Maryland
Department of
the Environment

Wes Moore, Governor
Aruna Miller, Lt. Governor

Serena McIlwain, Secretary
Suzanne E. Dorsey, Deputy Secretary

Mr. Barry W. Meyer, Director of Facilities
Johns Hopkins Bayview Medical Center
4940 Eastern Avenue
Baltimore, MD 21224

OCT 2 4 2023

Dear Mr. Meyer:

Re: Renewal Part 70/ Title V Operating Permit 24-510-1158

Enclosed, please find the Renewal Part 70/Title V Operating Permit and Fact Sheet for the Johns Hopkins Bayview Medical Center, located in Baltimore, MD. The Permit will expire on June 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. Sarah Wells, at sarah.wells@maryland.gov, or (410) 537-3254.

Sincerely,

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

SYS/jm

Enclosures

cc: EPA Region III

KEEP PERMIT AT SITE

CONTROL NO. B - 07522

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. 24-510-1158

DATE ISSUED OCT 24 2023

PERMIT FEE To be paid in accordance with COMAR 26.11.02.19B

EXPIRATION DATE June 30, 2028

LEGAL OWNER & ADDRESS

Johns Hopkins Bayview Medical Center
4940 Eastern Avenue
Baltimore, MD 21224
Attn: Mr. Barry W. Myer, Director of Facilities

SITE

Same
Baltimore City
AI # 203

SOURCE DESCRIPTION

Medical facility consisting of fuel-burning equipment.

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

Page 1 of 59

Program Manager

Director, Air and Radiation Administration

JOHNS HOPKINS BAYVIEW MEDICAL CENTER
4940 EASTERN AVENUE
BALTIMORE MD 21224
PART 70 OPERATING PERMIT NO. 24-510-1158

SECTION I SOURCE IDENTIFICATION

1. DESCRIPTION OF FACILITY

Johns Hopkins Bayview Medical Center is a medical hospital, conducting education, research, and patient care, on a 130-acre campus, located at 4940 Eastern Avenue in Baltimore City, Maryland in Maryland's Air Quality Region III. The primary SIC for this facility is 8062, General Medical and Surgical Hospital. The facility operates boilers and emergency generators for general heating and electricity on the campus.

2. FACILITY INVENTORY LIST

Emissions Unit Number	MDE - ARA Registration Number	Emissions Unit Name and Description	Date of Installation
EU-1	510-5-0792	One (1) Babcock and Wilcox boiler capable of firing natural gas (primary) and No. 2 fuel oil, rated 55.3 at MMBtu/hr. Located in the Boiler Plant.	1964
EU-2	510-5-0793	One (1) Babcock and Wilcox boiler capable of firing natural gas (primary) and No. 2 fuel oil, rated 55.3 at MMBtu/hr. Located in the Boiler Plant.	1966
EU-3	510-5-0794	One (1) Babcock and Wilcox boiler capable of firing natural gas (primary) and No. 2 fuel oil, rated 55.3 at MMBtu/hr. Located in the Boiler Plant.	1966
EU-4	510-5-1141	One (1) Cleaver Brooks dual-fired water tube boiler rated at 29.29 MMBtu/hr. Located in the Boiler Plant.	1987
EU-5	510-5-2065	One (1) HB Smith natural gas fired boiler rated at 3.172 MMBtu/hr. Located at Mason's F. Lord Building's East Tower.	1997
EU-6	510-5-2066	One (1) HB Smith natural gas fired boiler rated at 3.172 MMBtu/hr. Located at Mason's F. Lord Building's East Tower.	1997
EU-7	510-9-1210	One (1) Onan diesel fired emergency generator rated at 750-kW. Located at Administrative Services Center, Chiller Plant	1990
EU-9	510-9-1212	One (1) Caterpillar diesel fired emergency generator rated at 500-kW. Located at Mason's F. Lord Building's East Tower.	1996

Emissions Unit Number	MDE - ARA Registration Number	Emissions Unit Name and Description	Date of Installation
EU-12	510-1158-9-1209	One (1) Caterpillar diesel fired emergency generator rated at 1000-kW. Located at John R. Burton Pavilion Care Center.	2012
EU-13	510-1158-9-1294	One (1) diesel fired generator for emergency and peak shaving operation, rated at 1,825-kW (2,695-hp) and equipped with diesel oxidation catalyst and selective catalytic reduction unit.	2013
EU-14	510-1158-9-1295	One (1) diesel fired generator for emergency and peak shaving operation, rated at 1,825-kW (2,695-hp) and equipped with diesel oxidation catalyst and selective catalytic reduction unit.	2013
EU-15	510-1158-9-1296	One (1) diesel fired generator for emergency and peak shaving operation, rated at 1,825-kW (2,695-hp) and equipped with diesel oxidation catalyst and selective catalytic reduction unit.	2013

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 by (c.— g.) above.

19. CONSOLIDATION OF PROCEDURES FOR PUBLIC PARTICIPATION

[COMAR 26.11.02.11C] and [COMAR 26.11.03.01K]

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

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

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

20. PROPERTY RIGHTS

[COMAR 26.11.03.06E(4)]

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

21. SEVERABILITY

[COMAR 26.11.03.06A(5)]

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

22. INSPECTION AND ENTRY

[COMAR 26.11.03.06G(3)]

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

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

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

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 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 82.155.

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

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

16. ACID RAIN PERMIT

Not applicable

SECTION IV PLANT SPECIFIC CONDITIONS

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

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

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

Table IV – 1	
1.0	**Emissions Unit Number(s): EU-1 thru EU-6** **EU-1 through EU-3** – Three (3) Babcock and Wilcox boilers, each rated at 55.3 MMBtu/hr. and each capable of firing natural gas (primary) and No. 2 fuel oil (secondary). (**ARA Registration Nos. 510-5-0792, 5-0793, and 5-0794**). **EU-4** – One (1) dual fuel fired (natural gas and No. 2 fuel oil) boiler rated at 29.18 MMBtu/hr. (**ARA Registration No. 510-5-1141**) **EU-5 & EU-6** – Two (2) natural gas fired boilers, each rated at 3.172 MMBtu/hr. (**ARA Registration Nos. 510-5-2065 & 5-2066**)
1.1	**Applicable Standards/Limits:** A. Control of Visible Emissions COMAR 26.11.09.05A – Fuel Burning Equipment "(2) Areas III and IV. In Areas III and IV, a person may not cause or permit the discharge of emissions from any fuel burning equipment, other than water in an uncombined form, which is visible to human observers except that, for the purpose of demonstrating compliance using COM data, emissions that are visible to a human observer are those that are equal to or greater than 10 percent opacity.

Table IV – 1	
	(3) Exceptions. Section A(1) and (2) of this regulation do not apply to emissions during load changing, soot blowing, startup, or adjustments or occasional cleaning of control equipment if: (a) The visible emissions are not greater than 40 percent opacity; and (b) The visible emissions do not occur for more than 6 consecutive minutes in any sixty-minute period." ***Applies to EU-1 thru EU-4 only when burning No.2 fuel oil.*** B. Control of Sulfur Oxides COMAR 26.11.09.07A(2)(b) - Sulfur Content Limitations for Fuel. "A person may not burn, sell, or make available for sale any fuel with a sulfur content by weight in excess of or which otherwise exceeds the following limitations: In Areas III and IV: (b) Distillate fuel oils, 0.3 percent." C. Control of Nitrogen Oxides COMAR 26.11.09.08E. - Requirements for Fuel-Burning Equipment with a Rated Heat Input Capacity of 100 Million Btu Per Hour or Less. "A person who owns or operates fuel-burning equipment with a rated heat input capacity of 100 Million Btu 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 2 years and make this data available to the Department and the EPA upon request; (4) Once every 3 years, require each operator of the installation to attend operator training programs on combustion optimization that 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." ***Applies to EU-1 thru EU-4 only*** D. Control of HAPs **40 CFR Part 63, Subpart JJJJJJ—National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources** **§63.11201** - What standards must I meet? "(b) You must comply with each work practice standard, emission reduction measure, and management practice specified in Table 2 to this

Table IV – 1	
	subpart that applies to your boiler. An energy assessment completed on or after January 1, 2008, that meets or is amended to meet the energy assessment requirements in Table 2 to this subpart satisfies the energy assessment requirement. A facility that operates under an energy management program established through energy management systems compatible with ISO 50001, that includes the affected units, also satisfies the energy assessment requirement. (c) *Not Applicable*. (d) These standards apply at all times the affected boiler is operating, except during periods of startup and shutdown as defined in §63.11237, during which time you must comply only with Table 2 to this subpart."
1.2	**Testing Requirements:** A. Control of Visible Emissions See Monitoring Requirements. ***Applies to EU-1 thru EU-4 only when burning No.2 fuel oil.*** B. Control of Sulfur Oxides See Record Keeping Requirements. C. 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. **[Reference: COMAR 26.11.09.08E(2)]** ***Applies to EU-1 thru EU-4 only*** D. Control of HAPs **§63.11223** - How do I demonstrate continuous compliance with the work practice and management practice standards? "(b) Except as specified in paragraphs (c) through (f) of this section, you must **conduct a tune-up of the boiler biennially** to demonstrate continuous compliance as specified in paragraphs (b)(1) through (7) of this section. Each biennial tune-up must be conducted no more than 25 months after the previous tune-up. For a new or reconstructed boiler, the first biennial tune-up must be no later than 25 months after the initial startup of the new or reconstructed boiler. (1) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (you may delay the burner inspection until the next scheduled unit shutdown, not to exceed 36 months from the previous inspection). Units that produce electricity for sale may delay the burner inspection until the first outage, not to exceed 36 months from the previous inspection.

