Maryland
Department of
the Environment

Larry Hogan, Governor
Boyd K. Rutherford, Lt. Governor

Horacio Tablada, Secretary
Suzanne E. Dorsey, Deputy Secretary

July 1, 2022

Ms. Donna Twinam, Director
Facilities Management and Services
General Service Administration
301 7th Street SW, Room 3660
Washington DC 20407

Dear Ms. Twinam:

Enclosed, please find the revised Part 70/Title V Operating Permit and Fact Sheet for the GSA White Oak facility located in Silver Spring, MD. The Permit will expire on January 31, 2027.

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. Marcie Gurley, the permit manager for this facility, at Marcie.gurley@maryland.gov, or (410) 537-3230.

Sincerely,

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

SYS/jm

Enclosures

cc: EPA Region III (w/encl)

KEEP PERMIT AT SITE

CONTROL NO. B - 07136

Larry Hogan
Governor

State of Maryland

Horacio Tablada
Secretary

DEPARTMENT OF THE ENVIRONMENT

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

[ ] Construction Permit

Part 70
[X] Operating Permit

PERMIT NO. 24-031-1129

DATE ISSUED JUL 01 2022

PERMIT FEE To be paid in accordance with COMAR 26.11.02.19B

EXPIRATION DATE January 31, 2027

LEGAL OWNER & ADDRESS

GSA Federal Research Center at White Oak
10901 New Hampshire Ave.
Silver Spring, Maryland 20903
Attn: Mr. Matt August, Director

SITE

GSA Federal Research Center at White Oak
Central Utility Plants (CUPs) #1 & #2
10901 New Hampshire Ave.
Silver Spring, MD 20903
AI # 27442

SOURCE DESCRIPTION

GSA Federal Research Center at White Oak (GSA FRCWO) Central Utility Plants.

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

Program Manager

Director, Air and Radiation Administration

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

(NOT TRANSFERABLE)

GSA FEDERAL RESEARCH CENTER AT WHITE OAK
10901/10903 NEW HAMPSHIRE AVENUE, SILVER SPRING, MD 20903
PART 70 OPERATING PERMIT NO. 24-031-1129

SECTION I SOURCE IDENTIFICATION

1. DESCRIPTION OF FACILITY

The General Services Administration (GSA) owns the 662-acre White Oak site which is used primarily as the headquarters campus for the Food and Drug Administration (FDA). The site also includes two central utility plants (CUPs) and one (1) emergency power plant (EPP). CUP1, CUP2, and the EPP are operated by Honeywell Building Solutions, SES. Collectively the principal purpose of CUP1, CUP2 and the EPP is to provide heating, cooling and electricity to the GSA Campus. Therefore, the primary SIC code associated with the Honeywell's operations is 4931 (electric and other services combined). The emissions units associated with these facilities are fuel-burning equipment units as well as insignificant activities.

2. FACILITY INVENTORY LIST

Emissions Unit Number	MDE - ARA Registration Number	Emissions Unit Name and Description	Date of Installation
		Central Utility Plant 1 (CUP1)	
G-1	9-0709	5.7-MW dual-fired Wartsila 18V32 compression-ignition (CI) engine located at CUP1. This unit is equipped with a heat recovery boiler and selection catalytic reduction (SCR) and oxidation emissions control. The primary fuel for the engine is natural gas. The engine can also operate using No. 2 fuel oil.	Modified 2021; Modified 2012; Nov 2003
G-2	9-0710	2.0-MW Cummins 2000, No. 2 oil fired reciprocating compression-ignition (CI) emergency generator.	Modified 2021; Modified 2012; Nov 2003
G-3	9-0840	4.5-MW Solar Mercury 50, natural gas fired combustion turbine. (Turbine #1)	Sept 2007
G-4	9-0841	4.5-MW Solar Mercury 50, natural gas fired combustion turbine. (Turbine #2)	April 2008
G-5	9-0901	4.5-MW Solar Mercury 50, natural gas fired combustion turbine. (Turbine #3)	Mar 2009
G-6	9-0940	4.5-MW Solar Mercury 50, natural gas fired combustion turbine. (Turbine #4)	May 2010
B-1	5-1294	12.3-MMBtu/hr. Johnston Co. Boiler #1, dual-fired boiler. The primary fuel for the boiler is natural gas. The boiler can also operate using No. 2 fuel oil.	Mar 2003
B-2	5-1295	12.3-MMBtu/hr. Johnston Co. Boiler #2, dual-fired boiler. The primary fuel for the boiler is	Mar 2003

