP (1) The Permittee shall perform an annual visual inspection of each tank's gauging and sampling devices. If a failure of a gauging or sampling device is detected during a required visual inspection, the Permittee shall repair the device or empty and remove the tank from service within 45 days. If a repair cannot be made within 45 days and if the tank cannot be emptied within 45 days, a 30-day extension may be requested from the Department. Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the Permittee will take that will assure that the device will be repaired or the tank will be emptied as soon as possible. **[Authority: COMAR 26.11.03.06C]** (2), (3) and (4) The Permittee shall meet the following monitoring requirements: (a) The Permittee shall visually inspect the internal floating roof, the primary seal, and the secondary seal, prior to filling or refilling the storage vessel with volatile organic liquid. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the Permittee shall repair the items

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before filling or refilling the storage vessel. **[Authority: 40 CFR §60.113b(a)(1), §63.11087(c), and §63.11092(e)(1)]**

(b) The Permittee shall visually inspect the internal floating roof and the primary seal or the secondary seal through manholes and roof hatches on the fixed roof at least once every twelve (12) months after initial fill. If the internal floating roof is not resting on the surface of the volatile organic liquid inside the storage vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the Permittee shall repair the items or empty and remove the storage vessel from service within 45 days, and perform an internal inspection of the floating roof and seals. If a failure that is detected during inspections cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Department in the inspection report required by 40 CFR §60.115b(a)(3). Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the Permittee will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible. **[Authority: COMAR 26.11.13.03A(3)(a), COMAR 26.11.13.03A(3)(b), 40 CFR §60.113b(a)(2), §60.113b(a)(3)(ii), §63.11087(c), and §63.11092(e)(1)]** Note: the annual inspection requirements of 40 CFR, Part 60, Subpart Kb §60.113b(a)(2) and (a)(3)(ii) satisfy the annual inspection requirements of COMAR 26.11.13.03A(3)(a) and (b).

(c) The Permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the Permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with volatile organic liquid. The storage vessel shall be emptied, degassed, and inspected in accordance with the specifications

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	of this paragraph at a frequency of no less than once every ten (10) years. **[Authority: COMAR 26.11.13.03A(3)(c), 40 CFR §60.113b(a)(3)(i), §60.113b(a)(4), §63.11087(c), and §63.11092(e)(1)]** Note: Compliance with the internal inspection requirements of 40 CFR, Part 60, Subpart Kb §60.113b(a)(3)(i) and (a)(4) satisfy the internal inspection requirements of COMAR 26.11.13.03A(3)(c). Based on the revisions to 40 CFR, Part 60, Subpart Kb dated January 19, 2021, the Permittee has the option to meet the inspection requirements by complying with 40 CFR 63 Subpart WW, which allows 10-year internal seal inspection to be conducted while the tanks remain in service. If the Permittee chooses to comply with 40 CFR 63 Subpart WW, the Permittee must also comply with all conditions specified under 40 CFR 60.110b(e)(5), including the recordkeeping and reporting requirements listed under 40 CFR 60.110b(e)(5)(iv).
2.4	**Record Keeping Requirements:** Control of VOC and HAP (1) The Permittee shall record the results of all visual inspections of each tank's gauging and sampling devices. The Permittee shall also record all repairs or replacements including the date and the action taken. **[Authority: COMAR 26.11.03.06C]** (2) and (3) The Permittee shall maintain the following records: **[Authority: COMAR 26.11.13.03C(4)]** (a) Each inspection performed as required by 40 CFR §60.113b(a)(1), (a)(2), (a)(3), and (a)(4) and COMAR 26.11.13.03A(3) for each storage tank. Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings). This information shall also be included in the semiannual compliance report required by 40 CFR §63.11095(a). **[Authority: COMAR 26.11.13.03C(1), 40**

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	CFR §60.115b(a)(2), §63.11087(e), §63.11094(a), and §63.11095(a)(1)] (b) All repairs or replacement of the seals, including the date and the action taken for each storage tank. **[Authority: COMAR 26.11.13.03C(2)]** (d) The average monthly storage temperature and throughput for each storage tank. **[Authority: COMAR 26.11.13.03C(3)]** <u>For Tank 1964</u> (5) The Permittee shall maintain the following records: (a) The dimension of the storage vessel and an analysis showing the capacity of the storage vessel. **[Authority: 40 CFR §60.116b(b)]** (b) The volatile organic liquid stored, the period of storage, and the maximum true vapor pressure that the volatile organic liquid during the respective storage period (available storage temperature data may be used to determine the maximum true vapor pressure). **[Authority: 40 CFR §60.116b(c) and (e)]**
2.5	**<u>Reporting Requirements</u>:** <u>Control of VOC and HAP</u> (1) Records of visual inspections of each tank's gauging and sampling devices shall be made available to the Department upon request. **[Authority: COMAR 26.11.03.06C]** (2), (3) and (4) The Permittee shall meet the following reporting requirements: (a) The Permittee shall notify the Department in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by 40 CFR 60.113b(a)(1) and (a)(4) to afford the Department the opportunity to have an observer present. If the inspection required by 40 CFR 60.113b(a)(4) is not planned and the Permittee could not have known about the inspection 30 days in advance of refilling the

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tank, the Permittee shall notify the Department at least seven (7) days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Department at least seven (7) days prior to the refilling. **[Authority: COMAR 26.11.13.03A(3)(d), 40 CFR §60.113b(a)(5), §63.11087(c), and §63.11092(e)(1)]**

(b) If any of the conditions described in 40 CFR §60.113b(a)(2) are detected during the annual visual inspection required by 40 CFR §60.113b(a)(2), a report shall be furnished to the Department within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied, or the nature of and date the repair was made. This information shall also be included in the semiannual compliance report required by 40 CFR §63.11095(a). **[Authority: 40 CFR §60.115b(a)(3), §63.11087(e), §63.11094(a), and §63.11095(a)(1)]**

(c) After each inspection required by 40 CFR §60.113b(a)(3) that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in 40 CFR §60.113b(a)(3)(ii), a report shall be furnished to the Department within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of 40 CFR §60.112b(a)(1) or §60.113b(a)(3) and list each repair made. This information shall also be included in the semiannual compliance report required by 40 CFR §63.11095(a). **[Authority: 40 CFR §60.115b(a)(4), §63.11087(e), §63.11094(a), and §63.11095(a)(1)]**

(d) The Permittee shall submit to the Department semiannual compliance reports that include the following information:

(i) Records of each inspection performed for each of the storage tanks as required by 40 CFR §60.113b(a)(1), (a)(2), (a)(3), (a)(4), and COMAR 26.11.13.03A(3). **[Authority: 40 CFR §60.115b(a)(2), §63.11087(e), and §63.11095(a)(1)]**

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	(ii) Reports of any of the storage tanks having the defects described in 40 CFR §60.113b(a)(2) that are detected during the annual visual inspection required by 40 CFR §60.113b(a)(2). **[Authority: 40 CFR §60.115b(a)(3), §63.11087(e), and §63.11095(a)(1)]** (iii) Reports that find any of the storage tanks not meeting the specifications of 40 CFR §60.112b(a)(1) or §60.113b(a)(3) during inspections required by 40 CFR §60.113b(a)(3). **[Authority: 40 CFR §60.115b(a)(4), §63.11087(e), and §63.11095(a)(1)]**

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3.0	**Emissions Unit Number(s)** EU-4: Fuel Burning Equipment (Boilers) for Process Heat Boiler 191: a 21 MMBtu/hr boiler fired with natural gas as a primary fuel and No. 2 fuel oil as a backup only, modified in 2014 **(ARA Registration No. 510-0918-4-1239)** Boiler 192: a 25 MMBtu/hr boiler fired with natural gas as a primary fuel and No. 2 fuel oil as a backup only, modified in 2014 **(ARA Registration No. 510-0918-4-1241)** Boiler 194: a 29 MMBtu/hr boiler fired with natural gas as a primary fuel and No. 2 fuel oil as a backup only, modified in 2014 **(ARA Registration No. 510-0918-4-1242)** Boiler 195: a 29 MMBtu/hr boiler fired with No. 6 fuel oil installed in 1971 **(ARA Registration No. 003-0283-4-0329)** Boiler 196: a 29 MMBtu/hr boiler fired with No. 6 fuel oil installed in 1971 **(ARA Registration No. 003-0283-4-0330)**
3.1	**Applicable Standards/Limits** A. Visible Emissions Limitations **COMAR 26.11.09.05A(2)** which states that the Permittee shall not cause or permit the discharge of emissions from any fuel burning

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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. **Exceptions.** Section A(1) does not apply to emissions during load changing, soot blowing, startup, 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
Boiler 195 and 196

COMAR 26.11.09.06B(2) which states that the Permittee shall not discharge particulate matter emissions in excess of 0.03 gr/scfd.

C. Control of Sulfur Oxides

COMAR 26.11.09.07A(2)(c) which states that the Permittee shall not burn any residual fuel oil with a sulfur content greater 1.0% (by weight) in any boiler.

D. Control of Nitrogen Oxides

COMAR 26.11.09.08E which states that a person who owns or operates fuel-burning equipment with a rated heat input capacity of 100 MMBtu per hour or less shall:

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

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

(3) Maintain the results of the combustion analysis at the site for at least 5 years and make this data available to the Department and the EPA upon request;

(4) Once every 3 years, require each operator of the installation to attend operator training programs on combustion optimization that

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	are sponsored by the Department, the EPA, or equipment vendors; and (5) Prepare and maintain a record of training program attendance for each operator at the site, and make these records available to the Department upon request. **COMAR 26.11.09.08B(5)** which states that for the purposes of COMAR 26.11.09.08, the equipment operator to be trained may be the person who maintains the equipment and makes the necessary adjustments for efficient operation. E. Control of HAP Boiler 195 and 196 **40 CFR 63, Subpart JJJJJJ**, which requires work practice standards, emission reduction measures, and management practices for control of HAP emissions for existing oil-fired boilers. F. Operational Limit The Permittee shall burn only natural gas or No. 2 fuel oil in Boiler 191, 192, and 194 unless the Permittee obtains an approval from the Department to burn alternate fuels. No. 2 fuel oil may only be burned during periods of gas curtailment, gas supply interruption, startups, or periodic testing on liquid fuel. Periodic testing on liquid fuel may not exceed 48 hours during any calendar year for each boiler. Period of gas curtailment or supply interruption means a period of time during which the supply of gaseous fuel to an affected boiler is restricted or halted for reasons beyond the control of the facility. The act of entering into a contractual agreement with a supplier of natural gas established for curtailment purposes does not constitute a reason that is under the control of the facility for the purposes of this definition. An increase in the cost or unit price of natural gas due to normal market fluctuations not during periods of supplier delivery restriction does not constitute a period of natural gas curtailment or supply interruption. On-site gaseous fuel system emergencies or equipment failures qualify as periods of supply interruption when the emergency or failure is beyond the control of the facility. **[Authority: COMAR 26.11.02.09A 40 CFR §63.11237]**
3.2	**Testing Requirements:**

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A. Visible Emissions Limitations

See Monitoring, Record Keeping, and Reporting Requirements.

B. Control of Particulate Matter
Boiler 195 and 196

See Monitoring, Record Keeping, and Reporting Requirements for Visible Emissions Limitations.

C. Control of Sulfur Oxides

See Monitoring, Record Keeping, and Reporting Requirements.

D. Control of Nitrogen Oxides

The Permittee shall perform a combustion analysis for each installation at least once each year and optimize combustion based on the analysis. **[Authority: COMAR 26.11.09.08E(2)]**

E. Control of HAP
Boiler 195 and 196

The Permittee must conduct biennial performance tune-ups of each boiler while burning fuel oil. Each biennial tune-up must be conducted no more than 25 months after the previous tune-up. Each tune-up shall be conducted as follows:

(1) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the Permittee may delay the burner inspection until the next scheduled unit shutdown, not to exceed 36 months from the previous inspection).

(2) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.

(3) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the Permittee may delay the inspection

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	until the next scheduled unit shutdown, not to exceed 36 months from the previous inspection). (4) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any nitrogen oxide requirement to which the unit is subject. (5) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. (6) Maintain on-site and submit, if requested by the Department, a report containing the following information: (a) The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler. (b) A description of any corrective actions taken as a part of the tune-up of the boiler. (7) If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of startup. **[Authority: 40 CFR §63.11201(b) and (d), §63.11210(c) and (j), §63.11223(a) and (b), and Table 2, Item 4, of 40 CFR 63, Subpart JJJJJJ]** F. Operational Limit See Monitoring, Record Keeping, and Reporting Requirements for Control of Nitrogen Oxides.
3.3	**Monitoring Requirements:** A. Visible Emissions Limitations The Permittee shall visually inspect each boiler exhaust stack to look for visible emissions at least monthly for a 6-minute period when the boilers

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are operating. If a boiler does not operate during a month, this requirement is waived for that month. The Permittee shall record the results of each observation or the fact that the boiler did not operate during the month.
The Permittee shall perform the following, if emissions are visible to a human observer:

(1) Inspect the combustion control system and boiler/heater operations;

(2) Switch to an alternate boiler or perform all necessary adjustments and/or repairs to the boiler within 48 hours of operation so that visible emissions are eliminated or reduced to less than 20 percent opacity; and

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

If the Permittee is unable to switch to the alternate boiler or the required adjustments and/or repairs to the malfunctioning boiler have not eliminated the visible emissions within 48 hours, the Permittee shall perform a Method 9 observation once daily when boilers are operating for 18 minutes until corrective action have reduced the visible emissions to less than 20 percent opacity.
[Authority: COMAR 26.11.03.06C]

B. Control of Particulate Matter
Boiler 195 and 196

See Monitoring, Record Keeping, and Reporting Requirements for Visible Emissions Limitations.

C. Control of Sulfur Oxides

The Permittee shall obtain fuel supplier certifications for all residual fuels used. The fuel supplier certification shall include the name of the supplier and the sulfur content or maximum sulfur content of the oil.
[Authority: COMAR 26.11.03.06C]

D. Control of Nitrogen Oxides

Once every three years, require each operator of the installation to attend operator training programs on combustion optimization that are

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	sponsored by the Department, the EPA, or equipment vendors. **[Authority: COMAR 26.11.09.08E(4)]** Note: As specified in COMAR 26.11.09.08B(5), for the purposes of COMAR 26.11.09.08, the equipment operator to be trained may be the person who maintains the equipment and makes the necessary adjustments for efficient operation. E. Control of HAP Boiler 195 and 196 At all times the Permittee must operate and maintain the boilers, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the Permittee to make any further efforts to reduce emissions if levels required by 40 CFR 63, Subpart JJJJJJ have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Department that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. **[Authority: 40 CFR §63.11205(a)]** F. Operational Limit If the Permittee shall obtain an approval from the Department to burn No. 2 fuel oil in any of the three (3) boilers at any other times other than allowed under section 3.1 Part F of this permit the Permittee shall comply with the requirements of 40 CFR 63, Subpart JJJJJJ.
3.4	**Record Keeping Requirements:** A. Visible Emissions Limitations The Permittee shall maintain results of the visible emissions observations and, if applicable, the results of the inspections and the corrective actions taken to reduce the visible emissions. **[Authority: COMAR 26.11.03.06C]** B. Control of Particulate Matter Boiler 195 and 196

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See Monitoring, Record Keeping, and Reporting Requirements for Visible Emissions Limitations.

C. Control of Sulfur Oxides

The Permittee shall maintain records of fuel supplier certifications and shall make records available to the Department upon request. **[Authority: COMAR 26.11.03.06C]**

The Permittee shall maintain records of the type and amount of each fuel combusted during each calendar month. **[Authority: COMAR 26.11.02.19C]**

D. Control of Nitrogen Oxides

The Permittee shall maintain the results of the combustion analyses and test results at the site and make this data available to the Department and EPA upon request. **[Authority: COMAR 26.11.09.08E(3)]**

The Permittee shall prepare and maintain a record of training program attendance for each operator. **[Authority: COMAR 26.11.09.08E(5)]**

E. Control of HAP
Boiler 195 and 196

The Permittee must maintain the following records:

(1) As required in 40 CFR §63.10(b)(2)(xiv), the Permittee must keep a copy of each notification and report that the Permittee submitted to comply with 40 CFR 63, Subpart JJJJJJ and all documentation supporting any Initial Notification or Notification of Compliance Status that the Permittee submitted.

(2) The Permittee must keep records to document conformance with the work practices, emission reduction measures, and management practices required by 40 CFR §63.11214 and §63.11223 as follows:

(a) Records must identify each boiler, the date of tune-up, the procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned.

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	(b) A copy of the energy assessment report for each boiler. (c) Records of the occurrence and duration of each malfunction of the boiler, or of the associated air pollution control and monitoring equipment. (d) Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in 40 CFR §63.11205(a), including corrective actions to restore the malfunctioning boiler, air pollution control, or monitoring equipment to its normal or usual manner of operation. (e) Records must be in a form suitable and readily available for expeditious review. The Permittee must keep each record for five (5) years following the date of each recorded action. The Permittee must keep each record on-site or be accessible from a central location by computer or other means that instantly provide access at the site for at least two (2) years after the date of each recorded action. The Permittee may keep the records off site for the remaining three (3) years. **[Authority: 40 CFR §63.11225(c) and (d)]** F. Operational Limit The Permittee shall maintain records of natural gas and No. 2 fuel usage for Boilers 191, 192, and 194 including the types and amounts of fuel used and documentation showing that No. 2 fuel was only used during periods of natural gas curtailment or for testing.
3.5	**Reporting Requirements:** A. Visible Emissions Limitations 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". **[Authority: COMAR 26.11.03.06C]** B. Control of Particulate Matter

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Boiler 195 and 196

See Monitoring, Record Keeping, and Reporting Requirements for Visible Emissions Limitations.

C. Control of Sulfur Oxides

The Permittee shall submit all required fuel records with the supporting data for the Annual Emissions Certification Report due April 1st of each calendar year. **[Authority: COMAR 26.11.02.19C]**

D. Control of Nitrogen Oxides

The Permittee shall report records of combustion analyses and training program attendance upon request. **[Authority: COMAR 26.11.09.08E(3) and (5)]**

E. Control of HAP
Boiler 195 and 196

(1) The Permittee must prepare a biennial compliance report containing the following information:

(a) Company name and address.

(b) Statement by a responsible official, with the official's name, title, phone number, email address, and signature, certifying the truth, accuracy and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements of 40 CFR 63, Subpart JJJJJJ. The notification must include the following certification of compliance, as applicable, and signed by a responsible official:

(i) "This facility complies with the requirements in 40 CFR §63.11223 to conduct a biennial tune-up of the boiler."

(ii) "This facility complies with the requirement in 40 CFR §§63.11214(d) and 63.11223(g) to minimize the boiler's time spent during startup and shutdown and to conduct startups and shutdowns according to the manufacturer's

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	recommended procedures or procedures specified for a boiler of similar design if manufacturer's recommended procedures are not available." (2) If the Permittee has switched fuels or made a physical change to the boiler and the fuel switch or change resulted in the applicability of a different subcategory within 40 CFR 63, Subpart JJJJJJ, or in the boiler switching out of 40 CFR 63, Subpart JJJJJJ due to a change to 100 percent natural gas, the Permittee must provide notice of the date upon which the Permittee made the change, within 30 days of the change. The notification must identify: (a) The name of the owner or operator of the affected source, the location of the source, the boiler that was changed and the date of the notice. (b) The date upon which the change occurred and a description of the change. **[Authority: 40 CFR §63.11225(a), (b), and (g)]** F. Operational Limit The Permittee shall submit fuel usage records to the Department upon request.

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4.0	**Emissions Unit Number(s)** EU-5: Fuel Burning Equipment (Boiler) for Comfort Heat in Garage Boiler 193: a 2 MMBtu/hr boiler burning No. 2 fuel oil installed in 1962 **(ARA Registration No. 510-0918-4-1240)**
4.1	**Applicable Standards/Limits** A. Visible Emissions Limitations

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COMAR 26.11.09.05A(2) which prohibits visible emissions from any fuel burning equipment other than water in an uncombined form, except as allowed under COMAR 26.11.09.05A(3).