Table IV – 1	
	(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 (you may delay the inspection until the next scheduled unit shutdown, not to exceed 36 months from the previous inspection). Units that produce electricity for sale may delay the inspection until the first outage, 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 Administrator, a report containing the information in paragraphs (b)(6)(i) through (iii) of this section. (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. (iii) The type and amount of fuel used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit. (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."
1.3	**Monitoring Requirements:** A. Control of Visible Emissions The Permittee shall properly operate and maintain the boilers in a manner to minimize visible emissions and verify that there are no visible emissions when burning No. 2 fuel oil. The Permittee shall perform a visual observation of stack emissions for a 6-minute period once each 168-hours that the boiler burns oil or at a minimum of once per year. If a boiler burns oil for less than 100 hours in a calendar year, this requirement is waived. The Permittee shall perform the following, if emissions are visible:

Table IV – 1	
	(a) Inspect combustion control system and boiler operations, (b) Perform all necessary adjustments and/or repairs to the boiler within 48 hours, so that visible emissions are eliminated; (c) Document in writing the results of the inspections, adjustments and/or repairs to the boiler; and (d) After 48 hours, if the required adjustments and/or repairs have not eliminated the visible emissions, perform Method 9 observations once daily for 18-minutes until corrective actions have eliminated the visible emissions. **[Reference: COMAR 26.11.03.06C]** ***Applies to EU-1 thru EU-4 only when burning No.2 fuel oil.*** B. Control of Sulfur Oxides See Record Keeping Requirements. C. Control of Nitrogen Oxides Once every three (3) years, require each operator of the installation to attend operator training programs on combustion and optimization that are sponsored by the Department, the EPA, or equipment vendors. **[Reference: COMAR 26.11.09.08E(4)]**. ***Applies to EU-1 thru EU-4 only*** D. Control of HAPs **§63.11205** - What are my general requirements for complying with this subpart? "(a) At all times you must operate and maintain any affected source, 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 you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator 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."
1.4	**Record Keeping Requirements:** **Note:** All records must be maintained for a period of at least five (5) years and be made available to the Department upon request. **[Reference: COMAR 26.11.03.06C(5)(g)]** A. Control of Visible Emissions

Table IV – 1	
	The Permittee shall maintain an operation manual and preventive maintenance plan on site and maintain a record of the maintenance performed that relates to combustion performance. **[Reference: COMAR 26.11.03.06C]** ***Applies to EU-1 thru EU-4 only when burning No.2 fuel oil.*** B. Control of Sulfur Oxides The Permittee shall retain a fuel supplier certification from the supplier of the No. 2 fuel oil demonstrating compliance with this regulation and make these certifications available to the Department and EPA upon request. **[Reference: COMAR 26.11.09.07C]** C. Control of Nitrogen Oxides (1) 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. **[Reference COMAR 26.11.09.08E(3)]** (2) The Permittee shall prepare and maintain a record of training program attendance for each operator. **[Reference: COMAR 26.11.09.08E(5)]** ***Applies to EU-1 thru EU-4 only*** D. Control of HAPs **§63.11225** - What are my notification, reporting, and recordkeeping requirements? (**c**) "You must maintain the records specified in paragraphs (c)(1) through (7) of this section. (1) As required in §63.10(b)(2)(xiv), you must keep a copy of each notification and report that you submitted to comply with this subpart and all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted. (2) You must keep records to document conformance with the work practices, emission reduction measures, and management practices required by §63.11214 and §63.11223 as specified in paragraphs (c)(2)(i) through (vi) of this section. (i) 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. (ii) Not Applicable. (iii) For each boiler required to conduct an energy assessment, you must keep a copy of the energy assessment report. (*Completed*) (iv) *Not Applicable.* (v) *Not Applicable.* (vi) *Not Applicable.*

Table IV – 1	
	(3) *Not Applicable.* (4) Records of the occurrence and duration of each malfunction of the boiler, or of the associated air pollution control and monitoring equipment. (5) Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in §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. (6) You must keep the records of all inspection and monitoring data required by §§63.11221 and 63.11222, and the information identified in paragraphs (c)(6)(i) through (vi) of this section for each required inspection or monitoring. (i) The date, place, and time of the monitoring event. (ii) Person conducting the monitoring. (iii) Technique or method used. (iv) Operating conditions during the activity. (v) Results, including the date, time, and duration of the period from the time the monitoring indicated a problem to the time that monitoring indicated proper operation. (vi) Maintenance or corrective action taken (if applicable). (7) Not Applicable."
1.5	**Reporting Requirements:** A. Control of Visible Emissions The Permittee shall report incidents of visible emissions in accordance with the permit condition 4, Section III, Plant Wide Conditions, "Report of Excess Emissions and Deviation.". **[Reference: COMAR 26.11.03.06C]** ***Applies to EU-1 thru EU-4 only when burning No.2 fuel oil.*** B. Control of Sulfur Oxides The Permittee shall report fuel supplier certifications from the supplier upon request. **[Reference: COMAR 26.11.09.07C]** C. Control of Nitrogen Oxides The Permittee shall report records of combustion analyses and training program attendance upon request. **[Reference: COMAR 26.11.09.08E(3) and E(5)]** ***Applies to EU-1 thru EU-4 only*** D. Control of HAPs **§63.11225** - What are my notification, reporting, and recordkeeping requirements?

Table IV – 1	
	"(a) You must submit the notifications specified in paragraphs (a)(1) through (5) of this section to the administrator. (1) You must submit all of the notifications in §§63.7(b); 63.8(e) and (f); and 63.9(b) through (e), (g), and (h) that apply to you by the dates specified in those sections except as specified in paragraphs (a)(2) and (4) of this section. (2) An Initial Notification must be submitted no later than January 20, 2014, or within 120 days after the source becomes subject to the standard. (4) You must submit the Notification of Compliance Status no later than 120 days after the applicable compliance date specified in §63.11196 unless you own or operate a new boiler subject only to a requirement to conduct a biennial or 5-year tune-up or you must conduct a performance stack test. If you own or operate a new boiler subject to a requirement to conduct a tune-up, you are not required to prepare and submit a Notification of Compliance Status for the tune-up. If you must conduct a performance stack test, you must submit the Notification of Compliance Status within 60 days of completing the performance stack test. You must submit the Notification of Compliance Status in accordance with paragraphs (a)(4)(i) and (vi) of this section. The Notification of Compliance Status must include the information and certification(s) of compliance in paragraphs (a)(4)(i) through (v) of this section, as applicable, and signed by a responsible official. (i) You must submit the information required in §63.9(h)(2), except the information listed in §63.9(h)(2)(i)(B), (D), (E), and (F). If you conduct any performance tests or CMS performance evaluations, you must submit that data as specified in paragraph (e) of this section. If you conduct any opacity or visible emission observations, or other monitoring procedures or methods, you must submit that data to the Administrator at the appropriate address listed in §63.13. (ii) "This facility complies with the requirements in §63.11214 to conduct an initial tune-up of the boiler." (iii) "This facility has had an energy assessment performed according to §63.11214(c)." (iv) *Not Applicable.* (v) *Not Applicable.* (vi) The notification must be submitted electronically using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (*www.epa.gov/cdx*). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written Notification of Compliance Status must be submitted to the Administrator at the appropriate address listed in §63.13."

Table IV – 1	
	(**b**) You must prepare, by March 1 of each year, and submit to the delegated authority upon request, an annual compliance certification report for the previous calendar year containing the information specified in paragraphs (b)(1) through (4) of this section. You must submit the report by March 15 if you had any instance described by paragraph (b)(3) of this section. For boilers that are subject only to the energy assessment requirement and/or a requirement to conduct a biennial or 5-year tune-up according to §63.11223(a) and not subject to emission limits or operating limits, you may prepare only a biennial or 5-year compliance report as specified in paragraphs (b)(1) and (2) of this section. (1) Company name and address. (2) 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 this subpart. Your notification must include the following certification(s) of compliance, as applicable, and signed by a responsible official: (i) "This facility complies with the requirements in §63.11223 to conduct a biennial or 5-year tune-up, as applicable, of each boiler." (ii) For units that do not qualify for a statutory exemption as provided in section 129(g)(1) of the Clean Air Act: "No secondary materials that are solid waste were combusted in any affected unit." (iii) "This facility complies with the requirement in §§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." **§63.11214(b)**" If you own or operate an existing or new biomass-fired boiler or an existing or new oil-fired boiler, you must conduct a performance tune-up according to §63.11210(c) or (g), as applicable, and §63.11223(b). If you own or operate an existing biomass-fired boiler or existing oil-fired boiler, you must submit a signed statement in the Notification of Compliance Status report that indicates that you conducted an initial tune-up of the boiler." **§63.11223(6)** "Maintain on-site and submit, if requested by the Administrator, a report containing the information in paragraphs (b)(6)(i) through (iii) of this section. (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.

Table IV – 1	
	(ii) A description of any corrective actions taken as a part of the tune-up of the boiler. (iii) The type and amount of fuel used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit."

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

Table IV – 2	
2.0	**Emissions Unit Number(s): EU-7, EU-9, EU-12, & EU-13 thru EU-15: Emergency Generators** **EU-7** – One (1) diesel fired emergency generator rated at 750-kW (ARA Registration No. 510-1158-9-1214). **EU-9** – One (1) diesel fired emergency generator rated at 500-kW (ARA Registration No. 510-1158-9-1210). **EU-12** – One (1) diesel fired emergency generator rated at 1,000-kW (ARA Registration No. 510-1158-9-1209). **EU-13 thru EU-15** – Three (3) diesel fired generators for emergency and peak shaving operation, each rated at 1,825-kW (2,695-HP) and equipped with diesel oxidation catalyst and Selective Catalytic Reduction (ARA Registration No. 510-1158-9-1294, 9-1295 & 9-1296).
2.1	**Applicable Standards/Limits :** A. Control of Visible Emissions **COMAR 26.11.09.05** - Visible Emissions. **E**. Stationary Internal Combustion Engine Powered Equipment. "(2) Emissions During Idle Mode. A person may not cause or permit the discharge of emissions from any engine, operating at idle, greater than 10 percent opacity. (3) Emissions During Operating Mode. A person may not cause or permit the discharge of emissions from any engine, operating at other than idle conditions, greater than 40 percent opacity. (4) Exceptions.

Table IV – 2	
	(a) Section E(2) of this regulation does not apply for a period of 2 consecutive minutes after a period of idling of 15 consecutive minutes for the purpose of clearing the exhaust system. (b) Section E(2) of this regulation does not apply to emissions resulting directly from cold engine start-up and warm-up for the following maximum periods: (i) Engines that are idled continuously when not in service: 30 minutes; (ii) All other engines: 15 minutes. (c) Section E(2) and (3) of this regulation do not apply while maintenance, repair, or testing is being performed by qualified mechanics." B. Control of Sulfur Oxides **COMAR 26.11.09.07** - Control of Sulfur Oxides From Fuel Burning Equipment. "**A**. Sulfur Content Limitations for Fuel. A person may not burn, sell, or make available for sale any fuel with a sulfur content by weight in excess of or which otherwise exceeds the following limitations: (**2**) In Areas III and IV: (**b**) Distillate fuel oils, 0.3 percent." C. Control of Nitrogen Oxides Emissions **COMAR 26.11.09.08** - Control of NO_x Emissions for Major Stationary Sources **G**. Requirements for Fuel-Burning Equipment with a Capacity Factor of 15 Percent or Less, and Combustion Turbines with a Capacity Factor Greater than 15 Percent. (1) A person who owns or operates fuel-burning equipment with a capacity factor (as defined in 40 CFR Part 72.2) of 15 percent or less shall: (a) Provide certification of the capacity factor of the equipment to the Department in writing; (b) For fuel-burning equipment that operates more than 500 hours during a calendar year, perform a combustion analysis and optimize combustion at least once annually; (c) Maintain the results of the combustion analysis at the site for at least 2 years and make these results available to the Department and the EPA upon request; (d) Require each operator of an installation, except combustion turbines, to attend operator training programs at least once every 3 years, on combustion optimization that are sponsored by the Department, the EPA, or equipment vendors; and (e) Maintain a record of training program attendance for each operator at the site and make these records available to the Department upon request."