COMAR 26.11.09.05A(3) which allows visible emissions from any fuel burning equipment, 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 Sulfur Oxides

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

C. Control of Nitrogen Oxides

COMAR 26.11.09.08F(1), which states that a person who owns or operates a space heater as defined in COMAR 26.11.09.01B:

(1) Maintain an operating and maintenance plan to minimize NOx emissions based on the recommendations of equipment vendors and other information including the source's operating and maintenance experience;

(2) Implement the operating and maintenance plan and maintain the plan at the premises for review upon request by the Department;

(3) Require installation operators to attend in-State operator training programs once every 3 years on combustion optimization that are sponsored by the Department, the EPA, or equipment vendors; and

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

COMAR 26.11.09.08B(5) – Operator Training: For the purpose of this regulation, the equipment operator to be trained may be the person who maintains the equipment and makes the necessary

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	adjustments for efficient operation. D. Control of HAP **40 CFR 63, Subpart JJJJJJ**, which requires work practice standards, emission reduction measures, and management practices for control of HAP emissions for existing oil-fired boilers with a heat input capacity of equal to or less than 5 million Btu per hour. E. Operational Limitation The Permittee shall only burn distillate fuel oil (No. 2 fuel oil) in the boilers unless the Permittee applies for and receives an approval or permit from the Department to burn alternate fuels. **[Authority: COMAR 26.11.02.09A]**
4.2	**Testing Requirements:** A. Visible Emissions Limitations See Monitoring, Record Keeping, and Reporting Requirements. B. Control of Sulfur Oxides See Monitoring, Record Keeping, and Reporting Requirements. C. Control of Nitrogen Oxides See Monitoring, Record Keeping and Reporting Requirements. D. Control of HAP The Permittee must demonstrate continuous compliance by conducting performance tune-ups of the boiler. (1) The Permittee must conduct the tune-up while burning distillate oil (No. 2 fuel oil). (2) The Permittee must conduct a tune-up of the boiler every five years. Each 5-year tune-up must be conducted no more than 61 months after the previous tune-up.

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(3) Each tune-up shall be conducted as follows:

(a) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the Permittee may delay the burner inspection until the next scheduled unit shutdown, not to exceed 72 months from the previous inspection).

(b) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.

(c) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the Permittee may delay the inspection until the next scheduled unit shutdown, not to exceed 72 months from the previous inspection).

(d) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any nitrogen oxide requirement to which the unit is subject.

(e) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer.

(f) Maintain on-site and submit, if requested by the Department, a report containing the following information:

(i) The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler.

(ii) A description of any corrective actions taken as a part of the tune-up of the boiler.

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	(g) If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of startup. **[Authority: 40 CFR §63.11196(a)(1), §63.11201(b) and (d), §63.11210(c) and (j), §63.11223(a), (b), and (e), and Table 2, Item 12, of 40 CFR 63, Subpart JJJJJJ]** E. Operational Limitation See Record Keeping and Reporting Requirements.
4.3	**Monitoring Requirements:** A. Visible Emissions Limitations The Permittee shall properly operate and maintain the boilers in a manner to prevent visible emissions. **[Authority: COMAR 26.11.03.06C]** B. Control of Sulfur Oxides The Permittee shall obtain fuel supplier certifications for each shipment of fuel to be burned in the boilers. The certifications shall include the name of the supplier and the sulfur content or maximum sulfur content of the oil. **[Authority: COMAR 26.11.03.06C]** C. Control of Nitrogen Oxides The Permittee shall develop and maintain an operating and maintenance plan to minimize NOx. **[Authority: COMAR 26.11.09.08F(1)(b)]** D. Control of HAP At all times the Permittee must operate and maintain the boiler, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the Permittee to make any further efforts to reduce emissions if levels required by 40 CFR 63, Subpart JJJJJJ have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Department that may include, but is not

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	limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. **[Authority: 40 CFR §63.11205(a)]** E. Operational Limitation See Record Keeping and Reporting Requirements.
4.4	**Record Keeping Requirements:** A. Visible Emissions Limitations The Permittee shall maintain an operations manual and preventive maintenance plan for the boilers. The Permittee shall maintain a log of maintenance performed that relates to combustion performance. **[Authority: COMAR 26.11.03.06C]** B. Control of Sulfur Oxides The Permittee shall maintain records of fuel supplier certifications. **[Authority: COMAR 26.11.03.06C]** C. Control of Nitrogen Oxides The Permittee shall maintain: (1) Records of maintenance performed that relates to combustion performance in keeping with the requirements of an operations and maintenance plan **[Authority: COMAR 26.11.09.08F(1)(c)]** (2) Record of training program attendance for each operator and submit: a record of training program attendance for each operator to the Department upon request **[Authority: COMAR 26.11.09.08F(1)(e)]**. (3) An operations manual and preventive maintenance plan **[Authority: COMAR 26.11.09.08F(1)(b)]**. (4) Records of fuel use that demonstrate that the boiler meets the definition of a space heater. **[Authority: COMAR 26.11.09.08K(3) and COMAR 26.11.03.06C]**. D. Control of HAPs

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The Permittee must maintain the following records:

(1) As required in 40 CFR §63.10(b)(2)(xiv), the Permittee must keep a copy of each notification and report that the Permittee submitted to comply with 40 CFR 63, Subpart JJJJJJ and all documentation supporting any Initial Notification or Notification of Compliance Status that the Permittee submitted.

(2) The Permittee must keep records to document conformance with the work practices, emission reduction measures, and management practices required by 40 CFR §63.11214 and §63.11223 as follows:

(a) Records must identify each boiler, the date of tune-up, the procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned.

(b) Records of the occurrence and duration of each malfunction of the boiler, or of the associated air pollution control and monitoring equipment.

(c) Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in 40 CFR §63.11205(a), including corrective actions to restore the malfunctioning boiler, air pollution control, or monitoring equipment to its normal or usual manner of operation.

(d) Records must be in a form suitable and readily available for expeditious review. The Permittee must keep each record for five (5) years following the date of each recorded action. The Permittee must keep each record on-site or be accessible from a central location by computer or other means that instantly provide access at the site for at least two (2) years after the date of each recorded action. The Permittee may keep the records off site for the remaining three (3) years.

[Authority: 40 CFR §63.11225(c) and (d)]

E. Operational Limitation

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	The Permittee shall keep annual fuel records for the boiler including the type of fuel and the amount burned. **[Authority: COMAR 26.11.02.19C and D]**
4.5	**Reporting Requirements:** A. Visible Emissions Limitation The Permittee shall report incidents of visible emissions in accordance with permit condition 4, Section III, "Report of Excess Emissions and Deviations." **[Authority: COMAR 26.11.03.06C]** B. Control of Sulfur Oxides The Permittee shall make records of fuel supplier certifications available to the Department upon request. **[Authority: COMAR 26.11.03.06C]** C. Control of Nitrogen Oxides The Permittee shall submit all records required by COMAR 26.11.09.08F to the Department upon request. If the Permittee operates a space heater that no longer qualifies as a space heater as defined in COMAR 26.11.09.01B, the Permittee must notify the Department no longer than 60 days after the date when the Permittee shall inform the Department no later than 60 days after the date when the fuel burning equipment did not qualify and shall meet the applicable fuel burning equipment RACT requirement in the regulation. **[Authority: COMAR 26.11.09.08F(2)]** D. Control of HAP The Permittee shall submit the following notifications and reports: (1) The Permittee must submit all of the notifications in 40 CFR §§63.7(b); 63.8(e) and (f); and 63.9(b) through (e), (g), and (h) that apply to the Permittee. (2) The Permittee must prepare a 5-year compliance report containing the following information:

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(a) Company name and address.

(b) Statement by a responsible official, with the official's name, title, phone number, email address, and signature, certifying the truth, accuracy and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements of 40 CFR 63, Subpart JJJJJJ. The notification must include the following certification of compliance, as applicable, and signed by a responsible official:

(i) "This facility complies with the requirements in 40 CFR §63.11223 to conduct a 5-year tune-up of the boiler."

(ii) "This facility complies with the requirement in 40 CFR §§63.11214(d) and 63.11223(g) to minimize the boiler's time spent during startup and shutdown and to conduct startups and shutdowns according to the manufacturer's recommended procedures or procedures specified for a boiler of similar design if manufacturer's recommended procedures are not available."

(3) If the Permittee has switched fuels or made a physical change to the boiler and the fuel switch or change resulted in the applicability of a different subcategory within 40 CFR 63, Subpart JJJJJJ, or in the boiler switching out of 40 CFR 63, Subpart JJJJJJ due to a change to 100 percent natural gas, the Permittee must provide notice of the date upon which the Permittee made the change, within 30 days of the change. The notification must identify:

(a) The name of the owner or operator of the affected source, the location of the source, the boiler that was changed and the date of the notice.

(b) The date upon which the change occurred and a description of the change.

[Authority: 40 CFR §63.11225(a), (b), and (g)]

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	E. Operational Limitation Annual fuel usage records including the type of fuel used shall be submitted with the required annual emission certification. **[Authority: COMAR 26.11.02.19C and D]**

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5.0	**Emissions Unit Number(s)** EU-6: Hess Microgen 500 kW diesel powered emergency generator **(ARA Registration No. 510-0918-9-1002)**
5.1	**Applicable Standards/Limits:** A. Visible Emissions Limitations (1) **COMAR 26.11.09.05E(2)** which states that the Permittee shall not cause or permit the discharge of emissions from any engine, operating at idle, greater than 10 percent opacity. (2) **COMAR 26.11.09.05E(3)** which states that the Permittee shall not cause or permit the discharge of emissions from any engine, operating at other than idle conditions, greater than 40 percent opacity. Exceptions. **COMAR 26.11.09.05E(4)**: 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. 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 Section E(2) and (3) do not apply while maintenance, repair, or testing is being performed by qualified mechanics. B. Control of Sulfur Oxides

	COMAR 26.11.09.07A(2)(b), which limits the sulfur content of distillate fuel oil to 0.3 percent by weight. C. Control of Nitrogen Oxides (NOx RACT) **COMAR 26.11.09.08G** which states that 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: (1) Provide certification of the capacity factor of the equipment to the Department in writing; (2) 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; (3) 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; (4) 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 (5) Maintain a record of training program attendance for each operator at the site, and make these records available to the Department upon request. **COMAR 26.11.09.08B(5)** which states that for the purposes of COMAR 26.11.09.08, the equipment operator to be trained may be the person who maintains the equipment and makes the necessary adjustments for efficient operation. D. Control of HAP **40 CFR 63, Subparts A and ZZZZ** which specify general provisions and work practice and maintenance requirements for emergency engines at area sources of HAPs.
5.2	**Testing Requirements:** A. Visible Emissions Limitations

	See Monitoring, Record Keeping and Reporting Requirements. B. Control of Sulfur Oxides See Monitoring, Record Keeping and Reporting Requirements. C. Control of Nitrogen Oxides If the engine operates more than 500 hours during a calendar year, the Permittee shall perform a combustion analysis and optimize combustion at least once annually for the engine. **[Authority: COMAR 26.11.09.08G(1)(b)]** D. Control of HAP See Monitoring, Record Keeping, and Reporting Requirements.
5.3	**Monitoring Requirements:** A. Visible Emissions Limitations The Permittee shall operate and maintain the emergency engine in a manner to prevent visible emissions. **[Authority: COMAR 26.11.03.06C]** B. Control of Sulfur Oxides The Permittee shall obtain a certification from the fuel supplier indicating that the oil burned in the engine complies with the sulfur content requirement for the fuel oil. **[Authority: COMAR 26.11.03.06C]** C. Control of Nitrogen Oxides See Testing, Record Keeping and Reporting Requirements. D. Control of HAP (1) The Permittee shall comply with the following requirements for the engine: (a) Change the oil and filter every 500 hours of operation or annually, whichever comes first;

(b) Inspect the air cleaner every 1,000 hours of operation or annually, whichever comes first;

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

(d) Minimize the engine's time spent at idle during start-up and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.

[Authority: 40 CFR §63.6603(a), §63.6625(h), and Table 2d to 40 CFR 63, Subpart ZZZZ]

(2) If the engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of 40 CFR 63, Subpart ZZZZ, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. **[Authority: Footnote 2 to Table 2d of 40 CFR 63, Subpart ZZZZ]**

(3) The engine shall be equipped with a non-resettable hour meter. **[Authority: 40 CFR §63.6625(f)]**

(4) The Permittee must be in compliance with the emission limitations and operating limitations in 40 CFR 63, Subpart ZZZZ that apply to the engines at all times. **[Authority: 40 CFR §63.6605(a) and §63.6640(a)]**

(5) At all times the Permittee must operate and maintain the emergency generator, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the Permittee to make any further efforts to reduce emissions if levels required by 40 CFR 63, Subpart ZZZZ have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Department which may

include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. **[Authority: 40 CFR §63.6605(b)]**

(6) The Permittee must operate and maintain the emergency generator according to the manufacturer's emission-related written instructions or the Permittee must develop their own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. **[Authority: 40 CFR §63.6625(e), §63.6640(a), and Table 6 to 40 CFR 63, Subpart ZZZZ]**

(7) The Permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Table 2d of 40 CFR 63, Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2d. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5.

If all of these condemning limits are not exceeded, the Permittee is not required to change the oil. If any of the limits are exceeded, the Permittee must change the oil within 2 days of receiving the results of the analysis; if an engine is not in operation when the results of the analysis are received, the Permittee must change the oil within 2 business days or before commencing operation, whichever is later. The Permittee must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for each engine. The analysis program must be part of the maintenance plan for each engine. **[Authority: 40 CFR §63.6625(i)]**

(8) The Permittee must operate the emergency generator according to the following requirements:

(a) To be considered an emergency stationary RICE under 40 CFR 63, Subpart ZZZZ, any operation other than

	emergency operation and maintenance and testing is prohibited. **[Authority: 40 CFR §63.6640(f)]** (b) There is no time limit on the use of the emergency generator in emergency situations. **[Authority: 40 CFR §63.6640(f)(1)]** (c) The Permittee may operate the emergency generator for any combination of the following purposes for a maximum of 100 hours per calendar year: maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The Permittee may petition the Department for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the Permittee maintains records indicating that federal, state, or local standards require maintenance and testing of the emergency generator beyond 100 hours per calendar year. **[Authority: 40 CFR §63.6640(f)(2)]** **[Note: This engine is not used for emergency demand response or any other non-emergency operation. Requirements in 40 CFR 63, Supbart ZZZZ that apply to engines that operate for those purposes do not apply to this engine and are not included in the permit.]**
5.4	**Record Keeping Requirements:** A. Visible Emissions Limitations The Permittee shall maintain records of all maintenance/repairs performed and make them available to the Department upon request. **[Authority: COMAR 26.11.03.06C]** B. Control of Sulfur Oxides The Permittee shall retain fuel supplier certifications at the premises stating that the fuel is in compliance with the sulfur content requirement for the fuel oil. **[Authority: COMAR 26.11.03.06C]** C. Control of Nitrogen Oxides

	The Permittee shall maintain the following records at the premises: (1) Records of the calculated capacity factors. **[Authority: COMAR 26.11.03.06C]** (2) Records of hours of operation. **[Authority: COMAR 26.11.02.19C]** (3) Records of combustion analysis performed if the hours of operation exceed 500. **[Authority: COMAR 26.11.09.08G(1)(c)]** (4) Record of training program attendance for each operator. **[Authority: COMAR 26.11.09.08G(1)(e)]** D. Control of HAP (1) The Permittee shall maintain records of the maintenance conducted on the emergency generator to demonstrate that the emergency generator was operated and maintained according to either the manufacturer's emission-related written instructions or the Permittee's own maintenance plan. **[Authority: 40 CFR §63.6655(e) and COMAR 26.11.03.06C]** (2) The Permittee shall maintain records of the hours of operation of the emergency generator that is recorded through the non-resettable hour meter. The Permittee must document how many hours are spent for emergency operation, including what classified the operation as emergency. **[Authority: 40 CFR §63.6655(f)]** (3) All records must be kept for at least five years and must be readily accessible in hard copy or electronic format, and readily available for expeditious review according to 40 CFR §63.10(b)(1). **[Authority: 40 CFR §63.6660(a), (b), and (c)]**
5.5	**Reporting Requirements:** A. Visible Emissions Limitations The Permittee shall make available to the Department upon request any records that the Permittee is required to maintain. 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." **[COMAR 26.11.03.06C]**

	B. Control of Sulfur Oxides The Permittee shall make available to the Department upon request any records that the Permittee is required to maintain. **[Authority: COMAR 26.11.03.06C]** C. Control of Nitrogen Oxides The Permittee shall make all records (combustion analyses, emissions unit hours of operation, and training program attendance) to meet the NOx RACT requirements, available to the Department upon request. The Permittee shall provide certification of the capacity factor of the equipment to the Department in writing as part of the April 1 emissions certification report. **[Authority: COMAR 26.11.09.08G, COMAR 26.11.02.19C, and COMAR 26.11.03.06C]** D. Control of HAP All required records shall be made available to the Department upon request. **[Authority: COMAR 26.11.03.06C]**

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6.0	**Emissions Unit Number** EU-7: Truck loading rack with four (4) bottom-loading bays for the loading of gasoline/ethanol, and two (2) bottom-loading bays for distillates controlled by a primary John Zink Carbon Adsorption/Absorption Vapor Recovery Unit Control Device or a John Zink Vapor Combustion Unit Control Device as a back-up **(ARA Registration Number: 510-0918-9-0102)**
6.1	**Applicable Standards/Limits:** A. Control of VOC and HAP – Vapor Collection and Control Requirements

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(1) **COMAR 26.11.13.04A(1)(a), 40 CFR 60, Subpart XX, and 40 CFR 63, Subpart BBBBBB** which require vapor collection and control as follows:

(a) The loading rack shall be equipped with a vapor collection and control system designed to collect the total organic compound vapors displaced from cargo tanks during product loading.

(b) The vapor collection and control system shall control at least 90 percent of all vapors and emissions may not exceed 6.5 milligrams of VOC per liter of gasoline or VOC loaded into gasoline cargo tanks at the loading rack.

[Authority: COMAR 26.11.13.04A(1)(a), 40 CFR §60.502(a) and (b), §63.11088(a), §63.11092(d), Table 2, Items 1(a) and 1(b) of 40 CFR 63, Subpart BBBBBB, and ARA Permit to Construct issued April 3, 2018]

B. Control of VOC and HAP – Vapor Tight Tank Truck Requirements

(1) **COMAR 26.11.13.05, 40 CFR 60, Subpart XX and 40 CFR 63, Subpart BBBBBB** which require the Permittee to load gasoline only into vapor tight gasoline cargo tanks that have been certified as capable of sustaining a pressure change of not more than 3 inches of water in 5 minutes when pressurized to a gauge pressure of 18 inches of water, or evacuated to a gauge pressure of 6 inches of water, during a test. **[Authority: COMAR 26.11.13.05A, 40 CFR §60.502(e), 40 CFR §63.11088(a), and Table 2, Item 1(d) of 40 CFR 63, Subpart BBBBBB]**

(2) ARA Permit to Construct No. 510-0918-9-0102 issued on April 3, 2018, which requires that loadings of gasoline or VOC into tank trucks be limited to vapor tight tank trucks that have been certified as capable of sustaining a pressure change of not more than 1 inch of water (equivalent to a fugitive emission rate of 8 milligrams per liter of gasoline or VOC loaded) in 5 minutes when pressurized to a gauge pressure of 18 inches of water, or evacuated to a gauge pressure of 6 inches of water, during a test. **[Note: This also satisfies the requirements of 40 CFR 60.502(e) and COMAR 26.11.13.05A.]**

C. Control of VOC and HAP – Back Pressure and Leak Requirements

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COMAR 26.11.13.04A(1)(b), 40 CFR 60 Subpart XX, and 40 CFR 63, Subpart BBBBBB, which require the Permittee design and operate the vapor collection and control systems and the loading equipment so that during loading:

(1) The gauge pressure in the delivery tank does not exceed 4,500 pascals.

(2) No pressure-vacuum vent in the vapor collection and control system begins to open at a system pressure less than 4,500 pascals.

(3) The gasoline or VOC tank truck pressure does not exceed 18 inches of water, and vacuum does not exceed 6 inches of water.

(4) There are no gasoline or VOC leaks in the system during loading or unloading operations.

[Authority: COMAR 26.11.13.04A(1)(b), 40 CFR §60.502(h), (i), and (j), 40 CFR §63.11088(a), and Table 2, Item 1(d) of 40 CFR 63, Subpart BBBBBB]

D. Control of VOC and HAP – Design and Operational Requirements

COMAR 26.11.13.04A(1)(c), 40 CFR 60 Subpart XX, and 40 CFR 63, Subpart BBBBBB which specify the following design and operational requirements:

(1) The exhaust gases from the truck loading rack shall vent through the VRU as the primary control device, or the VCU as the back-up control device when the VRU is down for maintenance or malfunction, prior to discharging to the atmosphere.