Table IV – 2	
2.2	**Testing Requirements:** A. Control of Visible Emissions See Monitoring Requirements. B. Control of Sulfur Oxides See Monitoring Requirements. C. Control of Nitrogen Oxides Emissions The Permittee shall perform combustion analysis and optimize combustion once each year, for each year that the emission unit operates more than 500 hours. **[Reference: COMAR 26.11.09.08G(1)(b)]**
2.3	**Monitoring Requirements:** A. Control of Visible Emissions The Permittee must perform maintenance and optimize performance based on manufacturer's recommendation. **[Reference: COMAR 26.11.03.06C]** B. Control of Sulfur Oxides The Permittee shall obtain a certification from the fuel supplier indicating that the fuel oil complies with the limitation on the sulfur content of the fuel oil. **[Reference: COMAR 26.11.09.07C]** C. Control of Nitrogen Oxides Emissions Once every three (3) years, require each operator of the installation to attend operator training programs on combustion and optimization that are sponsored by the Department, the EPA, or equipment vendors. **[Reference: COMAR 26.11.09.08G(1)(d)]**
2.4	**Record Keeping Requirements:** **Note:** All records must be maintained for a period of at least five (5) years and be made available to the Department upon request. **[Reference: COMAR 26.11.03.06C(5)(g)]** A. Control of Visible Emissions The Permittee shall maintain (a) an operations manual and preventive maintenance plan on site; and (b) a record of the maintenance performed that relates to combustion performance. **[Reference: COMAR 26.11.03.06C]**

Table IV – 2	
	B. Control of Sulfur Oxides The Permittee shall retain for at least five years fuel supplier certifications stating that the fuel oil is in compliance with this regulation. **[Reference: COMAR 26.11.09.07C]** C. Control of Nitrogen Oxides Emissions The Permittee shall maintain the following records at the premises for at least five (5) years: (1) Records of the calculated capacity factors. **[Reference: COMAR 26.11.09.08G(1)(a)]** (2) Records of hours of operation of each generator. **[Reference: COMAR 26.11.02.19C]** (3) Records of combustion analysis performed if the hours of operation exceed 500. **[Reference: COMAR 26.11.09.08G(1)(c)]** (4) Records of training program attendance for each operator. **[Reference: COMAR 26.11.09.08G(1)(e)]**
2.5	**Reporting Requirements:** A. Control of Visible Emissions The Permittee shall report incidents of visible emission in accordance with the permit condition 4, Section III, Plant Wide Conditions, "Report of Excess Emissions and Deviation." **[Reference: COMAR 26.11.03.06C]** B. Control of Sulfur Oxides The Permittee shall report fuel supplier certifications to the Department upon request. **[Reference: COMAR 26.11.09.07C]** C. Control of Nitrogen Oxides Emissions (1) The Permittee shall make all records available to the Department and EPA upon request. (2) 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. **[Reference: COMAR 26.11.09.08G, COMAR 26.11.02.19C, and COMAR 26.1103.06C]**

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

Table IV – 2a: NSPS	
2a.0	**Emissions Unit Number(s): EU-12: (Emergency Generator)** **EU-12** – One (1) diesel fired emergency generator rated at 1,000-kW (ARA Registration No. 510-1158-9-1209).
2a.1	**Applicable Standards/Limits :** A. New Source Performance Standards (**NSPS**) under 40 CFR Part 60 Subpart IIII for Stationary Compression Ignition Internal Combustion Engines. Note: Beginning October 1, 2010, installations subject to 40 CFR Part 60, Subpart IIII must comply with the diesel fuel standards of §60.4207 which limit the maximum sulfur content of the fuel to 15 ppm. (1) This permit is valid only for the installation of an emergency diesel generator with piston displacement less than 10 liters per cylinder. (2) The provisions of 40 CFR Part 60, Subpart IIII apply if the emergency diesel generator uses a diesel engine manufactured after April 1, 2006 [**Ref: §60.4200**]. (3) An emergency diesel generator or diesel engine subject to the requirements of 40 CFR 60, Subpart IIII ("NSPS emergency diesel generator" or "NSPS emergency diesel engine") shall be equipped with a non-resettable hour meter. [**Reference: §60.4209(a)].** (4) The Permittee shall only purchase emergency generator sets certified to meet the emission standards of §60.4205(b). The generators must be installed and configured according to the manufacturer's specifications. [**Reference: §60.4211(c)**] (5) The Permittee must purchase and install emergency generator sets certified to the emission standards for new nonroad diesel engines in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants [**Reference: §62.4202(b)(2)];** (6) The requirements of condition (5) above do not apply to owners or operators of NSPS emergency diesel engines that have been modified, reconstructed, and do not apply to engines that were removed from one existing location and reinstalled at a new location [**Reference: §60.4208**].

Table IV – 2a: NSPS	
	B. National Emissions Standards for Hazardous Air Pollutants (**NESHAP**) promulgated under 40 CFR 63, Subparts A and ZZZZ for Reciprocating Internal Combustion Engines **§63.6590** - What parts of my plant does this subpart cover? This subpart applies to each affected source. (c) Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of **40 CFR Part 60 Subpart IIII**, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines. *No further requirements apply for such engines under this part.* (1) A new or reconstructed stationary RICE located at an area source. C. Operational Limits (1) The Permittee must operate and maintain an NSPS emergency diesel generator and control devices according to the manufacturer's written instructions or according to procedures developed by the owner or operator that are approved by the manufacturer. Additionally, the Permittee may change only those settings that are permitted by the manufacturer. The Permittee must also meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they may apply to an owner or operator [**Reference: §60.4211**]. (2) The Permittee must comply with the following emissions standards for the emergency generator set: (a) Non-methane Hydrocarbons and NOx (NMHC+NOx): 6.4 grams per kilowatt-hour (g/kW-hr) (b) Carbon Monoxide (CO): 3.5 g/kW-hr (c) Particulate Matter (PM): 0.2 g/kW-hr **[Reference: §60.4205(b), §60.4202(b)(2), and §89.112]** *Note: Compliance is demonstrated by maintaining documentation that the engine is certified to meet these limits by the manufacturer.* (3) The exhaust opacity from the emergency generator shall not exceed: (a) 20 percent during the acceleration mode; (b) 15 percent during the lugging mode; and (c) 50 percent during the peaks in either the acceleration or lugging modes. **[Reference: 40 CFR §60.4205(b), §60.4202(a)(2), and 40 CFR §89.113(a)]**

Table IV – 2a: NSPS	
	(4) The Permittee must use diesel fuel in the emergency generator set that meets the requirements of 40 CFR §80.510(b) (diesel fuel that has a per-gallon sulfur content that does not exceed 15 ppm, and that either has a minimum per-gallon cetane index of 40 or a maximum per-gallon aromatic content of 35 volume percent), unless a waiver is obtained from the Department and/or the EPA Administrator. **[Reference: §60.4207 and §80.510(b)]**. *Note: Since the fuel sulfur limitation under 40 CFR Part 60, Subpart IIII is more stringent than the COMAR 26.11.09.07 limitation, the Permittee must comply with the fuel standards of §60.4207 which limit the maximum sulfur content of the fuel to 15 ppm.* (5) In accordance with 40 CFR §60.4211(f), non-emergency use of the emergency diesel generator set for the purpose of maintenance checks and readiness testing is limited to 100 hours per year or less unless prior approval is received from the Department. (6) There is no time limit on the use of the emergency generator in emergency situations. **[Reference: 40 CFR §60.4211(f)(1)]** (7) The Permittee may operate the emergency stationary ICE for 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 Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year. **[Reference: 40 CFR §60.4211(f)(2)(i)]** (8) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. . **[Reference: 40 CFR §60.4211(f)(3)]** ***Note:*** *Effective May 2, 2016, emergency generators are no longer allowed to participate for emergency demand response operation unless they meet the requirements of a non-emergency generator of the same model year.*

Table IV – 2a: NSPS	
2a.2	**Testing Requirements:** A. NSPS See Monitoring Requirements. B. NESHAP See NSPS Requirements. C. Operational Limits See NSPS Requirements
2a.3	**Monitoring Requirements:** A. NSPS The Permittee shall maintain a log indicating the amounts of fuel combusted, the hours of operation, and the reason for generator operation (i.e., maintenance or operational testing, power outage, etc.) **[Reference: COMAR 26.11.03.06C]** B. NESHAP See NSPS Requirements C. Operational Limits See NSPS Requirements.
2a.4	**Record Keeping Requirements:** **Note:** All records must be maintained for a period of at least five (5) years and be made available to the Department upon request. **[Reference: COMAR 26.11.03.06C(5)(g)]** A. NSPS **§60.4214** - What are my notification, reporting, and **recordkeeping** requirements if I am an owner or operator of a stationary CI internal combustion engine? (**b**) If the stationary CI internal combustion engine is an emergency stationary internal combustion engine, the owner or operator is not required to submit an initial notification. Starting with the model years in table 5 to this subpart, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time

Table IV – 2a: NSPS	
	of operation of the engine and the reason the engine was in operation during that time. B. NESHAP See NSPS Requirements. C. Operational Limits See NSPS Requirements.
2a.5	**Reporting Requirements:** A. NSPS **§60.4214** - What are my notification, **reporting**, and recordkeeping requirements if I am an owner or operator of a stationary CI internal combustion engine? (**d**) If you own or operate an emergency stationary CI ICE with a maximum engine power more than 100 HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §60.4211(f)(2)(ii) and (iii) or that operates for the purposes specified in §60.4211(**f**)(3)(i), you must submit an annual report according to the requirements in paragraphs (d)(1) through (3) of this section. B. NESHAP See NSPS Requirements. C. Operational Limits See NSPS Requirements.

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

Table IV – 2b: NSPS	
2b.0	**Emissions Unit Number(s): EU-13 thru EU-15: (Non-Emergency Generators)** **EU-13 thru EU-15** – Three (3) diesel fired generators for emergency and peak shaving operation, each rated at 1,825-kW (2,695-HP) and equipped with diesel oxidation catalyst and Selective Catalytic Reduction (ARA Registration No. 510-1158-9-1294, 9-1295 & 9-1296).
2b.1	**Applicable Standards/Limits :** A. New Source Performance Standards (**NSPS**) under 40 CFR Part 60 Subpart IIII for Stationary Compression Ignition Internal Combustion Engines. Note: Beginning October 1, 2010, installations subject to 40 CFR Part 60, Subpart IIII must comply with the diesel fuel standards of §60.4207 which limit the maximum sulfur content of the fuel to 15 ppm. (1) The Permittee must operate and maintain the engine in a manner that achieves the emissions standards over the entire life of the engine. **[Reference: 40 CFR §60.4206]** (2) After December 31, 2012, the Permittee may not install a non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 130 KW (175 HP), including those above 560 KW (750 HP), that do not meet the applicable requirements for 2011 model year non-emergency engines. **[Reference: 40 CFR §60.4208(e)]** (3) The Permittee must comply with the emission standards in §60.4204(b) by purchasing a certified engine. The engine must be installed and configured according to the manufacturer's emission-related specifications. [**Reference: §60.4211(c)**] B. National Emissions Standards for Hazardous Air Pollutants (**NESHAP**) promulgated under 40 CFR 63, Subparts A and ZZZZ for Reciprocating Internal Combustion Engines **§63.6590** - What parts of my plant does this subpart cover? This subpart applies to each affected source. (c) Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of **40 CFR Part 60 Subpart IIII**, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for

Table IV – 2b: NSPS	
	spark ignition engines. *No further requirements apply for such engines under this part.* (1) A new or reconstructed stationary RICE located at an area source. C. Operational Limits (1) The exhaust opacity shall not exceed the following emission standards: (i) 20 percent during the acceleration mode; (ii) 15 percent during the lugging mode; and (iii) 50 percent during the peaks in either the acceleration or lugging modes. **[Reference: 40 CFR §60.4205(b), §60.4202(a)(2), and 40 CFR §89.113(a)]** (2) The Permittee must meet the non-road diesel fuel sulfur requirements of 40 CFR §80.510(b) as follows: (i) Maximum sulfur content 15 ppm and (ii) Minimum cetane index of 40; or (iii) Maximum aromatic content of 35 volume percent. **[Reference: 40 CFR §60.4207(b) and 40 CFR §80.510(b)]** (3) The Permittee shall meet the following emissions standards for the non-emergency generator sets: (a) Particulate matter (PM): 0.10 grams per kilowatt hour (g/kW hr.); (b) Nitrogen Oxides (NO_x): 0.67 grams per kilowatt hour; (c) Non-Methane Hydrocarbons (NMHC): 0.4 grams per kilowatt hour; and (d) Carbon Monoxide (CO): 3.5 g/kW hr. **[Reference: 40 CFR §60.4201(a), 40 CFR §60.4204(b), and 40 CFR §1039.102, Table 7 "Interim, Tier 4 Exhaust Emission Standards (G/kW-hr)"]** **Note:** Compliance with this condition will be demonstrated by the purchase of a certified engine. (4) The Permittee must operate and maintain the engine and control devices according to the manufacturer's emission related written instructions and may change only those emission related settings that are permitted by the manufacturer. **[Reference: 40 CFR §60.4211(a)(1&2)]** (5) The Permittee may request resetting the auxiliary emission control devices (AECDs) at any time. The manufacturer may reset the AECD

Table IV – 2b: NSPS	
	only if the manufacturer has evidence that the emergency situation is continuing, or after the operator provides the information required in paragraph (e) of this section, in writing or by any other means. **[Reference: 40 CFR §60.4211(h) and 40 CFR §1039.665(d)]** (6) The following actions by the Permittee are improper use of the AECD and are prohibited under Clean Air Act section 203 (42 U.S.C. 7522): (a) Activating the emergency AECD for any use other than a qualified emergency situation where the emission control strategy would curtail engine performance. (b) Failing to disable the emergency AECD after a qualified emergency situation has ended. (c) Failing to disable the emergency AECD after the problem causing the emission control strategy to interfere with engine performance has been or can reasonably be fixed. (d) Failing to provide the information required under 40 CFR §1039.665(e). **[Reference: 40 CFR §60.4211(h) and 40 CFR §1039.665(g)]** (7) The total emissions of nitrogen oxides (NO_x) from these generators shall be less than 25 tons in any consecutive 12-month period. **[Reference: ARA Permit to Construct Nos. 510-1158-9-1294 thru 1296, Part D(6) issued January 16, 2014].**
2b.2	**Testing Requirements:** A. NSPS See Monitoring Requirements. B. NESHAP See NSPS Requirements. C. Operational Limits See NSPS Requirements
2b.3	**Monitoring Requirements:** A. NSPS The Permittee will demonstrate compliance with this condition by purchasing an engine certified to the emission standards in 40 CFR §60.4205(b). **[Reference: 40 CFR §60.4211(c)]** B. NESHAP

Table IV – 2b: NSPS	
	See NSPS Requirements. C. Operational Limits The Permittee shall calculate and record the NO_x emissions from these generators, for each previous calendar month and a total for the previous 12 consecutive calendar months. The calculations and records shall be updated monthly, within the first 15 days of each following month. **[Reference: COMAR 26.11.03.06C]**
2b.4	**Record Keeping Requirements:** **Note:** All records must be maintained for a period of at least five (5) years and be made available to the Department upon request. **[Reference: COMAR 26.11.03.06C(5)(g)]** A. NSPS The Permittee shall maintain for at least five (5) years and make available to the Department upon request, records for each fuel delivery from the fuel supplier a fuel supplier certification consisting of the name of the oil supplier, the date of delivery, the amount of fuel delivered, and a statement from the fuel supplier that the diesel fuel oil complies with the specifications of 40 CFR §60.80.510(b). Also records of the certifications of compliance or manufacturer engine test data required by 40 CFR §60.4211. **[Reference: COMAR 26.11.03.06C]** B. NESHAP See NSPS Requirements. C. Operational Limits The Permittee shall maintain for at least five (5) years and make available to the Department upon request, records of NO_x emissions from these generators for each previous calendar month and a total for the previous 12 consecutive calendar months. **[Reference: COMAR 26.11.03.06C]**
2b.5	**Reporting Requirements:** A. NSPS The Permittee shall report incidents of visible emission in accordance with the permit condition 4, Section III, Plant Wide Conditions, "Report of Excess Emissions and Deviation." **[Reference: COMAR 26.11.03.06C]** B. NESHAP See NSPS Requirements.

Table IV – 2b: NSPS	
	C. Operational Limits (1) The Permittee must send a written report to the manufacturer within 60 calendar days after activating an AECD approved under 40 CFR Part 1039. The report must include the following: (a) Contact name, mail and email addresses, and telephone number for the responsible company or entity. (b) A description of the emergency situation, the location of the engine during the emergency, and the contact information for an official who can verify the emergency situation (such as a county sheriff, fire marshal, or hospital administrator). (c) The reason for AECD activation during the emergency situation, such as the lack of diesel exhaust fluid (DEF), or the failure of an emission related sensor when the engine was needed to respond to an emergency situation. (d) The engine's serial number (or equivalent). (e) A description of the extent and duration of the engine operation while the AECD was active, including a statement describing whether or not the AECD was manually deactivated after the emergency situation ended. **[Reference: 40 CFR §60.4211(h), 40 CFR §60.4214(e), and 40 CFR §1039.665(e)]** (2) If the Permittee fails to submit the report required in 40 CFR §1039.665(e), to the manufacturer within 60 days of activation an AECD approved under this section, the manufacturer, to the event it has been made aware of the AECD activation, must send written notification to the Permittee that failure to meet the submission requirements may subject the Permittee to penalties under 40 CFR §1068.101. **[Reference: 40 CFR §60.4211(h), 40 CFR §60.4214(e), and 40 CFR §1039.665(f)]** (3) Notifications and reports submitted to comply with 40 CFR §1039.665 are deemed to be submissions to the EPA. **[Reference: 40 CFR §60.4211(h), 40 CFR §60.4214(e), and 40 CFR §1039.665(i)]**

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

SECTION V INSIGNIFICANT ACTIVITIES

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

(1) No. 3 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;

[For Areas III and IV]

The [*affected fuel burning units*] are subject to the following requirements:

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

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

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

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

[For Distillate Fuel Oil]

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

(2) No. 2* Stationary internal combustion engines with an output less than 500 brake horsepower (373 kilowatts) and which are not used to generate electricity for sale or for peak or load shaving;

The [*affected units*] are subject to the following requirements:
* 1) 275 kW Cummins Genset; Model # 500 EDR 7016; Serial # JA-92630-1/12.5
2) 40 kW portable CAT Genset; Model # 4BTA3.9-G5; Serial # 21751771.

(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.

(3) ✓ Water cooling towers and water-cooling ponds unless used for evaporative cooling of water from barometric jets or barometric condensers, or used in conjunction with an installation requiring a permit to operate;

(4) ✓ Commercial bakery ovens with a rated heat input capacity of less than 2,000,000 Btu per hour;

(5) ✓ Kilns used for firing ceramic ware, heated exclusively by natural gas, liquefied petroleum gas, electricity, or any combination of these;

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

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

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

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

(b) No. 5 Storage of lubricating oils;

(c) No. 10 Storage of Numbers 1, 2, 4, 5, and 6 fuel oil and aviation jet engine fuel;

(d) No. 4 The storage of VOC normally used as solvents, diluents, thinners, inks, colorants, paints, lacquers, enamels, varnishes, liquid resins, or other surface coatings and having individual capacities of 2,000 gallons (7.6 cubic meters) or less;

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

(10) ✓ Potable water treatment equipment, not including air stripping equipment;

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

(12) ✓ Laboratory fume hoods and vents;

SECTION VI STATE-ONLY ENFORCEABLE CONDITIONS

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

1. Applicable Regulations:

   (A) COMAR 26.11.06.08, Nuisance. "An installation or premises may not be operated or maintained in such a manner that a nuisance or air pollution is created. Nothing in this regulation relating to the control of emissions may in any manner be construed as authorizing or permitting the creation of, or maintenance of, nuisance or air pollution."

   (B) COMAR 26.11.06.09, Odors. "A person may not cause or permit the discharge into the atmosphere of gases, vapors, or odors beyond the property line in such a manner that a nuisance or air pollution is created."

2. Record Keeping and Reporting:

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

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

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

JOHNS HOPKINS BAYVIEW MEDICAL CENTER
4940 EASTERN AVENUE
BALTIMORE MD 21224
PERMIT NO. 24-510-1158
PART 70 OPERATING PERMIT FACT SHEET

BACKGROUND

Johns Hopkins Bayview Medical Center is a medical hospital, conducting education, research, and patient care, on a 130-acre campus located at 4940 Eastern Avenue in Baltimore City, Maryland in Maryland's Air Quality Region III. The primary SIC for this facility is 8062, General Medical and Surgical Hospital. The facility operates boilers and emergency generators for general heating and electricity on the campus.

The following table summarizes the actual emissions from Johns Hopkins Bayview Medical Center based on its Annual Emission Certification Reports:

Table 1: Actual Emissions

Year	NO_x (TPY)	SO_x (TPY)	PM_{10} (TPY)	CO (TPY)	VOC (TPY)	Total HAP (TPY)
2020	9.5	0.15	0.66	7.35	0.49	0.94
2019	10.5	0.2	0.2	8.0	0.5	0
2018	10.5	0.3	0.2	8.0	0.54	0
2017	10.7	0.22	0.2	8.0	0.54	0
2016	10.3	0.18	0.2	8.1	0.54	0

The major source threshold for triggering Title V permitting requirements in Baltimore City is 25 tons per year for VOC, 25 tons for NOx, and 100 tons per year for any other criteria pollutants and 10 tons for a single HAP or 25 tons per year for total HAPs . Since the potential, NO_X emission from the facility is greater than the major source threshold, Johns Hopkins Bayview Medical Center is required to obtain a Title V – Part 70 Operating Permit under COMAR 26.11.03.01.

This is a renewal Part 70 permit for Johns Hopkins Bayview Medical Center.

No equipment added or removed at the facility since the prior Title V Operating permit was issued.

New Source Performance Standards (NSPS) – 40 CFR Part 60

Several emission units at the Johns Hopkins Bayview Medical Center are subject to the following NSPS:

Subpart Dc for Small Industrial-Commercial-Institutional Steam Generating Units applies to each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989, and that has a maximum

design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/h)) or less, but greater than or equal to 2.9 MW (10 MMBtu/h).

Johns Hopkins Bayview Medical Center boilers with a heat input capacity less than 100 million Btu/hour but greater than 10 million Btu/hour are not subject to 40 CFR 60, Subpart Dc. Boilers were installed prior to the effective date of June 9, 1989.