(2) The Permittee shall design the vapor collection system to prevent any total organic compounds vapors collected at one loading rack from passing to another loading rack.

(3) The Permittee shall assure that loadings of gasoline or VOC tank trucks are made only into tanks equipped with vapor collection equipment that is compatible with the terminal's vapor collection system.

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	(4) The Permittee shall assure that the terminal's and the tank truck's vapor collection systems are connected during each loading of a gasoline or VOC tank truck. (5) The Permittee shall equip the terminal's loading racks with a top submerged or bottom loading system. E. Operational Limitations (1) ARA Permit to Construct No. 510-0918-9-0102 issued on April 3, 2018, which states that total throughput of gasoline, ethanol, and gasoline additives, combined loaded into tank trucks shall not exceed 613,200,000 gallons in any consecutive 12-month period. **[Note: This limit was established to preclude applicability of Major New Source Review and to be recognized as a synthetic minor source for MACT requirements under 40 CFR Part 63 Subpart R - National Emission Standards for Gasoline Distribution Facilities.]** (2) ARA Permit to Construct No. 510-0918-9-0102 issued on April 3, 2018, which states that total throughput of distillate oil, distillate additives, and residual oil, combined shall not exceed 538,533,828 gallons in any consecutive 12-month period. F. Visible Emissions Limitation for the John Zink Vapor Combustor **COMAR 26.11.06.02C(2),** which prohibits the discharge of emissions from any building or installation other than water in an uncombined form which is visible to human observers. Exception: This does not apply to emissions during start-up and process modifications or adjustments, or occasional cleaning of control equipment, if: (a) The visible emissions are not greater than 40 percent opacity; and (b) The visible emissions do not occur for more than 6 consecutive minutes in any 60-minute period.
6.2	**Testing Requirements:** A. Control of VOC and HAP (Vapor Collection and Control Requirements)

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(1) The Permittee shall conduct performance tests on the VRU and VCU to determine total organic emissions per liter of gasoline loaded at the facility and to determine an overall control efficiency for VOC emissions caused by the facility's loading operations at least once every five years, during the period between May and September 15. Each five year performance test for the VCU or VRU must be conducted no more than 60 months after the previous performance test for the VCU or VRU, respectively.

(2) For the performance tests, the Permittee shall use Method 1009 of the Department's Technical Memorandum 91-01, "Test Methods and Equipment Specifications for Stationary Sources", which is incorporated by reference in COMAR 26.11.01.04C; the test methods and procedures in 40 CFR §60.503, except a reading of 500 parts per million shall be used to determine the level of leaks to be repaired under 40 CFR §60.503(b); or other methods approved by the Department.
[Authority: COMAR 26.11.13.04A(2)(a)(i) and (3)(b), and 40 CFR §63.11092(a)]

(3) Unless the Permittee obtains from the Department written approval to monitor and record an alternative operating parameter, during each required performance test on the VRU, the Permittee shall continuously monitor and record the organic compound concentration in the exhaust air stream using a continuous emissions monitoring system (CEMs); and during each required performance test on the facility's VCUs the Permittee shall continuously monitor for the presence of a pilot flame. **[Authority: 40 CFR §63.11092(b)(1), §63.11092(b)(1)(i)(A), §63.11092(b)(1)(iv), §63.11092(b)(3), (4), and (5), and Indicator 1 of the CAM Plan included in Table IV-4]**

(4) For each required performance test on the VRU the Permittee shall determine a monitored "operating parameter value" (as defined under 40 CFR §63.11100) for the vapor processing system using the organic compound concentration in the exhaust air stream monitored and recorded during each required performance test on the VRU supplemented by engineering assessments and manufacturer's recommendations. Each determination of an operating parameter value is subject to approval by the Department. **[Authority: COMAR 26.11.03.06C]**

(5) For all subsequent performance tests performed after the initial performance test required under 40 CFR §63.11092(a), the

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Permittee shall document the reasons for any change in the operating parameter values since the previous performance test. **[Authority: 40 CFR §63.11092(c)]**

(6) Performance tests conducted shall be conducted under conditions that the Department specifies based on representative performance (i.e., performance based on normal operating conditions) of the VRU or the VCU. The Permittee shall make available to the Department upon request necessary records to determine the conditions of the performance tests. **[Authority: 40 CFR §63.11092(g)]**

B. Control of VOC and HAP (Vapor Tight Tank Truck Requirements)
The annual certification test for gasoline cargo tanks shall consist of the following test methods: EPA Method 27, Appendix A-8, 40 CFR, Part 60 and Method 1007 of the Department's Technical Memorandum 91-01, "Test Methods and Equipment Specifications for Stationary Sources," which is incorporated by reference in COMAR 26.11.01.04C.

The test shall be conducted using a time period (t) for the pressure and vacuum tests of 5 minutes. The initial pressure (P_i) for the pressure test shall be 18 inches of water, gauge. The initial vacuum (V_i) for the vacuum test shall be 6 inches of water, gauge. The maximum allowable pressure and vacuum changes (Δ p, Δ v) for all affected gasoline cargo tanks is 3 inches of water, or less, in 5 minutes. Any needed repairs shall be completed and the cargo tank shall be retested within 15 days of the original test date.
[Authority: COMAR 26.11.13.05B, 40 CFR §63.11088(d), and §63.11092(f)(1)]

C. Control of VOC and HAP (Back Pressure and Leak Requirements)

(1) Testing for leak-tight conditions, as required in §A(1)(b)(ii) of this regulation, shall be conducted as prescribed in Method 1008 of the Department's Technical Memorandum 91-01, "Test Methods and Equipment Specifications for Stationary Sources" which is incorporated by reference in COMAR 26.11.01.04C. **[Authority: COMAR 26.11.13.04A(3)(a)]**

(2) A pressure measurement device (liquid manometer, magnehelic gauge, or equivalent instrument), capable of measuring up to 500 mm of water gauge pressure with ±2.5 mm of water precision, shall be calibrated and installed on the facility's vapor collection system

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	at a pressure tap located as close as possible to the connection with the gasoline cargo tank. **[Authority: 40 CFR §60.502(h), §60.503(d), 40 CFR §63.11088(a), and Table 2, Item 1(d) of 40 CFR 63, Subpart BBBBBB]** D. Control of VOC and HAP (Design and Operational Requirements) The loading rack and vapor collection and control systems are designed to operate as required. **[Authority: COMAR 26.11.03.06C]** E. Operational Limitation See Recordkeeping and Reporting Requirements. F. Visible Emissions Limitations See Monitoring, Record Keeping, and Reporting Requirements.
6.3	**Monitoring Requirements:** A. Control of VOC and HAP (Vapor Collection and Control Requirements) (1) The Permittee shall calibrate, certify, operate, and maintain, according to the manufacturer's specifications, a continuous monitoring system (CMS) while gasoline vapors are displaced to a vapor processing system consisting of a VRU or VCU. **[Authority: 40 CFR §63.11092(b)]** (2) When the VCU is used to control emissions from the loading rack, the Permittee shall comply with the CAM Plan for the VCU in Table IV-CAM of this permit and the following requirements: (a) The Permittee shall monitor the VCU for the presence of a pilot flame as specified under Indicator No. 1 of the CAM Plan for the VCU. (b) The Permittee shall maintain a VCU monitoring and inspection plan that describes the Permittee's approach for meeting the following requirements: (i) The VCU shall be equipped to automatically prevent gasoline loading operations from beginning at any time that the pilot flame is absent as specified under Indicator No. 1 of the CAM Plan for the VCU. (ii) The Permittee shall verify, during each manned day of operation of the loading rack, the proper

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	operation of the assist-air blower and the vapor line valve. Verification shall be through visual observation, or through an automated alarm or shutdown system that monitors system operation. A manual or electronic record of the start and end of a shutdown event may be used. (iii) The Permittee shall perform semi-annual preventive maintenance inspections of the VCU, including the automated alarm or shutdown system, according to the recommendations of the manufacturer of the system and as specified under Indicator No. 1 of the CAM Plan for the VCU. (iv) The monitoring and inspection plan shall specify conditions that would be considered malfunctions of the VCU during the inspections or automated monitoring, describe specific corrective actions that will be taken to correct any malfunction, and define what the Permittee owner or operator would consider to be a timely repair for each potential malfunction. (3) When the VRU is used to control emissions from a loading rack, the Permittee shall comply with the following monitoring requirements unless the Department approves alternative monitoring requirements under 40 CFR §63.8(b), §63.8(f), and 40 CFR 63 Subpart BBBBBB: **[Authority: CFR §63.8(b), §63.8(f), 40 CFR §63.11092(b)(1)(iv), and §63.11092(b)(3), (4), and (5)]** (a) The Permittee shall perform semi-annual preventative maintenance on the VRU according to the recommendations of the manufacturer of the system or other procedures approved by the Department. **[Authority: COMAR 26.11.03.06C]** (b) The Permittee shall maintain a continuous emissions monitoring system (CEMS) capable of measuring the organic compound concentration in the exhaust air stream of the VRU. The CEMS shall meet applicable performance specifications in 40 CFR 60, Appendix B. **[Authority: CFR 40 CFR §63.11092(b)(1), §63.11092(b)(1)(i)(A), and Table 3 to 40 CFR, Part 63, Subpart BBBBBB]**

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(c) The Permittee shall maintain and operate the CEMS in a manner consistent with good air pollution control practices as follows: The Permittee must keep the necessary parts for routine repairs of the affected CEMS equipment readily available. **[Authority: 40 CFR §63.8(c)(1) and §63.8(c)(1)(ii)]**

(d) Except for system breakdowns, out-of-control periods, repairs, maintenance periods, calibration checks, and zero (low-level) and high-level calibration drift adjustments, the CEMS shall be in continuous operation and shall meet minimum frequency of operation requirements as follows: the CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period. **[Authority: 40 CFR §63.8(c)(4)]**

(e) The Permittee must check the zero (low-level) and high-level calibration drifts at least once daily in accordance with the written procedure specified in the performance evaluation plan developed under 40 CFR §63.8(e)(3)(i) and (ii). The zero (low-level) and high-level calibration drifts must be adjusted, at a minimum, whenever the 24-hour zero (low-level) drift exceeds two times the limits of the applicable performance specifications. The system shall allow the amount of excess zero (low-level) and high-level drift measured at the 24-hour interval checks to be recorded and quantified whenever specified. **[Authority: 40 CFR §63.8(c)(6)]**

(f) The CEMS is out of control if the zero (low-level), mid-level (if applicable), or high-level calibration drift (CD) exceeds two times the applicable CD specification in the applicable performance specification; or the CEMS fails a performance test audit (e.g., cylinder gas audit), relative accuracy audit, relative accuracy test audit, or linearity test audit. **[Authority: 40 CFR §63.8(c)(7)(i)]**

(g) When the CEMS is out of control, the Permittee shall take necessary corrective action and shall repeat all necessary tests which indicate that the system is out of control. The Permittee shall take corrective action and conduct retesting until the performance requirements are below the applicable limits.

The beginning of the out-of-control period is the hour the Permittee conducts a performance check (e.g., calibration drift) that indicates an exceedance of the performance requirements.

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The end of the out-of-control period is the hour following the completion of corrective action and successful demonstration that the system is within the allowable limits.

During the period the CEMS is out of control, recorded data shall not be used in data averages and calculations, or to meet any data availability requirement. **[Authority: 40 CFR §63.8(c)(7)(ii)]**

(h) The Permittee must reduce the CEMS monitoring data as follows:

(i) Data from CEMS shall be reduced to 1-hour averages computed from four or more data points equally spaced over each 1-hour period, except during periods when calibration, quality assurance, or maintenance activities are being performed. During these periods, a valid hourly average shall consist of at least two data points with each representing a 15-minute period. Alternatively, an arithmetic or integrated 1-hour average of CEMS data may be used. Time periods for averaging are defined in 40 CFR §63.2.

(ii) The data may be recorded in reduced or non-reduced form.

(iii) All emission data shall be units of the relevant standard for reporting purposes using the conversion procedures specified in that standard. For CEMS data, the operating parameter value will be determined based on the parameter data monitored during the performance test, supplemented by engineering assessments and the manufacturer's recommendations.

The Permittee must provide for the Department's approval the rationale for the selected operating parameter value, monitoring frequency, and averaging time, including data and calculations used to develop the value and a description of why the value, monitoring frequency, and averaging time demonstrate continuous compliance with the emission standard in 40 CFR §63.11088(a).

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(iv) Monitoring data recorded during periods of unavoidable CEMS breakdowns, out-of-control periods, repairs, maintenance periods, calibration checks, and zero (low-level) and high-level adjustments must not be included in any data average computed unless the Permittee complies with the requirements of 40 CFR §63.10(b)(2)(vii)(A) or (B). **[Authority: 40 CFR §63.8(g)]**

(4) If the CEMS for the VRU is unavailable due to a malfunction or downtime, the Permittee shall comply with the following alternative monitoring procedures for the VRU during the malfunction or downtime period:

(a) Vacuum level shall be monitored using a pressure transmitter installed in the vacuum pump suction line, with the measurements displayed on a gauge that can be visually observed. Each carbon bed shall be observed during one complete regeneration cycle on each day of operation of the loading rack to determine the maximum vacuum level achieved.

(b) When relying on alternative monitoring for the VRU, conduct annual testing of the carbon activity for the carbon in each carbon bed. Carbon activity shall be tested in accordance with the butane working capacity test of the American Society for Testing and Materials (ASTM) Method D 5228-92 (incorporated by reference, see 40 CFR §63.14), or by another suitable procedure as recommended by the manufacturer.

(c) When relying on alternative monitoring for the VRU, conduct monthly measurements of the carbon bed outlet volatile organic compounds (VOC) concentration over the last 5 minutes of an adsorption cycle for each carbon bed, documenting the highest measured VOC concentration. Measurements shall be made using a portable analyzer, or a permanently mounted analyzer, in accordance with 40 CFR 60, Appendix A-7, EPA Method 21 for open-ended lines.

(d) Develop and submit to the Department a monitoring and inspection plan that describes the Permittee's approach for meeting the following requirements:

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(i) The lowest maximum required vacuum level and duration needed to assure regeneration of the carbon beds shall be determined by an engineering analysis or from the manufacturer's recommendation and shall be documented in the monitoring and inspection plan.

(ii) The Permittee shall verify, during each day of operation of the loading rack, the proper valve sequencing, cycle time, gasoline flow, purge air flow, and operating temperatures. Verification shall be through visual observation, or through an automated alarm or shutdown system that monitors system operation. A manual or electronic record of the start and end of a shutdown event may be used.

(iii) The Permittee shall perform semi-annual preventive maintenance inspections of the carbon adsorption system, including the automated alarm or shutdown system for those units so equipped, according to the recommendations of the manufacturer of the system.

(iv) The monitoring plan shall specify conditions that would be considered malfunctions of the carbon adsorption system during the inspections or automated monitoring performed under 40 CFR §63.11092(b)(1)(i)(B)(2)(i) through (iii), describe specific corrective actions that will be taken to correct any malfunction, and define what the owner or operator would consider to be a timely repair for each potential malfunction.

(v) The Permittee shall document the maximum vacuum level observed on each carbon bed from each daily inspection and the maximum

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VOC concentration observed from each carbon bed on each monthly inspection as well as any system malfunction, as defined in the monitoring and inspection plan, and any activation of the automated alarm or shutdown system with a written entry into a log book or other permanent form of record. Such record shall also include a description of the corrective action taken and whether such corrective actions were taken in a timely manner, as defined in the monitoring and inspection plan, as well as an estimate of the amount of gasoline loaded during the period of the malfunction.

[Authority: 40 CFR §63.11092(b)(1)(i)(B)]

(5) Operation of the VCU or VRU in a manner exceeding or going below the operating parameter value, as appropriate, shall constitute a violation of the emission standard in 40 CFR §63.11088(a). Malfunctions that are discovered shall not constitute a violation of the emission standard in 40 CFR §63.11088(a) if corrective actions as described in the monitoring and inspection plan are followed. The Permittee must:

(i) Initiate corrective action to determine the cause of the problem within 1 hour;

(ii) Initiate corrective action to fix the problem within 24 hours;

(iii) Complete all corrective actions needed to fix the problem as soon as practicable consistent with good air pollution control practices for minimizing emissions;

(iv) Minimize periods of start-up, shutdown, or malfunction; and

(v) Take any necessary corrective actions to restore normal operation and prevent the recurrence of the cause of the problem.

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[Authority: 40 CFR §63.11092(b)(1)(iii)(B)(*1*) and (*2*)(*i*) through (*iv*), §63.11092(d)(4) and the CAM Plan for the VCU in Table IV-CAM of this permit.]

(6) The Permittee shall operate each VRU and each VCU in a manner not to exceed or not to go below, as appropriate, the operating parameter values for the parameters established in the last performance test, the CAM Plan included in Table IV-CAM of the facility's current Title V – Part 70 Operating Permit No. 24-510-0918 (VCU only), or any alternative operating parameters approved by the Department. **[Authority: 40 CFR §63.11092(d)(1) and (2)]**

(7) The Permittee shall, at all times, operate and maintain any affected source subject to the requirements of 40 CFR, Part 63, Subpart BBBBBB, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The Department will determine whether such operation and maintenance procedures are being used based on information available to the Department which may include monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. **[Authority: 40 CFR §63.11085(a)]**

B. Control of VOC and HAP (Vapor Tight Tank Truck Requirements)
The Permittee shall assure that loadings of gasoline or VOC into tank trucks are limited to vapor-tight tank trucks certified as capable of sustaining a pressure change of not more than 1 inch of water (equivalent to a fugitive emission rate of 8 milligrams per liter of gasoline or VOC loaded) using the following procedures:

(1) The Permittee shall obtain the vapor tightness documentation specified in 40 CFR §60.505(b) and COMAR 26.11.13.05D(2) for each gasoline or VOC cargo tank which is to be loaded at the facility.

(2) The Permittee shall require the tank identification number to be recorded as each gasoline or VOC cargo tank is loaded at the facility.

(3) The Permittee shall cross-check each tank identification number with the file of tank vapor tightness documentation within 2 weeks after the corresponding tank is loaded.

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(4) The Permittee shall take steps to assure that any nonvapor-tight cargo tank will not be reloaded at the facility until vapor tightness documentation for that tank is obtained.

(5) Alternative procedures may be approved by the Department as specified in 40 CFR §60.502(e)(6).

[Authority: COMAR 26.11.13.05D(2), 40 CFR §60.502(e)(1), (2), (3), (5) and (6), 40 CFR §63.11088(a), and Table 2, Item 1(d) of 40 CFR 63, Subpart BBBBBB]

C. Control of VOC and HAP (Back Pressure and Leak Requirements)

(1) Each calendar month, the vapor collection system, the vapor processing system, and the loading rack handling gasoline shall be inspected during the loading of gasoline cargo tanks for total organic compounds liquid or vapor leaks. Detection methods incorporating sight, sound, or smell are acceptable. Each detection of a leak shall be recorded and the source of the leak repaired within 15 calendar days after it is detected. **[Authority: COMAR 26.11.13.04A(3)(a), 40 CFR §60.502(j), 40 CFR §63.11088(a), Table 2, Item 1(d) of 40 CFR 63, Subpart BBBBBB, and Indicator No. 4 of the CAM Plan for the VCU in Table IV-CAM of this permit.]**

(2) Each calendar month, the Permittee shall check the back pressure in the vapor collection system during loading of cargo tanks with methods specified in Table IV-CAM of this permit. **[Authority: COMAR 26.11.03.06C and Indicator No. 3 of the CAM Plan for the VCU in Table IV-CAM of this permit.]**

D. Control of VOC and HAP (Design and Operational Requirements)

The loading rack and vapor collection and control systems are designed to operate as required. **[Authority: COMAR 26.11.03.06C]**

E. Operational Limitation

See Record Keeping and Reporting Requirements.

F. Visible Emissions Limitations

The Permittee shall observe the stack of the VCU for visible emissions as specified under Indicator 2 of the CAM Plan for the VCU. **[Authority: COMAR 26.11.03.06C and Indicator No. 2 of the CAM Plan for the VCU in Table IV-CAM of this permit.]**

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6.4 **Record Keeping Requirements:**

A. Control of VOC and HAP (Vapor Collection and Control Requirements)

(1) The Permittee shall keep the following records for the VCU:

(a) Copies of all VCU performance test results.

(b) Records of all maintenance and repairs performed on the VCU.

(c) An up-to-date, readily accessible copy of the VCU monitoring and inspection plan required under §63.11092(b)(1)(iii)(B)(2).

(d) Records, as specified in the VCU monitoring and inspection plan required under 40 CFR §63.11092(b)(1)(iii)(B)(2)(v), of any system malfunction and any activation of the automated alarm or shutdown system with a written entry into a log book or other permanent form of record. Such record shall also include a description of the corrective action taken and whether such corrective actions were taken in a timely manner, as defined in the VCU monitoring and inspection plan, as well as an estimate of the amount of gasoline loaded during the period of the malfunction.

[COMAR 26.11.13.04A(2)(a)(iii) and (b) and 40 CFR §63.11092(b)(1)(iii)(B)(2) v) and the CAM Plan for the VCU in Table IV-CAM of this permit.]

(2) The Permittee shall maintain the following records for each vapor recovery collection system and each VRU:

(a) Records of all performance tests conducted on the VRU. **[Authority: COMAR 26.11.13.04A(2)(a)(iii)]**

(b) Records of all maintenance and repairs performed on the VRU. **[Authority: COMAR 26.11.13.04A(2)(b)]**

(d) A copy of the performance evaluation results for each CEMS. **[Authority: 40 CFR §63.8(e)(5)]**

(e) An up-to-date, readily accessible record of the CEMS data required under 40 CFR §63.11092(b). These records shall

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indicate the time intervals during which loadings of gasoline cargo tanks have occurred, or, alternatively, shall record the CEMS data only during such loadings. The date and time of day shall also be indicated at reasonable intervals on these records. **[Authority: 40 CFR §63.11094(f)(1)]**

(f) An up-to-date, readily accessible copy of the VRU monitoring and inspection plan required under §63.11092(b)(1)(i)(B)(2).

B. Control of VOC and HAP (Vapor Tight Cargo Tank Requirements)

(1) The Permittee shall maintain records of each cargo tank's vapor tightness documentation on file at the facility in a permanent form available for inspection.
The documentation file for each cargo tank shall be updated at least once per year to reflect current test results as determined by EPA Reference Method 27 or Method 1007 of the Department's Technical Memorandum 91-01, "Test Methods and Equipment Specifications for Stationary Sources," which is incorporated by reference in COMAR 26.11.01.04C.

This documentation shall include, at a minimum, the following information:

(a) Test title: Gasoline Delivery Tank Pressure Test – EPA Reference Method 27 or Method 1007 of the Department's Technical Memorandum 91-01
(b) Tank owner and address.
(c) Tank identification number.
(d) Testing location.
(e) Date of test.
(f) Date and type of repair, if applicable.
(g) Date of retest, if applicable.
(h) Tester name and signature.
(i) Witnessing inspector, if any: Name, signature, and affiliation.
(j) Vapor tightness repair: nature of repair work and when performed in relation to vapor tightness testing.
(k) Test results: Actual pressure change in 5 minutes, millimeters of water (average for two (2) runs).
(l) Pressure testing: the initial and final test pressure, the time of each reading, and the actual pressure change.
(m) Vacuum testing: the initial and final test vacuum, the time of each reading, and the actual vacuum change.

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(n) Number of leaks found with an instrument and leak definition.
[Authority: COMAR 26.11.13.05D(1)(a), COMAR 26.11.13.05D(2), 40 CFR §60.505(b), 40 CFR §63.11088(f), and §63.11094(b)]

(2) As an alternative to keeping records at the facility of each gasoline cargo tank test result as required in 40 CFR §63.11094(b), the Permittee may comply with one of the following requirements:

(a) An electronic copy of each record is instantly available at the facility and the copy of each record is an exact duplicate image of the original paper record with certifying signatures; or

(b) For facilities that use a facility automation system to prevent gasoline cargo tanks that do not have valid cargo tank vapor tightness documentation from loading (e.g., via a card lock-out system), a copy of the documentation is made available (e.g., via facsimile) for inspection by the Department during the course of a site visit, or within a mutually agreeable time frame, and the copy of each record is an exact duplicate image of the original paper record with certifying signatures.
[Authority: 40 CFR 40 CFR §63.11088(f) and §63.11094(c)]

C. Control of VOC and HAP (Back Pressure and Leak Requirements)
The Permittee shall maintain the following records:

(1) Monthly leak inspection records including, as a minimum, the following information:
(a) Date of inspection.
(b) Findings (may indicate no leaks discovered; or location, nature, and severity of each leak.
(c) Leak determination method.
(d) Corrective action (date each leak repaired; reasons for any repair interval in excess of 15 days).
(e) Inspector name and signature.
[Authority: COMAR 26.11.13.04A(3)(a), 40 CFR §60.502(j), 40 CFR §63.11088(a), Table 2, Item 1(d) of 40 CFR 63, Subpart BBBBBB, and Indicator No. 4 of the CAM Plan for the VCU in Table IV-CAM of this permit.]

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	(2) Monthly records of the back pressure reading in the vapor collection system. **[Authority: COMAR 26.11.03.06C and Indicator No. 3 of the CAM Plan for the VCU in Table IV-CAM of this permit.]** D. Control of VOC and HAP (Design and Operational Requirements) The loading rack and vapor collection and control systems are designed to operate as required. **[Authority: COMAR 26.11.03.06C]** E. Operational Limitation (1) The Permittee shall keep monthly records to document that the total gasoline, ethanol, and gasoline additives combined throughput loaded into tank trucks for each consecutive 12 months does not exceed 613,200,000 gallons. **[Authority: ARA Permit to Construct No. 510-0918-9-0102 issued on April 3, 2018]** (2) The Permittee shall keep monthly records to document that the total distillate oil, distillate additives, and residual oil combined throughput loaded into tank trucks for each consecutive 12 months does not exceed 538,533,828ngallons. **[Authority: ARA Permit to Construct No. 510-0918-9-0102 issued on April 3, 2018]** F. Visible Emissions Limitations The Permittee shall maintain records of visible emissions observations as specified under Indicator 2 of the CAM Plan for the VCU. **[Authority: COMAR 26.11.03.06C and Indicator No. 2 of the CAM Plan for the VCU in Table IV-CAM of this permit.]**
6.5	**Reporting Requirements:** A. Visible Emissions Limitations The Permittee shall submit reports of visible emissions observations as specified under Indicator 2 of the CAM Plan for the VCU. **[Authority: COMAR 26.11.03.06C and Indicator No. 2 of the CAM Plan for the VCU in Table IV-CAM]** B. Control of VOC and HAP (Vapor Collection and Control Requirements) (1) For the VCU and VRU, the Permittee shall submit to the Department the following information:

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(a) Written notification to conduct a performance test on the VCU or VRU at least 60 calendar days before the performance test is scheduled. The notification shall include the site-specific test plan required under COMAR 26.11.13.04A(2)(a)(ii) and 40 CFR §63.7(c).

(b) Results of each VCU or VRU performance test not more than 60 days after each test date.

[Authority: COMAR 26.11.13.04A(2)(a)(ii) and (iii), 40 CFR §63.9(e), §63.11093(c), and §63.7(g)]

(2) The Permittee shall submit an excess emissions report to the Department at the time the semiannual compliance report is submitted as specified in 40 CFR §63.11095(b). The report shall include the following information:

(a) Each exceedance or failure to maintain, as appropriate, a monitored operating parameter value determined under 40 CFR §63.11092(b). The report shall include the monitoring data for the days on which exceedances or failures to maintain have occurred, and a description and timing of the steps taken to repair or perform maintenance on the vapor collection and processing systems or the continuous monitoring system (CMS).

(b) The Permittee shall submit all information concerning out-of-control periods for the CEMS, including start and end dates and hours and descriptions of corrective actions taken.

(c) Each instance in which malfunctions discovered during the monitoring and inspections required under 40 CFR §63.11092(b)(1)(iii)(B)(2) for the VCU or under 40 CFR §63.11092(b)(1)(i)(B)(2) for the VRU were not resolved according to the necessary corrective actions described in the VCU or VRU monitoring and inspection plan. The report shall include a description of the malfunction and the timing of the steps taken to correct the malfunction.

[Authority: 40 CFR §63.8(c)(8), §63.11095(b)(3) and (4), and the CAM Plan for the VCU in Table IV-CAM of this permit.]

C. Control of VOC and HAP (Vapor Tight Cargo Tank Requirements)

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(1) The Permittee shall notify the owner or operator of each non-vapor-tight gasoline or VOC cargo tank loaded at the facility within one (1) week of the documentation cross-check required by 40 CFR §60.502(e)(3), or within three (3) weeks after the loading has occurred. **[Authority: 40 CFR §60.502(e)(4), 40 CFR §63.11088(a), and Table 2, Item 1(d) of 40 CFR 63, Subpart BBBBBB]**

(2) The Permittee shall submit a semiannual compliance report to the Department as specified in 40 CFR §63.11095(a). The report shall include the following information for the loading rack: each loading of a gasoline cargo tank for which vapor tightness documentation had not been previously obtained by the facility. **[Authority: 40 CFR §63.11088(f) and §63.11095(a)(2)]**

(3) The Permittee shall submit an excess emissions report to the Department at the time the semiannual compliance report is submitted as specified in 40 CFR §63.11095(b). The report shall include the following information for gasoline cargo tanks:

(a) Each instance of a non-vapor-tight gasoline cargo tank loading at the facility in which the owner or operator failed to take steps to assure that such cargo tank would not be reloaded at the facility before vapor tightness documentation for that cargo tank was obtained.

(b) Each reloading of a non-vapor-tight gasoline cargo tank at the facility before vapor tightness documentation for that cargo tank is obtained by the facility in accordance with 40 CFR §63.11094(b).
[Authority: 40 CFR §63.11095(b)(1) and (2)]

D. Control of VOC and HAP (Back Pressure and Leak Requirements)
The Permittee shall include leak inspection and back pressure records in the semiannual compliance report and excess emissions report as specified in 40 CFR §63.11095(a) and (b). **[Authority: 40 CFR §63.11088(f), §63.11095(a) and (b), and Indicator Nos. 3 and 4 of the CAM Plan for the VCU in Table IV-CAM of this permit.]**

E. Control of VOC and HAP (Design and Operational Requirements)
The loading rack and vapor collection and control systems are designed to operate as required. **[Authority: COMAR 26.11.03.06C]**

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	F. Operational Limitation The Permittee shall report incidences of excess emissions in accordance with permit condition 4, Section III, Plant Wide Conditions, "Report of Excess Emissions and Deviations". **[Authority: COMAR 26.11.03.06C]**

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Part 64 Requirement	**CAM Plan**
	Indicator No. 1- John Zink Vapor Combustion Unit
I. Indicator Measurement Approach	Presence of flame within stack Pilot (flame) detector
II. Indicator Range Reporting Threshold	An excursion is defined as a failure for pilot detector to shutdown the VCU when there is no flame. All excursions shall be reported to the MDE in semi-annual monitoring reports.
III. Performance Criteria	
A. Data Representativeness	The pilot detector controls the operation of the VCU. When no pilot flame is detected, the VCU cannot start-up and if no flame is detected during operation, the VCU automatically shuts down and loading ceases.
B. Verification of Operational Status	The pilot detector is connected to an interlock system that ensures the VCU and loading rack cannot operate if no flame is detected.

C. AQ/QC Practices and Criteria	VCU receives preventative maintenance semiannually by a company certified to install and maintain vapor combustion units.
D. Monitoring Frequency	Pilot detector operates continuously.
E. Data Collection	Results of inspection and preventative maintenance of the pilot operation are manually recorded or in a readily accessible computer system and maintained on site.
F. Averaging Period	N/A

Part 64 Requirement	**CAM Plan**
	Indicator No. 2- John Zink Vapor Combustion Unit
I. Indicator Measurement Approach	Visible emissions A visual observation is made of the exhaust gases at the outlet of the combustor stack during the loading of a gasoline tank truck.
II. Indicator Range Reporting Threshold	An excursion occurs if there are visible emissions observed. An excursion will trigger an investigation, corrective action, and a reporting requirement. All excursions will be reported to the MDE in semi-annual monitoring reports.
III. Performance Criteria	
A. Data Representativeness	The observer looks for visible emissions in the exhaust gases just above the point the gases exit the combustor stack.
B. Verification of Operational Status	N/A
C. AQ/QC Practices and Criteria	The observers are trained on procedures in making an observation and the record keeping requirements.

D. Monitoring Frequency	An observation will be made once per week for a 1-minute period when the flare is operating.
E. Data Collection	Results of observations will be manually recorded or in a readily accessible computer system and maintained on site. Records will include date, time, and result of observation or reason.
F. Averaging Period	N/A

Part 64 Requirement	**CAM Plan**
	Indicator No. 3- Vapor Collection System
I. Indicator Measurement Approach	Vapor Collection Line Back Pressure Pressure gauge reading when trucks are being loaded.
II. Indicator Range Reporting Threshold	An excursion is defined as when the pressure gauge reading shows back pressure to be greater than 18" of water column. An excursion will trigger an investigation, corrective action, and a reporting requirement. All pressure gauge readings greater than 18 inches will be reported to the MDE in the semi-annual monitoring reports.
III. Performance Criteria	
A. Data Representativeness	A pressure gauge that is attached to a spool piece is inserted between the vapor line connection of the tanker and the connection for the terminal's vapor collection line measures back pressure. The gauge measures pressure within ± 0.2 inch of water column.
B. Verification of Operational Status	Quarterly check on each loading bay with manual log entry.
C. AQ/QC Practices and Criteria	Permittee will replace the gauge annually.
D. Monitoring Frequency	Quarterly
E. Data Collection	Quarterly reading with manual entry.

F. Averaging Period	N/A

Part 64 Requirement	CAM Plan
	Indicator No.4- Vapor Collection System
I. Indicator	Equipment Leaks
Monitoring Approach	Monthly leak check of vapor collection system. Each calendar month, the vapor collection system from the tanker truck to the John Zink Combustor will be inspected during the loading of gasoline tank trucks for total organic compounds liquid or vapor leaks. The detection method will be sight, sound, or smell.
II. Indicator Range	An excursion is defined as detection of a leak by sight, sound, or smell. An excursion will trigger an investigation, corrective action, and a reporting requirement. Leaks will be repaired within 15 days. All excursions and corrective actions taken will be reported to the MDE in the semi-annual monitoring reports.
III. Performance Criteria	
A. Data Representativeness	The terminal operations personnel will be trained on the procedures to detect, record, and initiate corrective actions.
B. Verification of Operational Status	N/A
C. AQ/QC Practices and Criteria	The operations' personnel responsible for performing the monthly inspections will be trained on the procedures to follow. The terminal will maintain a record of employees trained to perform the inspections.
D. Monitoring Frequency	Monthly

E. Data Collection	Results of inspections, leaks found and leaks repaired are recorded and kept on site.
F. Averaging Period	N/A
Part 64 Requirement	**CAM Plan**
	Indicator No. 5- John Zink Vapor Combustion System
I. Indicator	Preventative Maintenance Program
Monitoring Approach	Documentation of preventative maintenance Proper VCU operation is verified by performing preventative maintenance as recommended by VCU manufacturer semi-annually.
II. Indicator Range	An excursion occurs if the preventative maintenance is not performed or documented. All excursions will be reported to the MDE in semi-annual monitoring reports.
III. Performance Criteria	
A. Data Representativeness	VCU operation is verified visually by trained personnel using documented inspection and maintenance procedures.
B. Verification of Operational Status	N/A
C. AQ/QC Practices and Criteria	Personnel are trained on inspection and maintenance procedures and proper frequencies.
D. Monitoring Frequency	Preventative maintenance will be performed semi-annually.
E. Data Collection	Results of inspection and maintenance performed during preventative maintenance are manually recorded or in a readily accessible computer system and maintained on site.
F. Averaging Period	N/A

	Table IV-7
7.0	**Emissions Unit Number(s)** EU-8 is the marine transfer operations at the terminal General Facility Wide Requirements **(ARA Registration No: 510-0918-9-0102)**
7.1	**Applicable Standards/Limits** A. Control of VOC (1) Total VOC emissions from all marine vessel loading operations at the premises shall be less than 25 tons per calendar year unless the Permittee obtains an approval from the Department. **[Authority: COMAR 26.11.02.02H]** B. Control of HAP (1) Premises wide HAP emissions shall be less than 10 tons for any single HAP and 25 tons for the total combination of HAP in any consecutive 12 month period. **[Authority: COMAR 26.11.02.02H]** (2) **40 CFR §63.560(a)(3)** which states that the record keeping requirements of 40 CFR §63.567(j)(4) and the emission estimation requirements of 40 CFR §63.565(l) apply to existing sources with emissions less than 10 and 25 tons. (3) **40 CFR 63, Subpart BBBBBB**, which requires general emission minimization procedures and premises wide leak inspections for control of HAP emissions from bulk gasoline terminals.
7.2	**Testing Requirements** A. Control of VOC See Record Keeping and Reporting Requirements. B. Control of HAP See Monitoring, Record Keeping, Reporting Requirements.

7.3 Monitoring Requirements

A. Control of VOC

See Record Keeping and Reporting Requirements.

B. Control of HAP

(1) Emission estimation procedures. For sources with emissions less than 10 tons of any individual HAP or 25 tons of total HAP, the Permittee shall calculate an annual estimate of HAP emissions, excluding commodities exempted by 40 CFR §63.560(d), from marine tank vessel loading operations. Emission estimates and emission factors shall be based on test data, or if test data is not available, shall be based on measurement or estimating techniques generally accepted in industry practice for operating conditions at the source. **[Authority: 40 CFR §63.565(l)]**

(2) The Permittee must, at all times, operate and maintain the bulk gasoline terminal, including any associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Department, which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the premises. **[Authority: 40 CFR §63.11085(a)]**

(3) The Permittee shall perform a monthly leak inspection of all equipment in gasoline service, as defined in 40 CFR §63.11100, in accordance with the following requirements:

(a) For this inspection, detection methods incorporating sight, sound and smell are acceptable.

(b) A log book shall be used and shall be signed by the Permittee at the completion of each inspection. A section of the log book shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the premises.

	(c) Each detection of a liquid or vapor leak shall be recorded in the log book. When a leak is detected, an initial attempt at repair shall be made as soon as practicable, but no later than 5 calendar days after the leak is detected. Repair or replacement of leaking equipment shall be completed with 15 calendar days after detection of each leak, except as provided in 40 CFR §63.11089(d). (d) Delay of repair of leaking equipment will be allowed if the repair is not feasible within 15 days. The Permittee shall provide in the semiannual report specified in 40 CFR §63.11095(b), the reason(s) why the repair was not feasible and the date each repair was completed. **[Authority: 40 CFR §63.11089(a) through (d)]**
7.4	**Record Keeping Requirements** A. Control of VOC The Permittee shall maintain records of total VOC emissions from all marine vessel loading operations at the premises in tons per month and tons per calendar year. The records shall include all supporting marine vessel loading data and emissions calculations. **[Authority: COMAR 26.11.03.06C]** B. Control of HAP (1) The following records shall be kept on-site for at least five years: (a) Documentation of HAP vapor mass fraction content data used for HAP emissions calculations based on annual HAP content test results OR other test data from the American Petroleum Institute, the U.S. EPA, or other sources approved by the Department. (b) Monthly premises wide individual and total HAP emissions. (i) The Permittee shall calculate the monthly individual and total premises wide HAP emissions as follows: For HAP emissions from marine vessel loading, the Permittee shall use the procedures in 40 CFR §63.565(l). For all other sources, the Permittee shall multiply individual HAP vapor mass fractions by monthly VOC emissions from each source in tons per month to calculate monthly HAP emissions in tons per month by individual HAP. The Permittee shall sum the individual monthly

HAP amounts in tons per month to calculate monthly total HAP emissions in tons per month.

(ii) To calculate monthly VOC emissions for each source to use in the monthly HAP calculation, the Permittee shall sum the monthly VOC emissions calculated from each of the following sources as follows:

1. For storage tanks, the Permittee shall calculate monthly VOC emissions using the methods provided in AP42 Chapter 7, or an equivalent method approved by the Department, and site specific temperature and storage tank data for each month, and convert the results to tons per month.