Subpart IIII for Stationary Compression Ignition Internal Combustion Engines applies to stationary compression ignition (CI) internal combustion engines (ICE) constructed after July 11, 2005, and either manufactured after April 1, 2006, or modified or reconstructed after July 11, 2005.

Johns Hopkins Bayview Medical Center has four (4) generators [EU-12 thru EU-15] manufactured after April 1, 2006, subject to 40 CFR 60, Subpart IIII.

EU-7 and EU-9 were installed prior to applicable date and are not subject to this regulation.

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

Johns Hopkins Bayview Medical Center is not a major HAP Emissions Source. Instead, it is an area HAP emission source and is subject to the following MACTs:

Subpart ZZZZ — Stationary Reciprocating Internal Combustion Engines. Requirements for Existing Stationary RICE Located at Area Sources of HAP

Johns Hopkins Bayview Medical Center has six (6) Engines **[EU-7, EU-9, EU-12 & EU-13 thru EU-15]** subject to this MACT.

Four (4) of the generators [**EU-12 thru EU-15**] will meet the requirements of this regulation by meeting the requirements of 40 CFR Part 60, Subpart IIII per 40 CFR §63.6590(a)(2)(iii) and (c)(1). These four (4) generators have no additional requirements under 40 CFR Part 63, Subpart ZZZZ.

Two (2) of the emergency generators [**EU-7 & EU-9**] are not subject to 40 CFR Part 63, Subpart ZZZZ. Johns Hopkins Bayview Medical Center is considered an institution for the purpose of this regulation and emergency generators at institutions are exempt from this regulation per 40 CFR §63.6585(f)(3).

Subpart JJJJJJ—National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources.

Johns Hopkins Bayview Medical Center has four (4) boilers [**EU-1 thru EU-4**] that are subject to this boiler MACT. These boilers fire both natural gas (primary) and No. 2 fuel oil (secondary).
Two (2) boilers [EU-5 & EU-6] fire natural gas only. These boilers meet the definition of a "gas-fired boiler" in 40 CFR §63.11237 and are exempt from this regulation per 40 CFR §63.11195(e).

COMPLIANCE ASSURANCE MONITORING (CAM)

Johns Hopkins Bayview Medical Center conducted a Compliance Assurance Monitoring (CAM) analysis for the facility and determined that the facility is not subject to the (CAM) Rule 40 CFR Subpart 64.

CAM is intended to provide a reasonable assurance of compliance with applicable requirements under the Clean Air Act for large emission units that rely on air pollution control (APC) equipment to achieve compliance. The CAM approach establishes monitoring for the purpose of: (1) documenting continued operation of the control measures within ranges of specified indicators of performance (such as emissions, control device parameters, and process parameters) that are designed to provide a reasonable assurance of compliance with applicable requirements; (2) indicating any excursions from these ranges; and (3) responding to the data so that the cause or causes of the excursions are corrected.

In order for a unit to be subject to CAM, the unit must be located at a major source, be subject to an emission limitation or standard; use a control device to achieve compliance; have pre-control emissions of at least 100% of the major source amount (for initial CAM submittals); and must not otherwise be exempt from CAM. Applicability determinations are made on a pollutant-by-pollutant basis for each emission unit.

Johns Hopkins Bayview Medical Center does not have any air pollution control (APC) equipment on the boilers or generators to achieve compliance with applicable requirements. Therefore, the facility is not subject to CAM Rule.

GREENHOUSE GAS (GHG) EMISSIONS

Johns Hopkins Bayview Medical Center emits the following greenhouse gases (GHGs) related to Clean Air Act requirements: carbon dioxide, methane, and nitrous oxide. These GHGs originate from the boilers and generators contained within the facility premises. The facility has not triggered Prevention of Significant Deterioration (PSD) requirements for GHG emissions; therefore, there are no applicable GHG Clean Air Act requirements. While there may be no

applicable requirements as a result of PSD, emission certification reports for the years 2018, 2019, and 2020, showed that Johns Hopkins Bayview Medical Center is not a major source (threshold: 100,000tpy CO_2e) for GHG's (see Table 3 shown below). The Permittee shall quantify facility wide GHGs emissions and report them in accordance with Section 3 of the Part 70 permit.

The following table summarizes the actual emissions from Johns Hopkins Bayview Medical Center based on its Annual Emission Certification Reports:

Table 3: Greenhouse Gases Emissions Summary

GHG	Conversion factor	2018 tpy CO_2e	2019 tpy CO_2e	2020 tpy CO_2e
Carbon dioxide CO_2	1	11,480	11,480	11,490
Methane CH_4	25	0.217	0.217	0.217
Nitrous Oxide N_2O	298	0.208	0.208	0.208
Total GHG CO_{2eq}		**11,480**	**11,480**	**11,490**

EMISSION UNIT IDENTIFICATION

Johns Hopkins Bayview Medical Center has identified the following emission units as being subject to Title V permitting requirements and having applicable requirements.

Table 2: Emission Unit Identification

Emissions Unit Number	MDE - ARA Registration Number	Emissions Unit Name and Description	Date of Installation
EU-1	510-5-0792	One (1) Babcock and Wilcox boiler capable of firing natural gas (primary) and No. 2 fuel oil, rated 55.3 at MMBtu/hr. Located in the Boiler Plant.	1964
EU-2	510-5-0793	One (1) Babcock and Wilcox boiler capable of firing natural gas (primary) and No. 2 fuel oil, rated 55.3 at MMBtu/hr. Located in the Boiler Plant.	1966

Emissions Unit Number	MDE - ARA Registration Number	Emissions Unit Name and Description	Date of Installation
EU-3	510-5-0794	One (1) Babcock and Wilcox boiler capable of firing natural gas (primary) and No. 2 fuel oil, rated 55.3 at MMBtu/hr. Located in the Boiler Plant.	1966
EU-4	510-5-1141	One (1) Cleaver Brooks dual-fired water tube boiler rated at 29.29 MMBtu/hr. Located in the Boiler Plant.	1987
EU-5	510-5-2065	One (1) HB Smith natural gas fired boiler rated at 3.172 MMBtu/hr. Located at Mason's F. Lord Building's East Tower.	1997
EU-6	510-5-2066	One (1) HB Smith natural gas fired boiler rated at 3.172 MMBtu/hr. Located at Mason's F. Lord Building's East Tower.	1997
EU-7	510-9-1210	One (1) Onan diesel fired emergency generator rated at 750-kW. Located at Administrative Services Center, Chiller Plant	1990
EU-9	510-9-1212	One (1) Caterpillar diesel fired emergency generator rated at 500-kW. Located at Mason's F. Lord Building's East Tower.	1996
EU-12	510-1158-9-1209	One (1) Caterpillar diesel fired emergency generator rated at 1000-kW. Located at John R. Burton Pavilion Care Center.	2012
EU-13	510-1158-9-1294	One (1) diesel fired generator for emergency and peak shaving operation, rated at 1,825-kW (2,695-hp) and equipped with diesel oxidation catalyst and selective catalytic reduction unit.	2013
EU-14	510-1158-9-1295	One (1) diesel fired generator for emergency and peak shaving operation, rated at 1,825-kW (2,695-hp) and equipped with diesel oxidation catalyst and selective catalytic reduction unit.	2013
EU-15	510-1158-9-1296	One (1) diesel fired generator for emergency and peak shaving operation, rated at 1,825-kW (2,695-hp) and equipped with diesel oxidation catalyst and selective catalytic reduction unit.	2013

AN OVERVIEW OF THE PART 70 PERMIT

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

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

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

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

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

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

Section VI of the Part 70 Permit contains State-only enforceable requirements. Section VI identifies requirements that are not based on the Clean Air Act, but solely on Maryland air pollution regulations. These requirements generally relate

to the prevention of nuisances and implementation of Maryland's Air Toxics Program.

REGULATORY REVIEW/TECHNICAL REVIEW/COMPLIANCE METHODOLOGY

Emissions Unit(s): EU-1 thru EU-6: Boilers

EU-1 through EU-3 – Three (3) Babcock and Wilcox boilers, each rated at 55.3 MMBtu/hr. and each capable of firing natural gas (primary) and No. 2 fuel oil (secondary). (**ARA Registration Nos. 510-5-0792, 5-0793, and 5-0794**).

EU-4 – One (1) dual fuel fired (natural gas and No. 2 fuel oil) boiler rated at 29.18 MMBtu/hr. (**ARA Registration No. 510-5-1141**)

EU-5 & EU-6 – Two (2) natural gas fired boilers, each rated at 3.172 MMBtu/hr. (**ARA Registration Nos. 510-5-2065 & 5-2066**)

Boilers - **EU-1** through **EU-4** are subject to the requirements of 40 CFR Part 63, Subpart JJJJJJ. These boilers are each capable of firing No. 2 fuel oil and have no restrictions on its use. The four (4) boilers are each classified as existing in 40 CFR Part 63, Subpart JJJJJJ and are required to conduct biennial tune-ups and a one-time energy assessment, but there are no testing requirements. The one-time energy assessment was conducted on the boilers in March 2014. The most recent biennial tune up was conducted on the boilers in June 2021.

The two (2) natural gas fired boilers (**EU-5 and EU-6**) are not subject to 40 CFR Part 63, Subpart JJJJJJ because they meet the definition of "gas-fired boilers" in 40 CFR §63.11237.

Compliance Status
During the June 30, 2021, full compliance inspection report one boiler was operating on low fire producing about 10K pounds of steam per hour. Boiler **EU-4** was opened up for inspection. The other boilers were available but not needed due to low steam demand. A method 9 visible emissions observation was conducted on the boiler stack. No visible emission was observed. Records indicated that each boiler operated less than 100 hrs. on fuel oil. In 2020, only **EU-3** operated on fuel oil for less than 4 hours. The most recent biennial tune-up for the boilers [**EU-1 thru EU-3**] was performed on June 24, 2021. EU-4 tune-up was rescheduled for a later date.

Applicable Standards and Limits

A. Control of Visible Emissions
COMAR 26.11.09.05A – Fuel Burning Equipment

"(2) Areas III and IV. In Areas III and IV, a person may not cause or permit the discharge of emissions from any fuel burning equipment, other than water in an uncombined form, which is visible to human observers except that, for the purpose of demonstrating compliance using COM data, emissions that are visible to a human observer are those that are equal to or greater than 10 percent opacity.
(3) Exceptions. Section A(1) and (2) of this regulation do not apply to emissions during load changing, soot blowing, startup, or adjustments or occasional cleaning of control equipment if:
(a) The visible emissions are not greater than 40 percent opacity; and
(b) The visible emissions do not occur for more than 6 consecutive minutes in any sixty-minute period."