2. For the loading rack, the Permittee shall calculate monthly VOC emissions by multiplying the monthly loading rack throughput by the VOC stack and fugitive emissions factors established during the most recent performance test for the loading rack control device to determine VOC emissions and convert the results to tons per month.

3. For fugitive emissions, the Permittee shall calculate monthly VOC emissions by multiplying the annual VOC emission factor for each type of component from the U.S. EPA's Protocol for Equipment Leak Estimates (EPA-453/R-95-017) by the number of components to get pounds of VOC per year. The Permittee shall add all annual VOC component emissions together and convert the results to tons per month.

(2) The Permittee shall retain records of the emissions estimates determined in 40 CFR §65.565(l) and records of their actual throughputs by commodity. **[Authority: 40 CFR §63.567(j)(4)]**

(3) The Permittee shall maintain the following operation and maintenance records:

(a) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.

(b) Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR

	§63.11085(a), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. **[Authority: 40 CFR §63.11094(g)(1) and (2)]** (4) The Permittee shall maintain the following leak inspection records: (a) The Permittee shall prepare and maintain a record describing the types, identification numbers, and locations of all equipment in gasoline service. If the Permittee implements an instrument program under 40 CFR §63.11089, the record shall contain a full description of the program. (b) The Permittee shall maintain a log book for leak inspections and record the following information for each leak that is detected: (i) The equipment type and identification number. (ii) The nature of the leak (i.e., vapor or liquid) and the method of detection (i.e., sight, sound, or smell). (iii) The date the leak was detected and the date of each attempt to repair the leak. (iv) Repair methods applied in each attempt to repair the leak. (v) "Repair delayed" and the reason for the delay if the leak is not repaired within 15 calendar days after discovery of the leak. (vi) The expected date of successful repair of the leak if the leak is not repaired within 15 days. (vii) The date of successful repair of the leak. **[Authority: 40 CFR §63.11089(g), 40 CFR §63.11094(d) and (e)]**
7.5	**Reporting Requirements** A. Control of VOC

The Permittee shall report the total emissions of VOC from all marine loading operations at the premises in the Annual Emissions Certification Report that is due April 1 of each calendar year. **[Authority: COMAR 26.11.02.19D]**

B. Control of HAP

(1) The Permittee shall report emissions of HAP from all marine loading operations in the Annual Emissions Certification Report that is due April 1 of each calendar year. **[Authority: COMAR 26.11.02.19D]**

(2) The Permittee shall submit a semiannual compliance report to the Department as specified in 40 CFR §63.11095(a). The report shall include the following information:

(a) The number, duration, and a brief description of each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by the Permittee during a malfunction of an affected source to minimize emissions in accordance with 40 CFR §63.11085(a), including actions taken to correct a malfunction. **[Authority: 40 CFR §63.11095(d)]**

(b) For equipment leak inspections, the following information:

(i) The number of equipment leaks not repaired within 15 days after detection. **[Authority: 40 CFR §63.11095(a)(3)]**

(ii) An excess emissions report to the Department at the time the semiannual compliance report is submitted that includes the following information for each occurrence of an equipment leak for which no repair attempt was made within 5 days or for which repair was not completed within 15 days after detection:

(A) The date on which the leak was detected;

(B) The date of each attempt to repair the leak;

(C) The reasons for the delay of repair; and

(D) The date of successful repair.

	[Authority: 40 CFR §63.11095(b)(5)]

SECTION V - INSIGNIFICANT ACTIVITIES

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

(1) No. 1 Stationary internal combustion engines with less than 300 brake horsepower of power output;

The diesel fired, 80 hp, portable air compressor is subject to the following requirements:

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

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

(C) Exceptions:

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

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

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

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

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

Boiler 197

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

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

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

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

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

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

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

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

(4) No. 2 Storage of lubricating oils

(5) No. 8 Unheated storage of VOC with an initial boiling point of 300°F (149°C) or greater: (Diesel additive, gasoline additive and red dye Tanks 1960, 1975, 1989, 1990, 1992, 1993, 1998, and 1999.)

(6) No. 28 Storage of Numbers 1,2,4,5, and 6 fuel oil and aviation jet engine fuel (Tanks No. 1903 (UST), 1917, 1920, 1930, 1931, 1941, 1942, 1943, 1944, 1950, 1951, 1952, 1954, 1955, 1956, 1957, 1958, 1959, 1962, 1963, 1965, 1968, 1970, 1971, 1997, Heating Oil Tank 1, Heating Oil Tank 2, and Emergency Generator Tank)

(7) No. 1 Storage of VOC normally used as solvents, diluents, thinners, inks, colorants, paints, lacquers, enamel;, varnishes, enamels; liquid resins, or other surface coatings and having individual capacities of 2,000 gallons (7.6 cubic meters) or less; **[Authority: COMAR 26.11.02.10 Q(8)]**

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

(9) X Laboratory fume hoods and vents; and

(10) X Any other emissions unit, not listed in this section, which has a pre-control potential to emit less that is less than one (1) ton per year for VOC, for each pollutant for which there is a federal ambient air quality standard, and for each Class II pollutant as defined in COMAR 26.11.15.01B(4), and is not more than one (1) pound per day of Class I toxic air pollutant as defined in COMAR 26.11.15.01B(4):

No. 1 oil/water separator tank
No. 1 40,000 gallon biodiesel storage tank (Tank 1912)
No. 4 Recovered oil and process water tanks

VOC emissions from the above listed tanks are subject to either COMAR 26.11.06.06B(1)(a) or B(1)(b), depending on the date of installation.

COMAR 26.11.06.06B(1)(a) requires that the Permittee limit emissions of VOC to not more than 200 pounds per day from installations constructed before May 12, 1972 unless VOC emissions are reduced by 85 percent or more overall.

COMAR 26.11.06.06B(1)(b) requires that the Permittee limit emissions of VOC to not more than 20 pounds per day from installations constructed on or after May 12, 1972 unless VOC emissions are reduced by 85 percent or more overall.

STATE ONLY ENFORCEABLE CONDITIONS

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

1. Applicable Regulations:

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

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

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

2. Operating Conditions:
   In reference to EU-8, the Permittee is prohibited from uncontrolled marine loading of gasoline and uncontrolled marine loading of ethanol is limited to 7,600,000 gallons per 12 months, unless the Permittee can demonstrate compliance with the air toxics requirements for premises wide emissions of benzene at other operating conditions.

3. 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:

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

   2. 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.

BUCKEYE TERMINALS, LLC
6200 PENNINGTON AVE, BALTIMORE, MARYLAND
PART 70 OPERATING PERMIT NO. 510-0918
FACT SHEET

BACKGROUND

Buckeye Terminals, LLC (Buckeye) operates a bulk petroleum marketing terminal located at 6200 Pennington Avenue within the limits of Baltimore City and Anne Arundel County. Both of these areas are located in Maryland Air Quality Region III. The primary SIC code for the terminal is 4226. The company petitioned to have their SIC code changed from 5171 to 4226 because they do not own the petroleum products and only store them. Petroleum products and ethanol are received by the facility via pipeline, barge, or ship, are stored in large tanks, and are loaded into tanker trucks or barges for distribution. The loading operations occur at a truck loading rack and at a marine vessel loading berth(s). Buckeye handles conventional and reformulated gasoline, petroleum distillates, residual fuel oil, and ethanol. Gasoline is stored in seven (7) of the thirty-seven (37) storage tanks. The seven (7) gasoline storage tanks are also permitted to store ethanol.

The primary sources of air emissions at the facility include three (3) primarily natural gas fired boilers, two (2) No. 2 fuel oil fired boilers for comfort heat in the office and garage, two (2) No. 6 fuel oil fired heaters used to maintain the No. 6 fuel oil tanks in the liquid phase, several large above-ground gasoline/ethanol storage tanks, a six (6) bay truck loading rack, marine vessel loading/unloading berths, a diesel powered 500 kW emergency generator, and fugitive emissions from connections, valves, and seals. The following table summarizes the actual emissions from Buckeye based on Annual Emission Certification Reports:

Table 1: Actual Emissions

Year	NO_x (TPY)	SO_x (TPY)	PM_{10} (TPY)	CO (TPY)	VOC (TPY)	Total HAP (TPY)
2015	18.22	37.39	2.83	11.55	58.9	2.32
2016	12.89	14.73	1.20	16.11	64.84	2.73
2017	14.47	9.56	0.87	22.62	63.68	2.14
2018	5.54	0.69	0.24	8.45	57.78	2.01
2019	4.32	2.43	0.26	4.11	63.00	2.19

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

The company submitted a Title V permit renewal application on September 23, 2019. An administrative completeness review was conducted and the application was deemed administratively complete. This Title V permit will expire on September 30, 2025.

GREENHOUSE GAS (GHG) EMISSIONS

Buckeye emits the following greenhouse gases (GHGs) related to Clean Air Act requirements: carbon dioxide, methane, and nitrous oxide. These GHGs originate from various processes (i.e. boilers, emergency generator) contained within the facility premises applicable to Buckeye. The facility has not triggered Prevention of Significant Deterioration (PSD) requirements for GHG emissions; therefore, there are no applicable GHG Clean Air Act requirements. There are no applicable requirements as a result of PSD. 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 Buckeye based on its Annual Emission Certification Reports:

Table 2: Greenhouse Gases Emissions Summary

GHG	Conversion factor	2017 tpy CO_2e	2018 tpy CO_2e	2019 tpy CO_2e
Carbon dioxide CO_2	1	9,112.82	4,769.98	3,862.77
Methane CH_4	25	7.5	3.22	2.14
Nitrous Oxide N_2O	300	30	21.78	18
Total GHG CO_{2eq}		**9,150.32**	**4,794.98**	**3,882.91**

BUCKEYE TERMINALS, LLC
6200 PENNINGTON AVE, BALTIMORE, MARYLAND
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CHANGES AND MODIFICATIONS TO THE PART 70 OPERATING PERMIT

On April 1, 2020 Buckeye was issued a permit to construct to convert existing tank No. 1942 from No. 6 oil storage to asphalt storage. Tank No. 1942 is listed in the Insignificant Activities section.

On April 3, 2018 Buckeye was issued a permit to construct to modify the existing truck loading rack and Tanks 1953 and 1964 to increase gasoline and distillate loading and throughput. This was considered a significant modification. The modification of Tank 1953 has been cancelled.

On May 12, 2021 Buckeye submitted an update to the application requesting the incorporation of changes to 40 CFR 60, Subpart Kb. A revision of the rule was issued on January 19, 2021. This revision allows in-service inspections of internal floating roof tanks. The changes were incorporated into Table IV-2, Condition 2.3 (2),(3),&(4)(c).

NSPS APPLICABILITY

Buckeye operates one (1) gasoline storage tank (Tank No. 1973) subject to 40 CFR Part 60, Subpart K - Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978. The tank has a capacity greater than the 75 cubic meters and was constructed or modified after June 11, 1973, and prior to May 19, 1978. The NSPS requirements of 40 CFR, Part 60, Subpart K are included in the Title V – Part 70 Operating Permit for this tank.

Buckeye operates one (1) gasoline storage tank (Tank No. 1964) subject to 40 CFR Part 60, Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984. The NSPS requirements of 40 CFR, Part 60, Subpart Kb are included in the Title V – Part 70 Operating Permit for this tank.

The truck loading rack is subject to the requirements of 40 CFR, Part 60, Subpart XX – Standards of Performance for Bulk Gasoline Terminals. Subpart XX applies to loading racks constructed or modified after December 17, 1980. In 1997, Buckeye received a permit to construct for the conversion of loading bay "B" from No. 6 fuel oil to gasoline. This modification to the loading rack made the gasoline loading operations subject to New Source Performance Standards (NSPS) 40 CFR Part 60, Subpart XX -Standards of Performance for Bulk Gasoline Terminals. Additional permits to construct were issued in June of 1999 for the installation of a John Zink vapor combustor unit and in April of 2017 for the installation of a John

Zink vapor recovery unit. The NSPS requirements of 40 CFR, Part 60, Subpart XX are included in the Title V – Part 70 Operating Permit for the loading rack.

No other NSPS regulations apply to the Buckeye terminal.

NESHAP APPLICABILITY

Buckeye accepted operational and emission limits included in their Part 70 Permit to be recognized as a synthetic minor source of HAPs. As a synthetic minor source of HAPs, Buckeye does not trigger the MACT standards of 40 CFR Part 63, subpart Y - National Emissions Standards for Marine Vessel Loading Operations and subpart R - National Emission Standards for Gasoline Distribution Facilities.

Buckeye operates one (1) emergency reciprocating internal combustion engine (RICE) that is subject to 40 CFR, Part 63, Subpart ZZZZ for Stationary Reciprocating Internal Combustion Engines. The emergency engine was installed prior to June 12, 2006. The engine is considered an existing stationary RICE at an area source of HAP emissions. Subpart ZZZZ requirements are included in the Title V – Part 70 Operating Permit.

Buckeye is subject to the requirements of 40 CFR, Part 63, Subpart BBBBBB for Gasoline Distribution Bulk Terminals, Bulk Plants and Pipeline Facilities. The company is considered an existing source with respect to 40 CFR, Part 63, Subpart BBBBBB because it was not constructed or reconstructed, as defined in 40 CFR, Part 63, after November 9, 2006. A notification of compliance with the requirements of this regulation was submitted on 01/11/11. Buckeye will be required to maintain ongoing continuous compliance with this regulation. The NESHAP requirements of 40 CFR, Part 63, Subpart BBBBBB are included in the Title V – Part 70 Operating Permit.

Buckeye is subject to the requirements of 40 CFR, Part 63, Subpart JJJJJJ for Industrial, Commercial, and Institutional Boilers at Area Sources of HAP. Buckeye operates two (2) boilers that burn No. 6 fuel oil and one (1) boiler that burns No. 2 fuel oil installed in 1962 that are subject to these requirements. The NESHAP requirements of 40 CFR, Part 63, Subpart JJJJJJ applicable to the boilers are included in the Title V – Part 70 Operating Permit.

No other NESHAP regulations apply to the Buckeye terminal.

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NSR APPLICABILITY

In order to preclude applicability of major NSR requirements due to the significant modification to the loading rack, Buckeye has requested a new stack emissions limit and a new fugitive emissions limit. These limits are included in the Title V Permit to Operate, along with supporting testing, monitoring, record keeping and reporting requirements to demonstrate compliance.

CAM APPLICABILITY

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

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

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

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

The storage tanks and boilers at Buckeye do not employ control devices as defined in 40 CFR §64.1. CAM requirements do not apply to the storage tanks or boilers.

Buckeye utilizes a John Zink Carbon Adsorption/Absorption Vapor Recovery Unit as a primary control and a John Zink Vapor Combustion Unit as a backup to control VOC emissions from the truck loading rack to meet the federally enforceable limits specified in COMAR 26.11.13.04A(1)(a) and 40 CFR 60.502(a) and (b). The VOC emissions from the loading rack, pre-control, would be greater than the major source threshold of 25 tons per year without use of the control device.

The loading rack is not subject to major source MACT requirements and is not otherwise exempt from CAM. CAM requirements apply to the John Zink Vapor Combustion Unit. A CAM plan for the John Zink Vapor Combustion Unit is included in Table IV-6a of the renewal Title V – Part 70 Operating Permit.

Note: CAM requirements do not apply to the carbon adsorption/absorption vapor recovery unit because it is equipped with a CEMS.

EMISSION UNIT IDENTIFICATION

Buckeye has identified the following emission units at the Baltimore Terminal as being subject to the Title V permitting requirements and having applicable requirements.

Table 3: Emission Unit Identification

Emissions Unit Number	Emissions Unit Name and Description	ARA Registration Number	Date of Installation
EU-1	Tank No.1967: a 4,337,046 gallon, external floating roof equipped storage tank to store gasoline and/or ethanol	510-0918-9-0102	1960
EU-2	Tank No 1973: a 5,821,746 gallon external floating roof equipped storage tank to store gasoline and/or ethanol		1977
EU-3	Tank No.1953: a 391,524 gallon, internal floating roof equipped storage tank to store gasoline and/or ethanol		1959
	Tank No.1961: a 3,084,774 gallon, internal floating roof equipped storage tank to store gasoline and/or ethanol		1941
	Tank No.1972: a 4,980,948 gallon, internal floating roof equipped storage tank to store gasoline and/or ethanol		1969
	Tank No.1966: a 2,136,036 gallon, internal floating roof storage tank equipped with a geodesic dome roof to store gasoline or ethanol		1960 Modified in 2006
	Tank No.1964: a 4,700,000 gallon, internal floating roof equipped storage tank to store gasoline and/or ethanol		1961 Modified in 2018
EU-4	Boiler 191: 21 million Btu per hour Boiler burning natural gas as a primary fuel and No. 2 fuel oil as a backup only for process heat	510-0918- 4-1239	1959 Modified in 2014
	Boiler 192: 25 million Btu per hour Boiler burning natural gas as a primary fuel and	510-0918- 4-1241	1960 Modified in 2014

Emissions Unit Number	Emissions Unit Name and Description	ARA Registration Number	Date of Installation
	No. 2 fuel oil as a backup only for process heat		
	Boiler 194: 29 million Btu per hour Boiler burning natural gas as a primary fuel and No. 2 fuel oil as a backup only for process heat	510-0918- 4-1242	1968 Modified in 2014
	Boiler 195: 29 million Btu per hour Boiler burning No. 6 oil for process heat	003-0283-4-0329	1971
	Boiler 196: 29 million Btu per hour Boiler burning No. 6 oil for process heat 003-0283-4-0330 1971	003-0283-4-0330	1971
EU-5	Boiler 193: 2 million Btu per hour Boiler burning No. 2 oil for comfort heat in garage	510-0918- 4-1240	1962
EU-6	500 kW diesel-powered Emergency Generator	510-0918-9-1002	2004
EU-7	Truck loading rack with four (4) bottom-loading bays for the loading of gasoline/ethanol, and two (2) bottom-loading bays for distillates controlled by a primary John Zink Carbon Adsorption/Absorption Vapor Recovery Unit Control Device or a John Zink Vapor Combustion Unit Control Device as a back-up	510-0918-9-0102	1958 Modified in 2000, 2004, 2017, and 2018
EU-8	Marine Transfer Operations	510-0918-9-0102	1958 Modified in 2018

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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.

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REGULATORY REVIEW/ TECHNICAL REVIEW/ COMPLIANCE METHODOLOGY

Table IV-1

EU-1: Tank No. 1967: a 4,337,046 gallon, external floating roof storage tank for gasoline or ethanol installed in 1960

EU-2: Tank No. 1973: a 5,821,746 gallon, external floating roof storage tank to store gasoline or ethanol installed in 1977

(ARA Registration No. 510-0918-9-0102)

Applicable Standards/Limits:

EU-1: Tank No. 1967 is a large (greater than 40,000 gallons), open top, gasoline and ethanol storage tank equipped with an external floating roof. The tank was constructed in 1960, prior to the applicability dates of NSPS 40 CFR 60, Subparts K, Ka, and Kb. The tank is permitted for gasoline storage as well as ethanol and other petroleum products such as distillate oils.

EU-2: Tank No. 1973 is large (greater than 40,000 gallons) open top, gasoline and ethanol storage tank constructed in 1977, equipped with an external floating roof. The tank is subject to the requirements of 40 CFR 60, Subpart K- Standards of Performance for Storage Vessels for Petroleum Liquids for which construction, reconstruction, or modification commenced after June 11, 1973 and prior to May 19, 1978. The tank is permitted to store gasoline and ethanol.

A. Control of VOC

1. **COMAR 26.11.13.03B(2)(a)-(d)** which states that the Permittee shall not place or store gasoline or VOC having a true vapor pressure (TVP) of 1.5 psia (10.3 kilonewton/square meter) or greater in any open top tank with a capacity of 40,000 gallons (151,400 liters) or greater unless it is equipped with a properly installed and maintained external floating roof that meets all the following requirements:

   a. The external floating roof shall be equipped with a primary and secondary seal.

   b. Openings in the external floating roof, except for automatic bleeder vents, rim space vents, and leg sleeves, shall be equipped with a projection below the liquid surface. The opening with projections

shall also be equipped with a cover, seal, or lid, which shall be maintained in a closed position at all times, except when the device is in actual use.

c. Automatic bleeder vents shall be closed at all times except when the roof is resting on the roof supports. Rim vents shall be set to the open position when the roof is being floated off the leg supports or at the manufacturer's recommended setting.

d. Roof drains shall be provided with a slotted membrane fabric or equivalent cover that encapsulates at least 90 percent of the area of the drain opening.

2. **COMAR 26.11.13.03B(3)(a)-(c)** which states that the Permittee shall meet the following seal requirements when storing gasoline or VOC having a true vapor pressure (TVP) of 1.5 psia (10.3 kilonewton/square meter) or greater in any open top tank with a capacity of 40,000 gallons (151,400 liters) or greater:

   a. There shall be no visible holes, tears, or other openings in a seal or seal fabric.

   b. Each seal shall be intact and uniformly in place around the circumference of the floating roof between the floating roof and the tank wall.

   c. The accumulated area of the gaps between the secondary seal and the tank wall that are greater than 1/8 inch in width may not exceed 1.0 square inch per foot of tank diameter.

3. **40 CFR 60.112(a)(1)** which requires the Permittee to equip Storage Tank No. 1973 with a floating roof, a vapor recovery system or their equivalents.

B. Control of HAP

40 CFR 63, Subpart BBBBBB which requires the Permittee to meet emission limits and management practices for gasoline storage tanks. The Permittee shall comply with 40 CFR 63, Subpart BBBBBB by equipping each tank with an external floating roof meeting the following specifications prior to storing gasoline in the tank:

(1) Each external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge. The closure device is to consist of two seals, one above the other. The lower seal is

referred to as the primary seal, and the upper seal is referred to as the secondary seal.

(a) The primary seal shall be either a mechanical shoe seal or a liquid-mounted seal. Except as provided in 40 CFR §60.113b(b)(4), the seal shall completely cover the annular space between the edge of the floating roof and tank wall.

(b) The secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion except as allowed in §60.113b(b)(4).

[Authority: 40 CFR §60.112b(a)(2)(i), §63.11087(a), and Table 1 to 40 CFR 63, Subpart BBBBBB].

(2) If a tank does not meet the requirements of 40 CFR §60.112b(a)(2)(i):

(a) Except for automatic bleeder vents and rim space vents, each opening in a noncontact external floating roof shall provide a projection below the liquid surface.

(b) Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof is to be equipped with a gasketed cover, seal, or lid that is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use.

(c) Automatic bleeder vents are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.

(d) Rim vents are to be set to open when the roof is being floated off the roof legs supports or at the manufacturer's recommended setting.

(e) Automatic bleeder vents and rim space vents are to be gasketed.

(f) Each emergency roof drain is to be provided with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening.

[Authority: 40 CFR §60.112b(a)(2)(ii), §63.11087(a), and Table 1 to 40 CFR 63, Subpart BBBBBB].

(3) The roof shall be floating on the liquid at all times (i.e., off the roof leg supports) except during initial fill until the roof is lifted off leg supports and when the tank is completely emptied and subsequently refilled. The process of filling, emptying, or refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as

possible. **[Authority: 40 CFR §60.112b(a)(2)(iii), §63.11087(a), and Table 1 to 40 CFR 63, Subpart BBBBBB].**

Compliance Demonstration for Control of VOC and HAP
Each tank is equipped with an external floating roof with primary and secondary seal to meet the roof and seal requirements of COMAR 26.11.13.03 and 40 CFR 63, Subpart BBBBBB. For each tank storing gasoline, the Permittee is required to conduct semiannual visual inspections of each tank's seals and measure gaps of the secondary seal annually and the primary seal every five years. The Permittee is also required to visually inspect the roof, seals, and fittings when each tank is emptied and degassed. The Permittee must maintain records of inspections and measurements and any actions taken or repairs made to maintain compliance with all applicable requirements. The Permittee is required to notify the Department prior to conducting tank inspections and gap measurements and submit gap measurement and semiannual inspection reports.

For the NSPS requirement, 40 CFR 60.113(a), The gasoline storage and vapor pressure information is maintained electronically at the Permittee's Corporate Environmental Department through the use of the corporate Terminal Information Management System and the EPA Tanks Program.

Rationale for Periodic Monitoring Strategy for Control of VOC and HAP
COMAR 26.11.13.03, 40 CFR 60, Subpart K and 40 CFR 63, Subpart BBBBBB outline the specific inspection and gap measurement methods and procedures for demonstrating compliance with the applicable roof and seal requirements for each storage tank. These inspections and gap measurements provide the appropriate amount of periodic monitoring required for compliance.

Table IV-2

EU-3: Tank No. 1953, 1961, 1972, 1966, 1964

Tank No. 1953: a 391,524 gallon, internal floating roof equipped storage tank for gasoline or ethanol installed in 1959

Tank No. 1961: a 3,084,744 gallon, internal floating roof equipped storage tank for gasoline or ethanol installed in 1941

Tank No. 1972: a 4,980,948 gallon, internal floating roof equipped storage tank for gasoline or ethanol installed in 1969

Tank No. 1966: a 2,136,036 gallon, internal floating roof equipped storage tank with a geodesic dome for gasoline or ethanol installed in 1960 and modified in 2006 by the installation of a geodesic dome

Tank No. 1964: a 4,469,808 gallon, internal floating roof equipment storage tank for gasoline and/or ethanol installed in 1961 and modified in 2018

(ARA Registration No. 510-0918-9-0102)

Applicable Standards/Limits:

Tank Nos. 1953, 1961, 1972, and 1966 are large (greater than 40,000 gallons) closed top, gasoline and ethanol storage tanks. All of the tanks were constructed prior to 1973 (See Table 1 above for exact dates) and are not subject to the NSPS requirements of Subpart K, Ka, and Kb.

In February of 2006, Buckeye installed a geodesic dome on Tank No. 1966 after the external floating roof was damaged by heavy snow during a storm. A permit to construct was not required to install the geodesic dome roof on the existing external floating gasoline storage tank because the existing floating roof was not removed. This was not considered a modification or reconstruction of the tank and therefore did not trigger applicability of 40 CFR 60, Subpart Kb for volatile organic storage tanks. The tank is now considered to be equipped with an internal floating roof with the addition of the geodesic dome roof.

In April of 2018, Buckeye received a permit to construct to replace the internal floating roof on Tank No. 1953. Tank No. 1953 is an existing gasoline/ethanol storage tank built in 1959. This project was later cancelled.

These tanks are not subject to the requirements of 40 CFR, Part 60, Subpart K, Ka, or Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) because they were not constructed, reconstructed, or modified after July 11, 1973. All of these tanks were constructed prior to 1970 and have not undergone any major modifications or reconstructions as defined in 40 CFR Part 60.14 and 60.15 at this time. These storage tanks are subject to the requirements of COMAR 26.11.13, Control of Gasoline and Volatile Organic Compound Storage and Handling and to the requirements of 40 CFR, Part 63, Subpart BBBBBB for Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities. In most cases, the requirements of 40 CFR, Part 63, Subpart BBBBBB reference the requirements of 40 CFR, Part 60, Subpart Kb as applicable standards.

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In April of 2018, Buckeye received a permit to construct to modify Tank No. 1964 by installing an internal floating roof. Tank No. 1964 was an existing fuel oil storage tank not previously registered with the Air and Radiation Administration. The addition of an internal floating roof and the tank conversion to gasoline/ethanol storage is considered a new source subject to the federal NSPS requirements of 40 CFR 60, Subpart Kb for storage of volatile organic liquids. Tank No. 1964 is also subject to VOC RACT requirements under COMAR 26.11.13.03 and the area source NESHAP requirements of 40 CFR 63, Subpart BBBBBB. NSPS Subpart Kb requires an internal floating roof with primary and secondary seals or seal equivalent and frequent tank inspections. The new internal floating roof meets the requirements of Subpart Kb.

A. Control of VOC

1. **COMAR 26.11.13.03A(1)(a) and (b)** which require the Permittee to meet the following equipment requirements:

   a. Each tank's gauging and sampling devices shall be gas tight except when in use; and

   b. Each tank shall be equipped with one of the following properly installed, operating, and well maintained emission control systems:

      i. An internal floating roof equipped with a primary and secondary seal;

      ii. A pressure tank system that maintains a pressure at all times to prevent loss of vapors to the atmosphere; or

      iii. A vapor control system capable of collecting the vapors from the tank and disposing of the vapors to prevent their emission to the atmosphere.

2. **COMAR 26.11.13.03A(2)**, which requires the Permittee to meet the following seal requirements:

   a. There shall be no visible holes, tears, or other openings in the seal or seal fabric.

b. Each seal shall be intact and uniformly in place around the circumference of the floating roof between the floating roof and the tank wall.

c. The accumulated area of the gaps between the secondary seal and the tank wall and between the seal and other obstructions inside the tank (that is, ladder, roof supports) that are greater than 1/8 inch in width may not exceed 1.0 square inch per foot of tank diameter.

3. **40 CFR 60.112b(a)(1)** which requires the Permittee to equip the storage vessel with a fixed roof in combination with an internal floating roof meeting the specifications listed in 40 CFR §60.112b(a)(1)(i), §60.112b(a)(1)(ii)(A), §60.112b(a)(1)(ii)(C), and §60.112b(a)(1)(iii). **[Authority: 40 CFR §60.112b(a)(1), §63.11087(a), and Table 1 to 40 CFR, Part 63, Subpart BBBBBB, requirement 2(b)]**

   The internal floating roof shall be floating on the liquid surface (but not necessarily in complete contact with it) inside the storage vessel at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible. **[Authority: 40 CFR §60.112b(a)(1)(i), §63.11087(a), and Table 1 to 40 CFR, Part 63, Subpart BBBBBB, requirement 2(b)]**

   [Note: These requirements also satisfy the requirements of COMAR 26.11.13.03A(1)(b) and COMAR 26.11.13.03A(2).]

For Tank 1964 only

4. **40 CFR §60.112b(a)(1)** which requires the Permittee to equip the internal floating roof with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof listed in 40 CFR §60.112b(a)(1)(ii)(A-C). **[Authority: 40 CFR §60.112b(a)(1)(ii-ix) and ARA Permit to Construct issued April 3, 2018]**

Compliance Demonstration for Control of VOC and HAP

The Department received Buckeye's initial notification for Subpart BBBBBB on May 9, 2008 and their Notification of Compliance Status Report on January 11, 2011 so that there are no Subpart BBBBBB requirements included in this permit pertaining to the Notification of Compliance Status.

To comply with the requirements of COMAR 26.11.13.03A(1)(a), the Permittee shall perform annual visual inspections of each tank's gauging and sampling devices. If a failure of a gauging or sampling device is detected during a required visual inspection, the Permittee is required to repair the device or empty and remove the tank from service within 45 days. The Permittee shall maintain all records of the inspections and repairs, including the date and the action taken.

Each storage tank is equipped with an internal floating roof with a primary and secondary seal to comply with the requirements of COMAR 26.11.13.03A(1)(b). The new internal floating roof on Tank No. 1964 meets the requirements of Subpart Kb. Compliance with NSPS Subpart Kb demonstrates compliance with the COMAR and NESHAP Subpart BBBBBB requirements.

To comply with the seal requirements of COMAR 26.11.13.03A(2) and 40 CFR, Part 63, Subpart BBBBBB, the Permittee is required to conduct visual inspections of the internal floating roof and seals of each tank prior to filling and refilling the tank with volatile organic liquid as specified in 40 CFR §60.113b(a)(1). The Permittee must also perform annual external visual inspections of the roof and seals of each tank in accordance with COMAR 26.11.13.03A(3) and 40 CFR §60.113b(a)(2) and repair any defects found or empty and remove the tank from service within 45 days. In addition, the Permittee must conduct an internal inspection of each tank at least every ten (10) years, as specified in 40 CFR §60.113b(a)(4) or when an annual visual inspection shows non-compliance. The Permittee shall determine the total seal gap during each internal inspection using the procedures in COMAR 26.11.13.03A(4). Any defects must be repaired prior to refilling the storage tank with volatile organic liquid. The Permittee is required to notify the Department prior to conducting internal inspections to afford the Department the opportunity to have an observer present as specified in 40 CFR §60.113b(a)(5) and COMAR 26.11.13.03A(3)(d).

In addition to maintaining inspection and repair records for each tank including all repairs or replacements of the seals as specified by COMAR 26.11.13.03C(2), the Permittee shall also maintain the average monthly storage temperature and throughput for each tank as specified in COMAR 26.11.13.03C(3). The Permittee is required to furnish a report to the Department within 30 days illustrating any defects in the tanks, including the seals and internal roofs, detected during the required inspections, as well as any repairs made, as required by 40 CFR §60.115b(a)(3) and (4).

The Permittee is required to submit a semiannual compliance report that includes records of each inspection performed on each of the seven (7) storage tanks. The semiannual compliance report shall also include records of any defects in the tanks, including the seals and internal roofs, that are detected during the

required inspections, as well as any repairs made as specified by §60.115b(a)(2),(3), and (4).

In addition, for Tank No. 1964 the Permittee shall maintain the dimension and an analysis of the capacity of the storage vessel and information regarding the volatile organic liquid stored as specified by §60.116b(b,c and e).

Rationale for Periodic Monitoring Strategy for Control of VOC and HAP

COMAR 26.11.13 and 40 CFR, Part 63, Subpart BBBBBB, and 40 CFR, Part 60, Subpart Kb outline specific inspection methods and procedures for demonstrating compliance with the roof and seal requirements for each storage tank. Subpart BBBBBB requires both internal and external inspections periodically (after every fill and refill, every year, and every ten (10) years). In addition, the Department requires annual inspections of each tank's gauging and sampling devices to demonstrate compliance with the gas-tight device requirement. These inspections are thorough so that if there are any defects they should be detected in a timely manner without the release of significant emissions. Subpart BBBBBB requires that any defects noted in the internal and external inspections are reported to the Department. Subpart BBBBBB requires the submission of semiannual compliance reports detailing records of the required inspections and any noted defects. No additional periodic monitoring is necessary to demonstrate compliance at this time.

Table IV-3

EU-4: Fuel Burning Equipment (Boilers) for heating No. 6 Fuel Oil Storage Tanks

Boiler 191: a 21 MMBtu/hr boiler burning primarily natural gas and No. 2 fuel oil as a backup only (No. 510-0918-4-1239)
Boiler 192: a 25 MMBtu/hr boiler burning primarily natural gas and No. 2 fuel oil as a backup only (No. 510-0918-4-1241)
Boiler 194: a 29 MMBtu/hr boiler burning primarily natural gas and No. 2 fuel oil as a backup only (No. 510-0918-4-1242)
Boiler 195: a 29 MMBtu/hr boiler burning No. 6 fuel oil (No. 003-0283-4-0329)
Boiler 196: a 29 MMBtu/hr boiler burning No.6 fuel oil (No. 003-0283-4-0330)

Applicable Standards/Limits:

Boilers 191, 192 and 194 were modified in 2014 to burn natural gas as a primary fuel and No. 2 fuel oil as a backup only. If No. 2 fuel oil is used only as a backup

these boilers are not subject to the NESHAP requirements of 40 CFR 63, Subpart JJJJJJ.

Boiler 195 and 196 are fired by emulsified No. 6 residual fuel oil and are subject to the NESHAP requirements of 40 CFR 63, Subpart JJJJJJ. They were constructed prior to 1989 and have not been modified or reconstructed and, therefore, are not subject to NSPS Subpart Dc.

A. Visible Emissions Limitations

1. **COMAR 26.11.09.05A(2)** which prohibits visible emissions from any fuel burning equipment other than water in an uncombined form, except as allowed under COMAR 26.11.09.05A(3).

2. **COMAR 26.11.09.05A(3)** which allows visible emissions from any fuel burning equipment, 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
Boiler 195 and 196
COMAR 26.11.09.06B(2) which states that the Permittee shall not discharge particulate matter in excess of 0.03 gr/scfd from the combustion of residual oil fuel burning in fuel burning equipment rated between 13 MMBtu/hr and 50 MMBtu/hr.

Compliance Demonstration for the Visible Emissions Limitations and Control of Particulate
To comply with the visible emissions and PM requirements, the Permittee shall:

1. Properly operate and maintain the boilers in a manner to prevent visible emissions; and

2. The Permittee shall perform a visual observation on each boiler for a 6-minute period monthly. If the Permittee does not burn any No. 6 fuel oil during a month in a boiler, this requirement is waived for that boiler for the month.

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

a. Inspect combustion system and boiler operations;

b. Switch to an alternate boiler or perform all necessary adjustments and/or repairs to the boiler within 48 hours, so that visible emissions are eliminated;

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

d. If the Permittee is unable to switch to the alternate boiler or the required adjustments and/or repairs to the malfunctioning boiler have not eliminated the visible emissions within 48 hours, the Permittee shall perform a Method 9 observation once daily when the boiler is operating for 18 minutes until corrective action has eliminated the visible emissions.

Rationale for Periodic Monitoring for Visible Emissions Limitations and Control of Particulate

Based on U.S. EPA AP-42 emissions factors, the boilers will be in continuous compliance with the applicable 0.03 gr/SCFD particulate matter standard when the boilers are properly operated and maintained.

Monthly observations and follow-up maintenance when any visible emissions are observed are sufficient to demonstrate compliance with the visible emissions standard and to ensure that the boilers are operating properly to minimize visible emissions and particulate matter emissions. The Permittee shall maintain results of the visible emissions observations and, if applicable, the results of the inspections and the corrective actions taken to reduce the 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".

No further compliance demonstration requirements are necessary for those periods during which the emissions units burn distillate fuel oils.

C. Control of Sulfur Oxides

COMAR 26.11.09.07A(2)(c), which limits the sulfur content in No. 6 fuel oil to 1.0 percent by weight.

Compliance Demonstration and Rationale for Periodic Monitoring for Control of Sulfur Oxides

To comply with the sulfur content limitations, the Permittee shall retain on site for at least five years sulfur content in fuel analyses that certifies that the sulfur content of fuel oil burned in the boilers complies with the sulfur in fuel limitation. The Permittee shall make such records available to the Department upon request. Fuel supplier certifications are sufficient to demonstrate compliance with all applicable fuel sulfur limits. No additional monitoring is required.

D. Control of Nitrogen Oxides (NOx RACT)

Buckeye is a potential major source of NOx emissions. NOx RACT requirements are applicable to all sources of NOx at Buckeye – Baltimore Terminal.

1. **COMAR 26.11.09.08E** – Requirements for Fuel-Burning Equipment with a Rated Heat Input Capacity of 100 MM Btu/hr or Less. "A person who owns or operates fuel-burning equipment with a rated heat input capacity of 100 MMBtu per hour or less shall:

   a. Submit to the Department an identification of each affected installation, the rated heat input capacity of each installation, and the type of fuel burned in each;

   b. Perform a combustion analysis for each installation at least once each year and optimize combustion based on the analysis;

   c. Maintain the results of the combustion analyses at the site for at least 5 years and make this data available to the Department and EPA upon request **(Authority: COMAR 26.11.03.06C(5)(g));**

   d. Once every three years, require each operator of the installation to attend operator training programs on combustion optimization that are sponsored by the Department, the EPA, or equipment vendors; and

   e. Prepare and maintain a record of training program attendance for each operator.

2. **COMAR 26.11.09.08B(5)** Operator Training: 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.

Compliance Demonstration and Rationale for Periodic Monitoring for Control of Nitrogen Oxides

COMAR 26.11.09.08E outlines the specific monitoring, record keeping, and reporting requirements necessary to demonstrate compliance. These requirements include periodic combustion analyses and training programs. No additional periodic monitoring is necessary to demonstrate compliance.

E. Control of HAP
Boiler 195 and 196

40 CFR 63, Subpart JJJJJJ, which requires work practice standards, emission reduction measures, and management practices for control of HAP emissions for existing oil-fired boilers.

Compliance Demonstration for Control of HAP
For boilers installed on or before June 4, 2010 with a heat input capacity of equal to or greater than 10 million Btu per hour, a one-time energy assessment and biennial performance tune-ups are required. An energy assessment meeting the requirements of 40 CFR 63, Subpart JJJJJJ was performed in March of 2014.

The Permittee is also required to perform an annual combustion analyses to comply with the NOx RACT requirements of COMAR 26.11.09.08E when the boilers are operating. As long as the combustion analyses meets all tune-up requirements of Subpart JJJJJJ, the required annual combustion analyses satisfies both the requirements of COMAR 26.11.09.08E and 40 CFR 63, Subpart JJJJJJ.

In addition to the one-time energy assessment and biennial tune-ups, the Permittee must also operate and maintain the boiler in a manner that minimizes emissions. The Permittee must keep records of all notifications, energy assessments, and tune-ups and prepare a biennial compliance report to be submitted to the Department upon request.