Compliance Demonstration
The Permittee shall properly operate and maintain the boilers in a manner to minimize visible emissions and verify that there are no visible emissions when burning No. 2 fuel oil. The Permittee shall perform a visual observation of stack emissions for a 6-minute period once each 168-hours that the boiler burns oil or at a minimum of once per year. If a boiler burns oil for less than 100 hours in a calendar year, this requirement is waived.
The Permittee shall perform the following, if emissions are visible:
(a) Inspect combustion control system and boiler operations,
(b) Perform all necessary adjustments and/or repairs to the boiler within 48 hours, so that visible emissions are eliminated;
(c) Document in writing the results of the inspections, adjustments and/or repairs to the boiler; and
(d) After 48 hours, if the required adjustments and/or repairs have not eliminated the visible emissions, perform Method 9 observations once daily for 18-minutes until corrective actions have eliminated the visible emissions.
The Permittee shall maintain an operation manual and preventive maintenance plan on site and maintain a record of the maintenance performed that relates to combustion performance. The Permittee shall report incidents of visible emissions in accordance with the permit condition 4, Section III, Plant Wide Conditions, "Report of Excess Emissions and Deviation.".
[Reference: COMAR 26.11.03.06C]

Rationale for Periodic Monitoring
The Permittee is required to maintain on site an operation manual, a preventative maintenance plan, and records of maintenance performed that relate to combustion performance. If visible emissions occur, it will happen when burning No. 2 fuel oil. At a minimum, one observation for visible emissions is required each year that the boiler burns more than 100 hours on

oil. The Permittee is required to maintain a record of the results of the observations and the number of hours that No. 2 fuel oil was burned.

Applies to EU-1 thru EU-4 only when burning No.2 fuel oil.

B. Control of Sulfur Oxides

COMAR 26.11.09.07A(2)(b) - Sulfur Content Limitations for Fuel.

"A person may not burn, sell, or make available for sale any fuel with a sulfur content by weight in excess of or which otherwise exceeds the following limitations: In Areas III and IV: (b) Distillate fuel oils, 0.3 percent."

Compliance Demonstration

The Permittee shall retain a fuel supplier certification from the supplier of the No. 2 fuel oil demonstrating compliance with this regulation and make these certifications available to the Department and EPA upon request.
[Reference: COMAR 26.11.09.07C]

Rationale for Periodic Monitoring

Fuel oil certifications are sufficient to demonstrate compliance with the applicable fuel sulfur limits. Therefore, no additional monitoring is required.

C. Control of Nitrogen Oxides

COMAR 26.11.09.08E. - Requirements for Fuel-Burning Equipment with a Rated Heat Input Capacity of 100 Million Btu Per Hour or Less.

"A person who owns or operates fuel-burning equipment with a rated heat input capacity of 100 Million Btu 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 2 years and make this data available to the Department and the EPA upon request;
(4) Once every 3 years, require each operator of the installation to attend operator training programs on combustion optimization that 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."

Compliance Demonstration

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

Once every three (3) years, require each operator of the installation to attend operator training programs on combustion and optimization that are sponsored by the Department, the EPA, or equipment vendors. **[Reference: COMAR 26.11.09.08E(4)]**.

(1) 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. **[Reference COMAR 26.11.09.08E(3)]**

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

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

Rationale for Periodic Monitoring

Combustion analysis and operator training records are sufficient to demonstrate compliance.

Applies to EU-1 thru EU-4 only

D. Control of HAPs

40 CFR Part 63, Subpart JJJJJJ—National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources

§63.11201 - What standards must I meet?

"(b) You must comply with each work practice standard, emission reduction measure, and management practice specified in Table 2 to this subpart that applies to your boiler. An energy assessment completed on or after January 1, 2008, that meets or is amended to meet the energy assessment requirements in Table 2 to this subpart satisfies the energy assessment requirement. A facility that operates under an energy management program established through energy management systems compatible with ISO 50001, that includes the affected units, also satisfies the energy assessment requirement.

(c) *Not Applicable.*

(d) These standards apply at all times the affected boiler is operating, except during periods of startup and shutdown as defined in §63.11237, during which time you must comply only with Table 2 to this subpart."

Compliance Demonstration

§63.11223 - How do I demonstrate continuous compliance with the work practice and management practice standards?

"(b) Except as specified in paragraphs (c) through (f) of this section, you must **conduct a tune-up of the boiler biennially** to demonstrate continuous compliance as specified in paragraphs (b)(1) through (7) of this section. Each biennial tune-up must be conducted no more than 25 months after the previous tune-up. For a new or reconstructed boiler, the first biennial tune-up must be no later than 25 months after the initial startup of the new or reconstructed boiler.

(1) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (you may delay the burner inspection until the next scheduled unit shutdown, not to exceed 36 months from the previous inspection). Units that produce electricity for sale may delay the burner inspection until the first outage, 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 (you may delay the inspection until the next scheduled unit shutdown, not to exceed 36 months from the previous inspection). Units that produce electricity for sale may delay the inspection until the first outage, 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 Administrator, a report containing the information in paragraphs (b)(6)(i) through (iii) of this section.

(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.

(iii) The type and amount of fuel used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.

(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."

§63.11205 - What are my general requirements for complying with this subpart?
"(a) At all times you must operate and maintain any affected source, 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 you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator 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."

§63.11225 - What are my notification, reporting, and recordkeeping requirements?
(**c**) "You must maintain the records specified in paragraphs (c)(1) through (7) of this section.
(1) As required in §63.10(b)(2)(xiv), you must keep a copy of each notification and report that you submitted to comply with this subpart and all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted.
(2) You must keep records to document conformance with the work practices, emission reduction measures, and management practices required by §63.11214 and §63.11223 as specified in paragraphs (c)(2)(i) through (vi) of this section.
(i) 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.
(ii) Not Applicable.
(iii) For each boiler required to conduct an energy assessment, you must keep a copy of the energy assessment report. (*Completed*)
(iv) *Not Applicable.*
(v) *Not Applicable.*
(vi) *Not Applicable.*
(3) *Not Applicable.*
(4) Records of the occurrence and duration of each malfunction of the boiler, or of the associated air pollution control and monitoring equipment.
(5) Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in §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.

(6) You must keep the records of all inspection and monitoring data required by §§63.11221 and 63.11222, and the information identified in paragraphs (c)(6)(i) through (vi) of this section for each required inspection or monitoring.
(i) The date, place, and time of the monitoring event.
(ii) Person conducting the monitoring.
(iii) Technique or method used.
(iv) Operating conditions during the activity.
(v) Results, including the date, time, and duration of the period from the time the monitoring indicated a problem to the time that monitoring indicated proper operation.
(vi) Maintenance or corrective action taken (if applicable).
(7) Not Applicable."

§63.11225 - What are my notification, reporting, and recordkeeping requirements?
"(**a**) You must submit the notifications specified in paragraphs (a)(1) through (5) of this section to the administrator.
(1) You must submit all of the notifications in §§63.7(b); 63.8(e) and (f); and 63.9(b) through (e), (g), and (h) that apply to you by the dates specified in those sections except as specified in paragraphs (a)(2) and (4) of this section.
(2) An Initial Notification must be submitted no later than January 20, 2014, or within 120 days after the source becomes subject to the standard.
(4) You must submit the Notification of Compliance Status no later than 120 days after the applicable compliance date specified in §63.11196 unless you own or operate a new boiler subject only to a requirement to conduct a biennial or 5-year tune-up or you must conduct a performance stack test. If you own or operate a new boiler subject to a requirement to conduct a tune-up, you are not required to prepare and submit a Notification of Compliance Status for the tune-up. If you must conduct a performance stack test, you must submit the Notification of Compliance Status within 60 days of completing the performance stack test. You must submit the Notification of Compliance Status in accordance with paragraphs (a)(4)(i) and (vi) of this section. The Notification of Compliance Status must include the information and certification(s) of compliance in paragraphs (a)(4)(i) through (v) of this section, as applicable, and signed by a responsible official.
(i) You must submit the information required in §63.9(h)(2), except the information listed in §63.9(h)(2)(i)(B), (D), (E), and (F). If you conduct any performance tests or CMS performance evaluations, you must submit that data as specified in paragraph (e) of this section. If you conduct any opacity or visible emission observations, or other monitoring procedures or methods, you must submit that data to the Administrator at the appropriate address listed in §63.13.
(ii) "This facility complies with the requirements in §63.11214 to conduct an initial tune-up of the boiler."

(iii) "This facility has had an energy assessment performed according to §63.11214(c)."
(iv) *Not Applicable.*
(v) *Not Applicable.*
(vi) The notification must be submitted electronically using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (*www.epa.gov/cdx*). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written Notification of Compliance Status must be submitted to the Administrator at the appropriate address listed in §63.13."

(**b**) You must prepare, by March 1 of each year, and submit to the delegated authority upon request, an annual compliance certification report for the previous calendar year containing the information specified in paragraphs (b)(1) through (4) of this section. You must submit the report by March 15 if you had any instance described by paragraph (b)(3) of this section. For boilers that are subject only to the energy assessment requirement and/or a requirement to conduct a biennial or 5-year tune-up according to §63.11223(a) and not subject to emission limits or operating limits, you may prepare only a biennial or 5-year compliance report as specified in paragraphs (b)(1) and (2) of this section.
(1) Company name and address.
(2) 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 this subpart. Your notification must include the following certification(s) of compliance, as applicable, and signed by a responsible official:
(i) "This facility complies with the requirements in §63.11223 to conduct a biennial or 5-year tune-up, as applicable, of each boiler."
(ii) For units that do not qualify for a statutory exemption as provided in section 129(g)(1) of the Clean Air Act: "No secondary materials that are solid waste were combusted in any affected unit."
(iii) "This facility complies with the requirement in §§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."

§63.11214(b)" If you own or operate an existing or new biomass-fired boiler or an existing or new oil-fired boiler, you must conduct a performance tune-up according to §63.11210(c) or (g), as applicable, and §63.11223(b). If you own or operate an existing biomass-fired boiler or existing oil-fired boiler, you must submit a signed

statement in the Notification of Compliance Status report that indicates that you conducted an initial tune-up of the boiler."

§63.11223(6) "Maintain on-site and submit, if requested by the Administrator, a report containing the information in paragraphs (b)(6)(i) through (iii) of this section.
(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.
(iii) The type and amount of fuel used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit."

Rationale for Periodic Monitoring
The Permittee shall continue to conduct biennial tune-ups of each boiler. The biennial compliance certification report, biennial tune-ups, and required record keeping is sufficient to demonstrate compliance.

Emissions Units: EU-7, EU-9, EU-12, & EU-13, thru EU15: Emergency Generators

EU-7 – One (1) diesel fired emergency generator rated at 750-kW (ARA Registration No. 510-1158-9-1214).

EU-9 – One (1) diesel fired emergency generator rated at 500-kW (ARA Registration No. 510-1158-9-1210).

EU-12 – One (1) diesel fired emergency generator rated at 1,000-kW (ARA Registration No. 510-1158-9-1209).

EU-13 thru EU-15 – Three (3) diesel fired generators for emergency and peak shaving operation, each rated at 1,825-kW (2,695-HP) and equipped with diesel oxidation catalyst and Selective Catalytic Reduction (ARA Registration No. 510-1158-9-1294, 9-1295 & 9-1296).

Three (3) of the generators [**EU-7, EU-9 & EU-12**] are operated for emergency purposes only. Generators [**EU-13 thru EU-15**] are operated for both emergency and peak shaving operations.