Rationale for Periodic Monitoring Strategy for Control of HAP

40 CFR 63, Subpart JJJJJJ outlines the specific energy assessment and performance tune-up methods, procedures, and frequency and notification, record keeping and reporting requirements applicable to the boilers to demonstrate initial and continuous compliance with the subpart. No additional periodic monitoring is required.

F. Operational Limit

The Permittee shall burn only natural gas or No. 2 fuel oil in Boiler 191, 192, and 194 unless the Permittee obtains an approval from the Department to

burn alternate fuels. No. 2 fuel oil may only be burned during periods of gas curtailment, gas supply interruption, startups, or periodic testing on liquid fuel. Periodic testing on liquid fuel may not exceed 48 hours during any calendar year for each boiler.

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

[Authority: COMAR 26.11.02.09A 40 CFR §63.11237]

Compliance Demonstration and Rationale for Periodic Monitoring for the Operational Limitation

The Permittee maintains records of natural gas and No. 2 fuel usage for Boilers 191, 192, and 194 including the types and amounts of fuel used and documentation showing that No. 2 fuel was only used during periods of natural gas curtailment or for testing. If the Permittee shall obtain an approval from the Department to burn No. 2 fuel oil in any of the three (3) boilers at any other times other than periods of natural gas curtailment or testing, the Permittee shall comply with the requirements of 40 CFR 63, Subpart JJJJJJ. No additional periodic monitoring is necessary to demonstrate compliance.

Table IV-4

EU-5: Fuel Burning Equipment for Comfort Heat in Garage

Boiler 193: a 2 MMBtu/hr boiler burning No. 2 fuel oil (No. 510-0918-4-1240)

Applicable Standards/Limits:

This boiler is subject to general visible emissions and sulfur content requirements in COMAR 26.11.09 for fuel burning equipment. Boiler 193 was installed prior to 1970 and is subject to the area source HAP requirements under 40 CFR 63, Subpart JJJJJJ for boilers.

A. Visible Emissions Limitations

1. **COMAR 26.11.09.05A(2)** which states that "a person may not cause or permit the discharge of emissions from any fuel burning equipment, other than water in an unconfined form, which is visible to human observers."

2. **COMAR 26.11.09.05A(3)** which allows visible emissions from any fuel burning equipment, 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 and Rationale for Periodic Monitoring Strategy for Visible Emissions Limitations

To comply with these requirements, the Permittee shall properly operate and maintain the boiler in a manner to prevent visible emissions. Boilers, with a rated heat input capacity of less than 10 million Btu per hour that are properly maintained and operated typically will operate without visible emissions or excessive particulate matter emissions when burning distillate fuel oils. Boilers in this size range are set up to operate in an automatic mode without oversight of an operator.

The completion of preventive maintenance as recommended by the boiler manufacturer, focusing on combustion performance, is sufficient to maintain compliance with the no visible emissions requirement. To verify proper operation and maintenance, the Permittee shall maintain records of maintenance performed on the boilers to prevent visible emissions. Even though there is not a specific schedule to perform observations of the stack emissions, the Permittee is required under the general reporting requirement for excess emissions and deviations to report incidents when visible emissions are observed.

No additional periodic monitoring is necessary to demonstrate compliance.

B. Control of Sulfur Oxides

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

Compliance Demonstration and Rationale for Periodic Monitoring for Control of Sulfur Oxides

The Permittee shall obtain fuel supplier certifications for each shipment of fuel to be burned in the boiler. The certifications shall include the name of the supplier and the sulfur content or maximum sulfur content of the oil. Fuel supplier certifications for each shipment of fuel oil that states the maximum sulfur content of the oil is sufficient to demonstrate that the oil contains 0.3 percent by weight sulfur or less.

No additional monitoring is required.

C. Control of Nitrogen Oxides

1. **COMAR 26.11.09.08F(1)** A person who owns or operates a space heater as defined in regulation COMAR 26.11.09.01B shall:

   a. Submit to the Department a list of each affected installation on the premises and the types of fuel used in each installation;

   b. Develop an operating and maintenance plan to minimize NOx emissions based on the recommendations of equipment vendors and other information including the source's operating and maintenance experience;

   c. Implement the operating and maintenance plan and maintain the plan at the premises for review upon request by the Department;

   d. Require installation operators to attend in-State operator training programs once every 3 years on combustion optimization that are sponsored by the Department, the EPA, or equipment vendors; and

   e. Prepare and maintain a record of training program attendance for each operator at the site, and make these records available to the Department upon request."

COMAR 26.11.09.08B(5) – Operator Training: 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: COMAR 26.11.09.01B(15) states, "Space heater" means fuel-burning equipment that consumes more than 60 percent of its annual fuel during the period from October 31 of one year through March 31 of the following year. For the purpose of this regulation, annual fuel use is the total fuel consumed during the period October 1 of one year to September 30 of the following year, beginning October 1, 1989.

A person who owns or operates a space heater that no longer qualifies as a space heater as defined in COMAR 26.11.09.01(B) shall inform the Department no later than 60 days after the date when the fuel burning equipment did not qualify and shall meet the applicable fuel burning equipment RACT requirement in the regulation. **[Authority: COMAR 26.11.09.08F(2)]**

Compliance Demonstration and Rationale for Periodic Monitoring Strategy for Control of Nitrogen Oxides

COMAR 26.11.09.08F outlines the specific monitoring, record keeping, and reporting requirements necessary to demonstrate compliance. These requirements include periodic combustion analyses and training programs. No additional periodic monitoring is necessary to demonstrate compliance.

D. Control of HAP

40 CFR 63, Subpart JJJJJJ, which requires work practice standards, emission reduction measures, and management practices for control of HAP emissions for existing oil-fired boilers with a heat input capacity of equal to or less than 5 million Btu per hour.

Compliance Demonstration for Control of HAP

The Permittee submitted the Notification of Compliance Status for subpart JJJJJJ on July 17, 2014. For boilers installed on or before June 4, 2010 with a heat input capacity of equal to or less than 5 million Btu per hour, performance tune-ups are required every five years. The initial tune-up was conducted on May 30, 2012. Subsequent tune-ups are required every five years (no later than 61 months after the previous tune-up). The last tune-up was on April 9, 2014. The boiler has been out of service since March of 2015. The Permittee must also operate and maintain the boiler in a manner that minimizes emissions. The Permittee must also maintain records of the tune-ups and prepare a compliance report every five years.

Rationale for Periodic Monitoring Strategy for Control of HAP

40 CFR 63, Subpart JJJJJJ outlines the specific performance tune-up methods, procedures, and frequency and notification, record keeping and reporting requirements applicable to the boiler to demonstrate initial and continuous compliance with the subpart. No additional periodic monitoring is required.

E. Operational Limitation

The Permittee shall only burn distillate fuel oil (No. 2 fuel oil) in the boilers unless the Permittee applies for and receives an approval or permit from the Department to burn alternate fuels. **[Authority: COMAR 26.11.02.09A]**

Compliance Demonstration and Rationale for Periodic Monitoring Strategy for Operational Limitation

The Permittee is required to keep annual records of the type and amount of fuel used in the boiler. These records are required to support the emission certification report that must be submitted annually. These records are sufficient to demonstrate that only distillate fuel oil (No. 2 fuel oil) was used in the boiler.

Table IV-5

EU-6: Hess Microgen 500 kW diesel powered emergency generator

(ARA Registration No. 510-0918-9-1002)

Buckeye operates one (1) emergency reciprocating internal combustion engine (RICE) that is subject to 40 CFR, Part 63, Subpart ZZZZ for Stationary Reciprocating Internal Combustion Engines. Buckeye is not a major source with respect to HAP emissions and the engine was installed prior to June 12, 2006. The engine is considered an existing stationary RICE at an area source of HAP emissions. The NESHAP requirements of 40 CFR, Part 63, Subpart ZZZZ are included in the Title V - Part 70 Operating Permit.

Applicable Standards/Limits:

A. Visible Emissions Limitations

(1) **COMAR 26.11.09.05E(2)** which states that the Permittee shall not cause or permit the discharge of emissions from any engine, operating at idle, greater than 10 percent opacity.

(2) **COMAR 26.11.09.05E(3)** which states that the Permittee shall not cause or permit the discharge of emissions from any engine, operating at other than idle conditions, greater than 40 percent opacity.

Exceptions. **COMAR 26.11.09.05E(4)**: 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.

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

Section E(2) and (3) do not apply while maintenance, repair, or testing is being performed by qualified mechanics.

Compliance Demonstration and Rationale for Periodic Monitoring Strategy for Visible Emissions Limitations:
A properly operated and maintained engine of this size should not cause visible emissions in excess of the applicable standards. The Permittee shall operate and maintain the stationary internal combustion engine in a manner to prevent visible emissions. The Permittee shall maintain records of all maintenance/repairs performed and make them available to the Department upon request.

B. Control of Sulfur Oxides

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

Compliance Demonstration and Rationale for Periodic Monitoring Strategy for Control of Sulfur Oxides:
The Permittee shall obtain a certification from the fuel supplier indicating that the oil complies with the limitation on the sulfur content of fuel oil. The Permittee shall retain fuel supplier certifications of sulfur content in fuel. The Permittee shall report fuel supplier certifications of sulfur content in fuel to the Department upon request. Fuel supplier certifications are sufficient to demonstrate compliance with all applicable fuel sulfur limits. No additional monitoring is required.

C. Control of Nitrogen Oxides (NOx RACT)

1. **COMAR 26.11.09.08G** which states that 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.

Compliance Demonstration and Rationale for Periodic Monitoring Strategy for Control of Nitrogen Oxides

COMAR 26.11.09.08G outlines the specific monitoring, record keeping, and reporting requirements necessary to demonstrate compliance. These requirements include periodic combustion analyses and training programs. No additional periodic monitoring is necessary to demonstrate compliance.

D. Control of HAP

40 CFR 63, Subparts A and ZZZZ which specify general provisions and work practice and maintenance requirements for emergency engines at area sources of HAP.

Compliance Demonstration and Rationale for Periodic Monitoring Strategy for Control of HAP

The engine may only be operated for emergencies, and maintenance and testing. This engine is not used for emergency demand response or other nonemergency operation. Maintenance and testing are limited to 100 hours per calendar year, but there is no limit on the use of the engine for emergency purposes.

To meet the requirements of 40 CFR 63, Subpart ZZZZ, the Permittee is required to conduct periodic maintenance including oil and filter changes and inspections of the air cleaner and hoses and belts. The Permittee is also required to minimize time spent at idle during start-up and overall start-up time and operate and

maintain the engine in a manner consistent with safety and good air pollution control practices for minimizing emissions in accordance with manufacturer's specifications or the Permittee's own maintenance plan.

The Permittee shall maintain records of the maintenance conducted on the engine to demonstrate that the engine was operated and maintained according to either the manufacturer's emission-related written instructions or the Permittee's own maintenance plan. The Permittee must document how many hours are spent for emergency operation, including what classified the operation as emergency.

40 CFR 63, Subpart ZZZZ outlines the specific operating, maintenance, inspection, record keeping and reporting requirements applicable to the engine to demonstrate initial and continuous compliance with the subpart. No additional monitoring is required.

Table IV-6

EU-7: Truck loading rack with four (4) bottom-loading bays for the loading of gasoline/ethanol, and two (2) bottom-loading bays for distillates controlled by a primary John Zink Carbon Adsorption/Absorption Vapor Recovery Unit Control Device or a John Zink Vapor Combustion Unit Control Device as a back-up (ARA Registration Number: 510-0918-9-0102)

EU-7 is a six-bay truck loading rack controlled primarily by a John Zink Vapor Recovery Unit (installed April 2017), or a John Zink Vapor Combustion Unit as a backup, for the loading of gasoline, distillates, residual fuel oil, and ethanol.

In April of 2018, a permit to construct (No. 510-0918-9-0102) was issued for the modification of the truck loading rack by increasing the allowable throughput of gasoline through the loading rack from 495,000,000 gallons per year to 613,200,000 gallons per year. Distillate throughput has been limited to 538,533,828 gallons per year. In order to be considered a synthetic minor source with respect to HAP, and avoid triggering MACT standards, and to avoid a VOC emissions increase of greater than 25 tons per year and major New Source Review (NSR) applicability for the throughput increase, emission limits and operation limits were included in the permit.

The permit requires that Buckeye load gasoline or VOC into only vapor tight tank trucks certified as capable of sustaining a pressure change of not more than 1 inch of water (equivalent to a fugitive emission rate of 8 milligrams per liter of gasoline or VOC loaded). The tank truck vapor tightness requirement is more restrictive than COMAR 26.11.13 and 40 CFR Part 60, Subpart XX. In addition to the operational limits, Buckeye is required to limit VOC emissions, after control, from

the loading rack. The VOC emissions cannot exceed 6.5 milligrams per liter of gasoline loaded. The initial performance test has not been conducted to date but is expected this summer.

The gasoline loading operations are subject to New Source Performance Standards (NSPS) 40 CFR Part 60, Subpart XX -Standards of Performance for Bulk Gasoline Terminals. Subpart XX applies to loading racks constructed or modified after December 17, 1980.

Applicable Standards/Limits:

A. Control of VOC – Vapor Collection and Control Requirements

(1) **COMAR 26.11.13.04A(1)(a), 40 CFR 60, Subpart XX, and 40 CFR 63, Subpart BBBBBB** which require vapor collection and control as follows:

(a) The loading rack shall be equipped with a vapor collection and control system designed to collect the total organic compound vapors displaced from cargo tanks during product loading.

(b) The vapor collection and control system shall control at least 90 percent of all vapors and emissions may not exceed 6.5 milligrams of VOC per liter of gasoline or VOC loaded into gasoline cargo tanks at the loading rack.

[Authority: COMAR 26.11.13.04A(1)(a), 40 CFR §60.502(a) and (b), §63.11088(a), §63.11092(d), Table 2, Items 1(a) and 1(b) of 40 CFR 63, Subpart BBBBBB, and ARA Permit to Construct issued April 3, 2018]

Compliance Demonstration for Control of VOC – Vapor Collection and Control Requirements

To demonstrate compliance with the vapor collection and control requirements, the Permittee uses a VRU as the primary control device, and a VCU as a back-up control device, for the loading rack. For the VRU, the Permittee must maintain a continuous emissions monitoring system (CEMS) and perform semiannual preventative maintenance on the VRU. The Permittee must monitor the VCU for the presence of a pilot flame and operate the VCU in accordance with a monitoring and inspection plan specified in 40 CFR 63, Subpart BBBBBB. The Permittee must also perform semiannual preventive maintenance on the VCU.

The Permittee is required to maintain VOC emissions from the loading rack at less than 6.5 milligrams of VOC per liter of gasoline of VOC loaded which is less than the 35 milligrams per liter standard required by COMAR and the 80 milligrams per liter standard required by 40 CFR 63, Subpart BBBBBB. To demonstrate compliance with the VOC control efficiency requirement and the VOC emissions limitations required by COMAR 26.11.13.04A(1)(a), 40 CFR 60.502(a) and (b) and ARA Permit to Construct No. 510-0918-9-0102 issued on April 3, 2018, the Permittee shall conduct performance tests on the VRU and VCU at least once every five years. The Permittee shall submit a test protocol to the Department for review and approval and shall submit the test results to the Department. The most recent stack testing of the VRU was conducted on August 1, 2018 and the total organic carbons emissions were determined to be 2.09 mg/l of gasoline loaded. The most recent stack testing of the VCU was conducted on September 5, 2019 and the total organic carbons emissions were determined to be 1.34 mg/l of gasoline loaded.

The Permittee shall maintain all records of maintenance, repairs, replacements, additions and preventive maintenance as required by the CAM Plan. Any excursions from the CAM Plan requirements, exceedances of the CEMS monitored operating parameter, and any out-of-control periods for the CEMS shall be submitted semi-annually to the Department.

Rationale for Periodic Monitoring Strategy for Control of VOC – Vapor Collection and Control

COMAR 26.11.13, 40 CFR 63, Subpart BBBBBB, and 40 CFR 60 Subpart XX outline very specific compliance methods for the capture and control of VOC from gasoline cargo tank loading racks. The VRU and VCU are designed to meet all applicable VOC control efficiency and emissions limitation requirements. The VCU is monitored through a required periodic monitoring and inspection plan and CAM Plan. The VRU is monitored through the CEMS. In addition, COMAR requires performance testing of the VRU and VCU every five years. No additional monitoring is required to demonstrate compliance.

B. Control of VOC – Vapor Tight Truck Loading Requirements

(1) **COMAR 26.11.13.05, 40 CFR 60, Subpart XX and 40 CFR 63, Subpart BBBBBB** which require the Permittee to load gasoline only into vapor tight gasoline cargo tanks that have been certified as capable of sustaining a pressure change of not more than 3 inches of water in 5 minutes when pressurized to a gauge pressure of 18 inches of water, or evacuated to a gauge pressure of 6 inches of water, during a test. **[Authority: COMAR 26.11.13.05A, 40 CFR §60.502(e), 40 CFR §63.11088(a), and Table 2, Item 1(d) of 40 CFR 63, Subpart BBBBBB]**

(2) ARA Permit to Construct No. 510-0918-9-0102 issued on April 3, 2018, which requires that loadings of gasoline or VOC into tank trucks be limited to vapor tight tank trucks that have been certified as capable of sustaining a pressure change of not more than 1 inch of water (equivalent to a fugitive emission rate of 8 milligrams per liter of gasoline or VOC loaded) in 5 minutes when pressurized to a gauge pressure of 18 inches of water, or evacuated to a gauge pressure of 6 inches of water, during a test. **[Note: This also satisfies the requirements of 40 CFR 60.502(e) and COMAR 26.11.13.05A.]**

Compliance Demonstration for Control of VOC – Vapor Tight Truck Loading

To comply with the vapor tight cargo tank requirements of COMAR 26.11.13.05A, 40 CFR §60.502(e), 40 CFR §63.11088(a), and Table 2, Item 1(d) of 40 CFR 63, Subpart BBBBBB, the Permittee uses an alternate procedure as allowed under Subpart BBBBBB. The Permittee uses a terminal automation system to prevent gasoline or VOC cargo tanks that do not have valid cargo tank vapor tightness documentation from loading. The Permittee is required to keep all documentation from the terminal automation system as specified in Subpart BBBBBB.

The Permittee has in place a Card Reader System which links trailer certification to customer information in a computer chip installed in the Scully connection from the trailer to the loading rack. If the vapor tightness certification is not current, the driver is blocked from loading product. In addition, the loading system has an interlock system that requires the vapor line of the tank truck to be connected to the terminal's vapor control system so that the VRU or VCU is in operation before the tank truck can be loaded. The Permittee is required to operate and maintain the interlock system and maintain records of quality assurance activities related to maintaining the interlock system.

Rationale for Periodic Monitoring Strategy for Control of VOC – Vapor Tight Truck Loading

COMAR 26.11.13, NSPS Subpart XX, and 40 CFR 63, Subpart BBBBBB outline specific methods and procedures for demonstrating compliance with the vapor tight tank truck requirements. No additional periodic monitoring is necessary to demonstrate compliance.

C. Control of VOC - Back Pressure and Leak Requirements

COMAR 26.11.13.04A(1)(b), 40 CFR 60 Subpart XX, and 40 CFR 63, Subpart BBBBBB which require the Permittee design and operate the vapor collection and control system and the loading equipment so that during loading:

(1) The gauge pressure in the delivery tank does not exceed 4,500 pascals.

(2) No pressure-vacuum vent in the vapor collection and control system begins to open at a system pressure less than 4,500 pascals.

(3) The gasoline or VOC tank truck pressure does not exceed 18 inches of water, and vacuum does not exceed 6 inches of water.

(4) There are no gasoline or VOC leaks in the system during loading or unloading operations.

[Authority: COMAR 26.11.13.04A(1)(b), 40 CFR §60.502(h), (i), and (j), 40 CFR §63.11088(a), and Table 2, Item 1(d) of 40 CFR 63, Subpart BBBBBB]

Compliance Demonstration for Control of VOC – Back Pressure and Leak Requirements

To demonstrate compliance with the back pressure and leak requirements the Permittee is required to conduct monthly leak inspections of the vapor collection system, the vapor processing system, and the loading rack when loading cargo tanks as specified in the CAM plan. This inspection is in addition to the facility wide leak inspections required by 40 CFR 63, Subpart BBBBBB. The Permittee is also required to conduct monthly back pressure checks. Records of leak inspections and back pressure checks must be maintained and any excursion reported as part of the semiannual compliance and excess emissions reports required by 40 CFR 63, Subpart BBBBBB.