Four (4) of the generators [**EU-12 thru EU-15**] are subject to 40 CFR Part 60, Subpart IIII. These four (4) generators are also subject to 40 CFR Part 63, Subpart ZZZZ. Per 40 CFR §63.6590(a)(2)(iii) and (c)(1), these generators will meet the requirements of 40 CFR Part 63, Subpart ZZZZ by meeting the requirements of 40 CFR Part 60, Subpart IIII. These generators have no further requirements under 40 CFR Part 63, Subpart ZZZZ.

Two (2) of the emergency generators [**EU-7 & EU-9**] are not subject to 40 CFR Part 60, Subpart IIII because they were constructed prior to the applicable date of July 11, 2005. Additionally, these two (2) generators are not subject to 40 CFR Part 63, Subpart ZZZZ. Johns Hopkins Bayview Medical Center is considered an institution for the purpose of this regulation and emergency generators at institutions are exempt from this regulation per 40 CFR §63.6585(f)(3).

Compliance Status
During the June 30, 2021, full compliance inspection report: none of the generators were in operation. The peak shaving generators [**EU-13 thru EU-15**) have not operated for peak shaving purposes in 2020 or 2021. They operated for testing purposes on June 24, 2021. In 2020, the generators operated a maximum of 23 hours. The capacity factor for each generator is less than 1%.

Applicable Standards and Limits

A. Control of Visible Emissions
COMAR 26.11.09.05 - Visible Emissions.
E. Stationary Internal Combustion Engine Powered Equipment.
"(2) Emissions During Idle Mode. A person may not cause or permit the discharge of emissions from any engine, operating at idle, greater than 10 percent opacity.
(3) Emissions During Operating Mode. A person may not cause or permit the discharge of emissions from any engine, operating at other than idle conditions, greater than 40 percent opacity.
(4) Exceptions.
(a) Section E(2) of this regulation does not apply for a period of 2 consecutive minutes after a period of idling of 15 consecutive minutes for the purpose of clearing the exhaust system.
(b) Section E(2) of this regulation does not apply to emissions resulting directly from cold engine start-up and warm-up for the following maximum periods:
(i) Engines that are idled continuously when not in service: 30 minutes;
(ii) All other engines: 15 minutes.
(c) Section E(2) and (3) of this regulation do not apply while maintenance, repair, or testing is being performed by qualified mechanics."

Compliance Demonstration
The Permittee must perform maintenance and optimize performance based on manufacturer's recommendation. The Permittee shall maintain (a) an operations manual and preventive maintenance plan on site; and (b) a record of the maintenance performed that relates to combustion performance. The Permittee shall report incidents of visible emission in accordance with the permit condition 4, Section III, Plant Wide Conditions, "Report of Excess Emissions and Deviation." **[Reference: COMAR 26.11.03.06C]**

Rationale for Periodic Monitoring
A properly operated and maintained engine is not expected to produce visible emissions. Proper maintenance combined with a preventative maintenance plan is sufficient to demonstrate compliance with the visible emissions standards.

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

Compliance Demonstration
The Permittee shall obtain a certification from the fuel supplier indicating that the fuel oil complies with the limitation on the sulfur content of the fuel oil. The Permittee shall retain for at least five years fuel supplier certifications stating that the fuel oil is in compliance with this regulation and report fuel supplier certifications to the Department upon request. **[Reference: COMAR 26.11.09.07C]**

Rationale for Periodic Monitoring
Fuel oil certifications are sufficient to demonstrate compliance with the applicable fuel sulfur limits. Therefore, no additional monitoring is required.

C. Control of Nitrogen Oxides Emissions
COMAR 26.11.09.08 - Control of NO_x Emissions for Major Stationary Sources
G. Requirements for Fuel-Burning Equipment with a Capacity Factor of 15 Percent or Less, and Combustion Turbines with a Capacity Factor Greater than 15 Percent.
(1) A person who owns or operates fuel-burning equipment with a capacity factor (as defined in 40 CFR Part 72.2) of 15 percent or less shall:

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

Compliance Demonstration
The Permittee shall perform combustion analysis and optimize combustion once each year, for each year that the emission unit operates more than 500 hours. **[Reference: COMAR 26.11.09.08G(1)(b)]**
Once every three (3) years, require each operator of the installation to attend operator training programs on combustion and optimization that are sponsored by the Department, the EPA, or equipment vendors. **[Reference: COMAR 26.11.09.08G(1)(d)]**
The Permittee shall maintain the following records at the premises for at least five (5) years:
(1) Records of the calculated capacity factors. **[Reference: COMAR 26.11.09.08G(1)(a)]**
(2) Records of hours of operation of each generator. **[Reference: COMAR 26.11.02.19C]**
(3) Records of combustion analysis performed if the hours of operation exceed 500. **[Reference: COMAR 26.11.09.08G(1)(c)]**
(4) Records of training program attendance for each operator. **[Reference: COMAR 26.11.09.08G(1)(e)]**
(1) The Permittee shall make all records available to the Department and EPA upon request.
(2) 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. **[Reference: COMAR 26.11.09.08G, COMAR 26.11.02.19C, and COMAR 26.1103.06C]**

Rationale for Periodic Monitoring
A preventative maintenance plan, maintenance records, operator training records, and combustion analysis, if applicable, are deemed sufficient to demonstrate compliance.

Emissions Units: EU-12: Emergency Generator (NSPS)

EU-12 – One (1) diesel fired emergency generator rated at 1,000-kW. (ARA Registration No. 510-1158-9-1209).

Applicable Standards and Limits

A. New Source Performance Standards (**NSPS**) under 40 CFR Part 60 Subpart IIII for Stationary Compression Ignition Internal Combustion Engines.

Note: Beginning October 1, 2010, installations subject to 40 CFR Part 60, Subpart IIII must comply with the diesel fuel standards of §60.4207 which limit the maximum sulfur content of the fuel to 15 ppm.

(1) This permit is valid only for the installation of an emergency diesel generator with piston displacement less than 10 liters per cylinder.

(2) The provisions of 40 CFR Part 60, Subpart IIII apply if the emergency diesel generator uses a diesel engine manufactured after April 1, 2006 [**Ref: §60.4200**].

(3) An emergency diesel generator or diesel engine subject to the requirements of 40 CFR 60, Subpart IIII ("NSPS emergency diesel generator" or "NSPS emergency diesel engine") shall be equipped with a non-resettable hour meter. **[Reference: §60.4209(a)].**

(4) The Permittee shall only purchase emergency generator sets certified to meet the emission standards of §60.4205(b). The generators must be installed and configured according to the manufacturer's specifications. [**Reference: §60.4211(c**)]

(5) The Permittee must purchase and install emergency generator sets certified to the emission standards for new nonroad diesel engines in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants **[Reference: §62.4202(b)(2)];**

(6) The requirements of condition (5) above do not apply to owners or operators of NSPS emergency diesel engines that have been modified, reconstructed, and do not apply to engines that were removed from one existing location and reinstalled at a new location **[Reference: §60.4208]**.

Compliance Demonstration

The Permittee shall maintain a log indicating the amounts of fuel combusted, the hours of operation, and the reason for generator operation (i.e., maintenance or operational testing, power outage, etc.). **[Reference: COMAR 26.11.03.06C]**

§60.4214 - What are my notification, reporting, and **recordkeeping** requirements if I am an owner or operator of a stationary CI internal combustion engine?

(**b**) If the stationary CI internal combustion engine is an emergency stationary internal combustion engine, the owner or operator is not required to submit an initial notification. Starting with the model years in table 5 to this subpart, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time.

§60.4214 - What are my notification, **reporting**, and recordkeeping requirements if I am an owner or operator of a stationary CI internal combustion engine?

(**d**) If you own or operate an emergency stationary CI ICE with a maximum engine power more than 100 HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §60.4211(f)(2)(ii) and (iii) or that operates for the purposes specified in §60.4211(f)(3)(i), you must submit an annual report according to the requirements in paragraphs (d)(1) through (3) of this section.

Rationale for Periodic Monitoring

Fuel oil certifications are sufficient to demonstrate compliance with the applicable fuel sulfur limits. Therefore, no additional monitoring is required.

B. National Emissions Standards for Hazardous Air Pollutants (**NESHAP**) promulgated under 40 CFR 63, Subparts A and ZZZZ for Reciprocating Internal Combustion Engines

§63.6590 - What parts of my plant does this subpart cover?

This subpart applies to each affected source.

(c) Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of **40 CFR Part 60 Subpart IIII**, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines. *No further requirements apply for such engines under this part.*

(1) A new or reconstructed stationary RICE located at an area source.

Compliance Demonstration
See NSPS Requirements.

Operational Limits
(1) The Permittee must operate and maintain an NSPS emergency diesel generator and control devices according to the manufacturer's written instructions or according to procedures developed by the owner or operator that are approved by the manufacturer. Additionally, the Permittee may change only those settings that are permitted by the manufacturer. The Permittee must also meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they may apply to an owner or operator [**Reference: §60.4211**].

(2) The Permittee must comply with the following emissions standards for the emergency generator set:
(a) Non-methane Hydrocarbons and NOx (NMHC+NOx): 6.4 grams per kilowatt-hour (g/kW-hr)
(b) Carbon Monoxide (CO): 3.5 g/kW-hr
(c) Particulate Matter (PM): 0.2 g/kW-hr
[Reference: §60.4205(b), §60.4202(b)(2), and §89.112]
Note: Compliance is demonstrated by maintaining documentation that the engine is certified to meet these limits by the manufacturer.

(3) The exhaust opacity from the emergency generator shall not exceed:
(a) 20 percent during the acceleration mode;
(b) 15 percent during the lugging mode; and
(c) 50 percent during the peaks in either the acceleration or lugging modes.
[Reference: 40 CFR §60.4205(b), §60.4202(a)(2), and 40 CFR §89.113(a)]

(4) The Permittee must use diesel fuel in the emergency generator set that meets the requirements of 40 CFR §80.510(b) (diesel fuel that has a per-gallon sulfur content that does not exceed 15 ppm, and that either has a minimum per-gallon cetane index of 40 or a maximum per-gallon aromatic content of 35 volume percent), unless a waiver is obtained from the Department and/or the EPA Administrator. [**Reference: §60.4207 and §80.510(b)**].
Note: Since the fuel sulfur limitation under 40 CFR Part 60, Subpart IIII is more stringent than the COMAR 26.11.09.07 limitation, the Permittee must comply with the fuel standards of §60.4207 which limit the maximum sulfur content of the fuel to 15 ppm.

(5) In accordance with 40 CFR §60.4211(f), non-emergency use of the emergency diesel generator set for the purpose of maintenance checks and readiness testing is limited to 100 hours per year or less unless prior approval is received from the Department.

(6) There is no time limit on the use of the emergency generator in emergency situations. **[Reference: 40 CFR §60.4211(f)(1)]**

(7) The Permittee may operate the emergency stationary ICE for 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 Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year. **[Reference: 40 CFR §60.4211(f)(2)(i)]**

(8) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. . **[Reference: 40 CFR §60.4211(f)(3)]**
Note: *Effective May 2, 2016, emergency generators are no longer allowed to participate for emergency demand response operation unless they meet the requirements of a non-emergency generator of the same model year.*

Compliance Demonstration
See NSPS Requirements.