Rationale for Periodic Monitoring Strategy for Control of VOC - Back Pressure and Leak Requirements

The VRU (VCU as a backup) and the truck loading rack are designed to be leak tight and meet the applicable pressure requirements. In addition, the VRU (VCU as a backup) and the truck loading rack are designed to be leak-tight during loading. Monthly back pressure and leak checks during loading are sufficient to demonstrate compliance with the requirements.

D. Control of VOC - Design and Operational Requirements

COMAR 26.11.13.04A(1)(c), 40 CFR 60 Subpart XX, and 40 CFR 63, Subpart BBBBBB which specify the following design and operational requirements:

(1) The exhaust gases from the truck loading rack shall vent through the VRU as the primary control device, or the VCU as the back-up control device when the VRU is down for maintenance or malfunction, prior to discharging to the atmosphere.

(2) The Permittee shall design the vapor collection system to prevent any total organic compounds vapors collected at one loading rack from passing to another loading rack.

(3) The Permittee shall assure that loadings of gasoline or VOC tank trucks are made only into tanks equipped with vapor collection equipment that is compatible with the terminal's vapor collection system.

(4) The Permittee shall assure that the terminal's and the tank truck's vapor collection systems are connected during each loading of a gasoline or VOC tank truck.

(5) The Permittee shall equip the terminal's loading racks with a top submerged or bottom loading system.

Compliance Demonstration and Rationale for Periodic Monitoring Strategy for Design and Operational Requirements

The loading rack and vapor collection and control systems are designed to operate as required by COMAR 26.11.13.04A(1)(c), 40 CFR §60.502(f) and (g), and 40 CFR 63, Subpart BBBBBB. The loading rack is equipped with a bottom loading system. Periodic monitoring is not required to demonstrate compliance.

E. Control of VOC - Operational Limitation

ARA Permit to Construct No. 510-0918-9-0102 issued on April 3, 2018, which limits total gasoline throughput loaded into tanks trucks to 613,200,000 gallons in any consecutive 12-month period and distillate loading to 538,533,828 gallons in any consecutive 12-month period. **[Note: This limit was established to preclude applicability of Major New Source Review and to be recognized as a synthetic minor source for MACT requirements under 40 CFR Part 63 Subpart R - National Emission Standards for Gasoline Distribution Facilities.]**

Compliance Demonstration and Rationale for Periodic Monitoring Strategy for the Operational Limitation

To demonstrate compliance with the throughput limitation, the Permittee shall keep monthly records to document that total gasoline and distillate throughput for each consecutive twelve (12) months does not exceed the aforementioned limits. The records shall be made available to the Department upon request. The Permittee shall report any incidences of excess emissions as required in permit condition 4 of the Title V – Part 70 Operating Permit, Section III, Plant Wide Conditions, "Report of Excess Emissions and Deviations". Required records of gasoline throughput are sufficient to demonstrate compliance with the throughput limit. No periodic monitoring is required.

F. Visible Emissions Limitation for the John Zink Vapor Combustor

COMAR 26.11.06.02C(2) which prohibits the discharge of emissions from any building or installation other than water in an uncombined form which is visible to human observers.

Exception: This does not apply to emissions during start-up and process modifications or adjustments, or occasional cleaning of control equipment, if:

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

(b) The visible emissions do not occur for more than 6 consecutive minutes in any 60-minute period.

Compliance Demonstration for VE Limitation

The VCU is the only equipment associated with the loading rack that is capable of causing visible emissions. The Permittee shall observe the stack of the VCU for visible emissions at least once per week for 1-minute when the VCU is operating. The observation shall be conducted as specified under Indicator No. 2 of the CAM Plan for the VCU. The Permittee shall maintain records of the observations and shall report any excursions to the Department as specified under Indicator No. 2 of the CAM Plan for the VCU.

Rationale for Periodic Monitoring Strategy for VE Limitation

Visible emissions from the VCU are unlikely and would only occur if the unit is malfunctioning. A weekly 1-minute visible emissions observation of the VCU stack when the VCU is operating is sufficient to demonstrate compliance with the no

visible emission requirement. In addition, preventive maintenance required by the CAM Plan for the unit will further ensure that the unit is operating properly at all times.

CAM Plan Requirements

The loading rack at the Buckeye terminal uses a John Zink Vapor Combustion Unit to meet federally enforceable emission limits (COMAR 26.11.13.04A(1)(a) and 40 CFR 60.502(a) and (b)). The VOC emissions from the loading rack, pre-control, would be greater than the major source threshold of 25 tons per year. The loading rack is not subject to major source MACT requirements and is not otherwise exempt from CAM. CAM requirements apply to the John Zink Vapor Combustion Unit.

Rationale for Selection of Performance Indicators in the CAM Plan

The following five (5) performance indicators in the CAM Plan for the John Zink Vapor Combustion Unit were selected to provide a reasonable level of assurance that emissions of VOC from the loading of gasoline or VOC at the truck loading rack would be controlled by at least 90% and would not exceed 6.5 milligrams of VOC per liter of gasoline or VOC loaded.

1. Indicator 1 – Pilot (flame) detector– Presence of flame
   The John Zink Vapor Combustion Unit is equipped with a pilot (flame) detector to detect the presence of a pilot flame. This indicator was selected because the presence of the pilot flame is directly related to the combustion performance of the unit. If a pilot flame is not detected by the detector, vapors from the loading rack cannot be introduced into the unit. Tank trucks cannot be loaded unless the unit is in operation. The lack of a pilot flame will automatically shut down loading operations.

2. Indicator 2 – Visible emissions observations
   Visible emissions from the John Zink Vapor Combustion Unit would indicate incomplete combustion of the VOC vapors, or a malfunction of the unit. This indicator was selected so that the Permittee can determine if visible emissions are occurring.

3. Indicator 3 – Vapor collection back pressure checks
   The John Zink Vapor Combustion Unit is designed to meet the applicable pressure requirements. If the back pressure in the vapor collection system exceeds 18 inches of water column, the pressure relief valves in the tank trucks and in the vapor collection line may open and release VOC to the atmosphere. High back pressure will

increase losses of vapor from any leaks that may be in the system. This indicator was selected so that the Permittee can determine if the back pressure exceeds 18 inches of water column.

4. Indicator 4 – Equipment leak checks
   The John Zink Vapor Combustion Unit is designed to be leak-tight during loading. If there are leaks, the unit may not collect all vapors and control at least 90% of all vapors from the loading rack. This indicator was selected so that the Permittee can determine if leaks are occurring during loading.

5. Indicator 5 – Work Practice – Preventive maintenance
   Preventive maintenance, as recommended by the equipment vendor, should be performed on the John Zink Vapor Combustion Unit at least quarterly. This indicator was selected because preventive maintenance will ensure proper operation and performance of the John Zink Vapor Combustion Unit.

The following tables contain the CAM Plan for the John Zink Vapor Combustion Unit that is included in Table IV-6a of the renewal Title V – Part 70 Operating Permit:

Table IV - 6a	
Part 64 Requirement	**CAM Plan**
	Indicator No. 1 – John Zink Vapor Combustion Unit
I. Indicator Measurement Approach	Presence of flame within stack Pilot (flame) detector
II. Indicator Range Reporting Threshold	An excursion is defined as a failure for pilot detector to shutdown the VCU when there is no flame. All excursions shall be reported to the MDE in semi-annual monitoring reports.

III. Performance Criteria	
A. Data Representativeness	The pilot detector controls the operation of the VCU. When no pilot flame is detected, the VCU cannot start-up and if no flame is detected during operation, the VCU automatically shuts down and loading ceases.
B. Verification of Operational Status	The pilot detector is connected to an interlock system that ensures the VCU and loading rack cannot operate if no flame is detected.
C. AQ/QC Practices and Criteria	VCU receives preventative maintenance semiannually by a company certified to install and maintain vapor combustion units. During each visit the following items are checked to ensure proper pilot operation: Pull and clean pilot gas strainer Pull and clean assist gas strainer Check all indicator lights and sensors, replace if faulty Inspect spark ignition system Ensure burner scanner is operating properly- blocking scanner and starting unit. Unit must shut down on flame failure. Complete start-up procedure checked
D. Monitoring Frequency	Pilot detector operates continuously.
E. Data Collection	Results of inspection and preventative maintenance of the pilot operation are manually recorded or in a readily accessible computer system and maintained on site.
F. Averaging Period	N/A

Part 64 Requirement	CAM Plan
	Indicator No. 2 - Vapor Combustor
I. Indicator Measurement Approach	Visible emissions A visual observation is made of the exhaust gases at the outlet of the combustor stack during the loading of a gasoline tank truck.
II. Indicator Range Reporting Threshold	An excursion occurs if there are visible emissions observed. An excursion will trigger an investigation, corrective action, and a reporting requirement. All excursions will be reported to the MDE in semi-annual monitoring reports.
III. Performance Criteria	
A. Data Representativeness	The observer looks for visible emissions in the exhaust gases just above the point the gases exit the combustor stack.
B. Verification of Operational Status	N/A
C. AQ/QC Practices and Criteria	The observers are trained on procedures in making an observation and the record keeping requirements.
D. Monitoring Frequency	An observation will be made once per week for a 1-minute period when the flare is operating.
E. Data Collection	Results of observations will be manually recorded and maintained on site. Records will include date, time, and result of observation or reason.
F. Averaging Period	N/A

Part 64 Requirement	CAM Plan
	Indicator No. 3 - Vapor Collection System
I. Indicator Measurement Approach	Vapor Collection Line Back Pressure

	Pressure gauge reading when trucks are being loaded.
II. Indicator Range Reporting Threshold	An excursion is defined as when the pressure gauge reading shows back pressure to be greater than 18" of water column. An excursion will trigger an investigation, corrective action, and a reporting requirement. All pressure gauge readings greater than 18 inches will be reported to the MDE in the semi-annual monitoring reports.
III. Performance Criteria	
A. Data Representativeness	A pressure gauge that is attached to a spool piece is inserted between the vapor line connection of the tanker and the connection for the terminal's vapor collection line measures back pressure. The gauge measures pressure within ± 0.2 inch of water column.
B. Verification of Operational Status	Monthly check on each loading bay with manual log entry.
C. AQ/QC Practices and Criteria	Preventative maintenance is performed on back pressure gauge three times a year and is calibrated or replaced at least once every five years.
D. Monitoring Frequency	Monthly
E. Data Collection	Monthly reading with manual entry.
F. Averaging Period	N/A

Part 64 Requirement	**CAM Plan**
	Indicator No.4 - Vapor Collection System
I. Indicator	Equipment Leaks
Monitoring Approach	Monthly leak check of vapor collection system. Each calendar month, the vapor collection system from the tanker truck to the John Zink Combustor will be

	inspected during the loading of gasoline tank trucks for total organic compounds liquid or vapor leaks. The detection method will be sight, sound, or smell.
II. Indicator Range	An excursion is defined as detection of a leak by sight, sound, or smell. An excursion will trigger an investigation, corrective action, and a reporting requirement. Leaks will be repaired within 15 days. All excursions and corrective actions taken will be reported to the MDE in the semi-annual monitoring reports.
III. Performance Criteria	
A. Data Representativeness	The terminal operations personnel will be trained on the procedures to detect, record, and initiate corrective actions.
B. Verification of Operational Status	N/A
C. AQ/QC Practices and Criteria	The operations' personnel responsible for performing the monthly inspections will be trained on the procedures to follow. The terminal will maintain a record of employees trained to perform the inspections.
D. Monitoring Frequency	Monthly
E. Data Collection	Results of inspections, leaks found and leaks repaired are recorded and kept on site.
F. Averaging Period	N/A
Part 64 Requirement	**CAM Plan**
	Indicator No. 5 - John Zink Vapor Combustion Unit
I. Indicator	Preventative Maintenance Program
Monitoring Approach	Documentation of preventative maintenance

	Proper VCU operation is verified by performing preventative maintenance as recommended by VCU manufacturer semi-annually.
II. Indicator Range	An excursion occurs if the preventative maintenance is not performed or documented. All excursions will be reported to the MDE in semi-annual monitoring reports.
III. Performance Criteria	
A. Data Representativeness	VCU operation is verified visually by trained personnel using documented inspection and maintenance procedures.
B. Verification of Operational Status	N/A
C. AQ/QC Practices and Criteria	Personnel are trained on inspection and maintenance procedures and proper frequencies.
D. Monitoring Frequency	Preventative maintenance will be performed semi-annually.
E. Data Collection	Results of inspection and maintenance performed during preventative maintenance are manually recorded or in a readily accessible computer system and maintained on site.
F. Averaging Period	N/A

Table IV-7

EU- 8: Marine Transfer Operations
General Facility Wide Requirements

(ARA Registration No. 510-0918-9-0102)

EU-8 is the marine transfer operation at the terminal. The emissions standards under Subpart Y- National Emission Standards for Marine Tank Vessel Loading Operations do not apply, as Buckeye is a synthetic minor source with respect to HAP emissions. Buckeye however is subject to the record keeping requirements

under Subpart Y, in §63.567(j)(4) and the emission estimation requirements under Subpart Y, in §63.565(l) (See Facility Wide Requirements).

To preclude applicability of COMAR 26.11.13.08, Buckeye has elected to comply with a VOC emissions limit of less than 25 tons per calendar year from all marine vessel loading operations at the premises. COMAR 26.11.13.08 was promulgated in 2007 and requires VOC control equipment for marine vessel loading operations if the total emissions from all marine vessel loading at the premises during a calendar year are equal to or exceed 25 tons in Baltimore City. The VOC emissions limit is included in the renewal Title V Operating permit.
Buckeye is also subject to the facility wide HAP leak inspection requirements of 40 CFR 63, Subpart BBBBBB for area source bulk gasoline terminals.

Applicable Standards/Limits:

A. Control of VOC Emissions

(1) Total VOC emissions from all marine vessel loading operations at the premises shall be less than 25 tons per calendar year unless the Permittee obtains an approval from the Department. **[Authority: COMAR 26.11.02.02H]**

Compliance Demonstration for Control of VOC

The Permittee shall maintain records of total VOC emissions from all marine vessel loading operations at the premises in tons per month and tons per calendar year. The records shall include all supporting marine vessel loading data and emissions calculations. **[Authority: COMAR 26.11.03.06C]**

The Permittee shall report the total emissions of VOC from all marine loading operations at the premises in the Annual Emissions Certification Report that is due April 1 of each calendar year. **[Authority: COMAR 26.11.02.19D]**

Rationale for Record Keeping and Reporting Requirements for Control of VOC

Records of monthly and calendar year VOC emissions are sufficient to demonstrate compliance with the calendar year VOC emissions limitations. No periodic monitoring is required.

B. Control of HAP

(1) Premises wide HAP emissions shall be less than 10 tons for any single HAP and 25 tons for the total combination of HAP in any consecutive 12 month period. **[Authority: COMAR 26.11.02.02H]**

(2) **40 CFR §63.560(a)(3)** which states that the record keeping requirements of 40 CFR §63.567(j)(4) and the emission estimation requirements of 40 CFR §63.565(l) apply to existing sources with emissions less than 10 and 25 tons.

(3) **40 CFR 63, Subpart BBBBBB**, which requires general emission minimization procedures and premises wide leak inspections for control of HAP emissions from bulk gasoline terminals.

Compliance Demonstration for Control of HAP

The Permittee shall calculate an annual estimate of HAP emissions, excluding commodities exempted by 40 CFR §63.560(d), from marine tank vessel loading operations. Emission estimates and emission factors shall be based on test data, or if test data is not available, shall be based on measurement or estimating techniques generally accepted in industry practice for operating conditions at the source. The Permittee shall retain records of the emissions estimates determined in 40 CFR §65.565(l) and records of their actual throughputs by commodity. The Permittee shall report emissions of HAP from all marine loading operations in the Annual Emissions Certification Report that is due April 1 of each calendar year. **[Authority: COMAR 26.11.02.19D]**

The Permittee must also operate and maintain the facility in a manner that minimizes emissions and conduct monthly leak inspections of all equipment in gasoline service. The Permittee must keep records demonstrating that the facility is operated and maintained properly and leak inspection logs to document the results of each monthly leak inspection. The Permittee must also include these records in a semiannual report as specified in 40 CFR 63, Subpart BBBBBB.

Rationale for Periodic Monitoring Strategy for Control of HAP

40 CFR 63, Subpart Y specifies the appropriate HAP calculation methods for marine vessel loading at area sources of HAP emissions. These calculations methods and records of HAP emissions are sufficient to demonstrate compliance with the HAP emissions limitations. In addition, 40 CFR 63, Subpart BBBBBB outlines the specific procedures, and record keeping and reporting requirements that demonstrate continuous compliance with leak inspection and HAP emission minimization requirements. No additional periodic monitoring is required.

COMPLIANCE SCHEDULE

The Buckeye terminal is currently in compliance with all applicable air quality regulations.

TITLE IV – ACID RAIN

The Acid Rain Program does not apply to the Buckeye terminal.

TITLE VI – OZONE DEPLETING SUBSTANCES

The requirements of Title VI do not apply to the Buckeye terminal.

SECTION 112(r) – ACCIDENTAL RELEASE

The Buckeye terminal is not subject to the requirements of Section 112 (r).

PERMIT SHIELD

Buckeye did not request a permit shield.

INSIGNIFICANT ACTIVITIES

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

1. No. 1 Stationary internal combustion engines with less than 300 brake horsepower of power output;

   The diesel fired, 80 hp, portable air compressor is subject to the following requirements:

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

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

(C) Exceptions:

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

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

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

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

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

Boiler 197

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

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

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

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

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

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

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

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

4. No 2 Storage of lubricating oils

5. No. 8 Unheated storage of VOC with an initial boiling point of 300°F (149°C) or greater: (Diesel additive, gasoline additive and red dye Tanks 1960, 1975, 1989, 1990, 1992, 1993, 1998, and 1999.)

6. No. 27 Storage of Numbers 1,2,4,5, and 6 fuel oil and aviation jet engine fuel (Tanks No. 1903 (UST), 1917, 1920, 1930, 1931, 1941, 1943, 1944, 1950, 1951, 1952, 1954, 1955, 1956, 1957, 1958, 1959, 1962, 1963, 1965, 1968, 1970, 1971, 1997, Heating Oil Tank 1, Heating Oil Tank 2, and Emergency Generator Tank)

7. No. 1 Storage of VOC normally used as solvents, diluents, thinners, inks, colorants, paints, lacquers, enamel;, varnishes, enamels; liquid resins, or other surface coatings and having individual capacities of 2,000 gallons (7.6 cubic meters) or less; **[Authority: COMAR 26.11.02.10 Q(8)]**

8. __X__ Comfort air conditioning subject to requirements of Title VI of the Clean Air Act;

9. __X__ Laboratory fume hoods and vents; and

10. __X__ Any other emissions unit, not listed in this section, which has a pre-control potential to emit less that is less than one (1) ton per year for VOC, for each pollutant for which there is a federal ambient air quality standard, and for each Class II pollutant as defined in COMAR 26.11.15.01B(4), and is not more than one (1) pound per day of Class I toxic air pollutant as defined in COMAR 26.11.15.01B(4):

No. __1__ oil/water separator tank
No. __1__ asphalt storage tank 1942
No. __1__ 40,000 gallon biodiesel storage tank (Tank 1912)
No. __4__ Recovered oil and process water tanks

VOC emissions from the above listed tanks are subject to either COMAR 26.11.06.06B(1)(a) or B(1)(b), depending on the date of installation.

COMAR 26.11.06.06B(1)(a) requires that the Permittee limit emissions of VOC to not more than 200 pounds per day from installations constructed before May 12, 1972 unless VOC emissions are reduced by 85 percent or more overall.

COMAR 26.11.06.06B(1)(b) requires that the Permittee limit emissions of VOC to not more than 20 pounds per day from installations constructed on or after May 12, 1972 unless VOC emissions are reduced by 85 percent or more overall.

STATE ONLY ENFORCEABLE CONDITIONS

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

1. Applicable Regulations:

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

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

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

2. Operating Conditions:
   In reference to EU-8, the Permittee is prohibited from uncontrolled marine loading of gasoline and uncontrolled marine loading of ethanol is limited to 7,600,000 gallons per 12 months, unless the Permittee can demonstrate compliance with the air toxics requirements for premises wide emissions of benzene at other operating conditions.

3. 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:

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

   2. 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.