Emissions Units: EU-13 thru EU-15: (Non-Emergency Generators)

EU-13 thru EU-15 – Three (3) diesel fired generators for emergency and peak shaving operation, each rated at 1,825-kW (2,695-HP) and equipped with diesel oxidation catalyst and Selective Catalytic Reduction (ARA Registration No. 510-1158-9-1294, 9-1295 & 9-1296).

Applicable Standards and Limits
A. New Source Performance Standards (**NSPS**) under 40 CFR Part 60 Subpart IIII for Stationary Compression Ignition Internal Combustion Engines.
Note: Beginning October 1, 2010, installations subject to 40 CFR Part 60, Subpart IIII must comply with the diesel fuel standards of §60.4207 which limit the maximum sulfur content of the fuel to 15 ppm.

(1) The Permittee must operate and maintain the engine in a

manner that achieves the emissions standards over the entire life of the engine. **[Reference: 40 CFR §60.4206]**

(2) After December 31, 2012, the Permittee may not install a non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 130 KW (175 HP), including those above 560 KW (750 HP), that do not meet the applicable requirements for 2011 model year non-emergency engines. **[Reference: 40 CFR §60.4208(e)]**

(3) The Permittee must comply with the emission standards in §60.4204(b) by purchasing a certified engine. The engine must be installed and configured according to the manufacturer's emission-related specifications. [**Reference: §60.4211(c)**]

Compliance Demonstration:
The Permittee will demonstrate compliance with this condition by purchasing an engine certified to the emission standards in 40 CFR §60.4205(b). **[Reference: 40 CFR §60.4211(c)]**
The Permittee shall maintain for at least five (5) years and make available to the Department upon request, records for each fuel delivery from the fuel supplier a fuel supplier certification consisting of the name of the oil supplier, the date of delivery, the amount of fuel delivered, and a statement from the fuel supplier that the diesel fuel oil complies with the specifications of 40 CFR §60.80.510(b). Also records of the certifications of compliance or manufacturer engine test data required by 40 CFR §60.4211. **[Reference: COMAR 26.11.03.06C]**
The Permittee shall report incidents of visible emission in accordance with the permit condition 4, Section III, Plant Wide Conditions, "Report of Excess Emissions and Deviation." **[Reference: COMAR 26.11.03.06C]**

Rationale for Periodic Monitoring
Fuel oil certifications are sufficient to demonstrate compliance with the applicable fuel sulfur limits. Therefore, no additional monitoring is required. The Permittee shall also keep a copy of the engine certification on-site to demonstrate compliance with this requirement.

B. National Emissions Standards for Hazardous Air Pollutants (**NESHAP**) promulgated under 40 CFR 63, Subparts A and ZZZZ for Reciprocating Internal Combustion Engines

§63.6590 - What parts of my plant does this subpart cover?
This subpart applies to each affected source.
(c) Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the criteria in paragraphs (c)(1) through (7)

of this section must meet the requirements of this part by meeting the requirements of **40 CFR Part 60 Subpart IIII**, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines. *No further requirements apply for such engines under this part.*
(1) A new or reconstructed stationary RICE located at an area source.

Compliance Demonstration:
See NSPS Requirements.

C. Operational Limits
(1) The exhaust opacity shall not exceed the following emission standards:
(i) 20 percent during the acceleration mode;
(ii) 15 percent during the lugging mode; and
(iii) 50 percent during the peaks in either the acceleration or lugging modes.
[Reference: 40 CFR §60.4205(b), §60.4202(a)(2), and 40 CFR §89.113(a)]

(2) The Permittee must meet the non-road diesel fuel sulfur requirements of 40 CFR §80.510(b) as follows:
(i) Maximum sulfur content 15 ppm and
(ii) Minimum cetane index of 40; or
(iii) Maximum aromatic content of 35 volume percent.
[Reference: 40 CFR §60.4207(b) and 40 CFR §80.510(b)]

(3) The Permittee shall meet the following emissions standards for the non-emergency generator sets:
(a) Particulate matter (PM): 0.10 grams per kilowatt hour (g/kW hr.);
(b) Nitrogen Oxides (NOx): 0.67 grams per kilowatt hour;
(c) Non-Methane Hydrocarbons (NMHC): 0.4 grams per kilowatt hour; and
(d) Carbon Monoxide (CO): 3.5 g/kW hr. **[Reference: 40 CFR §60.4201(a), 40 CFR §60.4204(b), and 40 CFR §1039.102, Table 7 "Interim, Tier 4 Exhaust Emission Standards (G/kW-hr)"]**
Note: Compliance with this condition will be demonstrated by the purchase of a certified engine.

(4) The Permittee must operate and maintain the engine and control devices according to the manufacturer's emission related written instructions and may change only those emission related settings that are permitted by the manufacturer. **[Reference: 40 CFR §60.4211(a)(1&2)]**

(5) The Permittee may request resetting the auxiliary emission control devices (AECDs) at any time. The manufacturer may reset the AECD only if the

manufacturer has evidence that the emergency situation is continuing, or after the operator provides the information required in paragraph (e) of this section, in writing or by any other means. **[Reference: 40 CFR §60.4211(h) and 40 CFR §1039.665(d)]**

(6) The following actions by the Permittee are improper use of the AECD and are prohibited under Clean Air Act section 203 (42 U.S.C. 7522):
(a) Activating the emergency AECD for any use other than a qualified emergency situation where the emission control strategy would curtail engine performance.
(b) Failing to disable the emergency AECD after a qualified emergency situation has ended.
(c) Failing to disable the emergency AECD after the problem causing the emission control strategy to interfere with engine performance has been or can reasonably be fixed.
(d) Failing to provide the information required under 40 CFR §1039.665(e).
[Reference: 40 CFR §60.4211(h) and 40 CFR §1039.665(g)]

(7) The total emissions of nitrogen oxides (NO_x) from these generators shall be less than 25 tons in any consecutive 12-month period. **[Reference: ARA Permit to Construct Nos. 510-1158-9-1294 thru 1296, Part D(6) issued January 16, 2014].**

Compliance Demonstration:
The Permittee shall calculate and record the NO_x emissions from these generators, for each previous calendar month and a total for the previous 12 consecutive calendar months. The calculations and records shall be updated monthly, within the first 15 days of each following month. The Permittee shall maintain for at least five (5) years and make available to the Department upon request, records of NO_x emissions from these generators for each previous calendar month and a total for the previous 12 consecutive calendar months.
[Reference: COMAR 26.11.03.06C]
(1) The Permittee must send a written report to the manufacturer within 60 calendar days after activating an AECD approved under 40 CFR Part 1039. The report must include the following:
(a) Contact name, mail and email addresses, and telephone number for the responsible company or entity.
(b) A description of the emergency situation, the location of the engine during the emergency, and the contact information for an official who can verify the emergency situation (such as a county sheriff, fire marshal, or hospital administrator).
(c) The reason for AECD activation during the emergency situation, such as the lack of diesel exhaust fluid (DEF), or the failure of an emission related sensor when the engine was needed to respond to an emergency situation.

(d) The engine's serial number (or equivalent).
(e) A description of the extent and duration of the engine operation while the AECD was active, including a statement describing whether or not the AECD was manually deactivated after the emergency situation ended.
[Reference: 40 CFR §60.4211(h), 40 CFR §60.4214(e), and 40 CFR §1039.665(e)]

(2) If the Permittee fails to submit the report required in 40 CFR §1039.665(e), to the manufacturer within 60 days of activation an AECD approved under this section, the manufacturer, to the event it has been made aware of the AECD activation, must send written notification to the Permittee that failure to meet the submission requirements may subject the Permittee to penalties under 40 CFR §1068.101. **[Reference: 40 CFR §60.4211(h), 40 CFR §60.4214(e), and 40 CFR §1039.665(f)]**

(3) Notifications and reports submitted to comply with 40 CFR §1039.665 are deemed to be submissions to the EPA. **[Reference: 40 CFR §60.4211(h), 40 CFR §60.4214(e), and 40 CFR §1039.665(i)]**

Rationale for Periodic Monitoring
Notifications and reports submitted to comply with 40 CFR §1039.665 are deemed to be submissions to the EPA. Proper operation of the engines and records and reports of AECD activation are sufficient to demonstrate compliance.

COMPLIANCE SCHEDULE

Johns Hopkins Bayview Medical Center is currently in compliance with all applicable air quality regulations.

TITLE IV – ACID RAIN

Not Applicable.

TITLE VI – OZONE DEPLETING SUBSTANCES

Johns Hopkins Bayview Medical Center is not subject to Title VI requirements.

SECTION 112(r) – ACCIDENTAL RELEASE

Johns Hopkins Bayview Medical Center is not subject to the requirements of Section 112(r).

PERMIT SHIELD

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

INSIGNIFICANT ACTIVITIES

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

(1) No. 3 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;

[For Areas III and IV]

The [*affected fuel burning units*] are subject to the following requirements:

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

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

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

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

[For Distillate Fuel Oil]

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

(2) No. 2* Stationary internal combustion engines with an output less than 500 brake horsepower (373 kilowatts) and which are not used to generate electricity for sale or for peak or load shaving;

The [*affected units*] are subject to the following requirements:
* 1) 275 kW Cummins Genset; Model # 500 EDR 7016; Serial # JA-92630-1/12.5
2) 40 kW portable CAT Genset; Model # 4BTA3.9-G5; Serial # 21751771.

(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.

(3) ✓ Water cooling towers and water-cooling ponds unless used for evaporative cooling of water from barometric jets or barometric condensers, or used in conjunction with an installation requiring a permit to operate;

(4) ✓ Commercial bakery ovens with a rated heat input capacity of less than 2,000,000 Btu per hour;

(5) ✓ Kilns used for firing ceramic ware, heated exclusively by natural gas, liquefied petroleum gas, electricity, or any combination of these;

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

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

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

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

(b) No. 5 Storage of lubricating oils;

(c) No. 10 Storage of Numbers 1, 2, 4, 5, and 6 fuel oil and aviation jet engine fuel;

(d) No. 4 The storage of VOC normally used as solvents, diluents, thinners, inks, colorants, paints, lacquers, enamels, varnishes, liquid resins, or other surface coatings and

having individual capacities of 2,000 gallons (7.6 cubic meters) or less;

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

(10) ✓ Potable water treatment equipment, not including air stripping equipment;

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

(12) ✓ Laboratory fume hoods and vents;

STATE ONLY ENFORCEABLE REQUIREMENTS

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

1. Applicable Regulations:

(A) COMAR 26.11.06.08, Nuisance. "An installation or premises may not be operated or maintained in such a manner that a nuisance or air pollution is created. Nothing in this regulation relating to the control of emissions may in any manner be construed as authorizing or permitting the creation of, or maintenance of, nuisance or air pollution."

(B) COMAR 26.11.06.09, Odors. "A person may not cause or permit the discharge into the atmosphere of gases, vapors, or odors beyond the property line in such a manner that a nuisance or air pollution is created."

2. Record Keeping and Reporting:

The Permittee shall submit to the Department, by April 1 of each year during the term of this permit, a written certification of the results of an analysis of

emissions of toxic air pollutants from the Permittee's facility during the previous calendar year. The analysis shall include either:

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

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