		natural gas. The boiler can also operate using No. 2 fuel oil.	
B-3	5-1296	12.3-MMBtu/hr. Johnston Co. Boiler #3, dual-fired boiler. The primary fuel for the boiler is natural gas. The boiler can also operate using No. 2 fuel oil.	Mar 2003
		Central Utility Plant 2 (CUP2)	
G-7	9-1045	7.56-MW Solar Taurus 70 #1, dual-fired combustion turbine. The unit is equipped with a 41.1-MMBtu/hr. natural gas-fired duct burner, heat recovery steam generator (HRSG), and oxidation catalyst and selective catalytic reduction (SCR) emission controls. The primary fuel for the turbine is natural gas. The turbine can also operate using No. 2 fuel oil.	Aug 2013
G-8	9-1046	7.56-MW Solar Taurus 70 #2, dual-fired combustion turbine. The unit is equipped with a 41.1-MMBtu/hr. natural gas-fired duct burner, heat recovery steam generator (HRSG), and oxidation catalyst and selective catalytic reduction (SCR) emission controls. The primary fuel for the turbine is natural gas. The turbine can also operate using No. 2 fuel oil.	July 2013
G-9	9-1050	4.4-MW Solar Mercury, natural gas-fired combustion turbine. The unit is equipped with a heat recovery steam generator (HRSG), and ultralean premix low-NO_X pre-combustion technology. (Turbine #5)	June 2013
G-10	9-1048	2.25-MW Caterpillar Emergency Diesel generator (EDG) #1.	Sept 2013
G-11	9-1049	2.25-MW Caterpillar Emergency Diesel generator (EDG) #2.	Sept 2013
B-4	5-2284	25.1-MMBtu/hr. Cleaver Brooks Steam Boiler, dual-fired boiler. The primary fuel for the boiler is natural gas. The boiler can also operate using No. 2 fuel oil.	Feb 2013
		Emergency Power Plant (EPP)	
G-13	9-1090	2500-kW Cummins QSK78 Emergency Diesel Generator (EDG) #1.	April 2014
G-14	9-1091	2500-kW Cummins QSK78 Emergency Diesel Generator (EDG) #2.	April 2014
G-15	9-1092	2500-kW Cummins QSK78 Emergency Diesel Generator (EDG) #3	April 2014
G-16	9-1093	2500-kW Cummins QSK78 Emergency Diesel Generator (EDG) #4.	April 2014
G-17	9-1094	2500-kW Cummins QSK78 Emergency Diesel Generator (EDG) #5.	April 2014

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
PM_{10}	Particulate Matter with Nominal Aerodynamic Diameter of 10 micrometers or less
ppm	parts per million
ppb	parts per billion
PSD	Prevention of Significant Deterioration
PTC	Permit to construct
PTO	Permit to operate (State)
SIC	Standard Industrial Classification
SO_2	Sulfur Dioxide
TAP	Toxic Air Pollutant

tpy	tons per year
VE	Visible Emissions
VOC	Volatile Organic Compounds

3. EFFECTIVE DATE

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

4. PERMIT EXPIRATION

[COMAR 26.11.03.13B(2)]

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

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

5. PERMIT RENEWAL

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

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

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

6. CONFIDENTIAL INFORMATION

[COMAR 26.11.02.02G]

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

7. PERMIT ACTIONS

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

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

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

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

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

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

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

8. PERMIT AVAILABILITY

[COMAR 26.11.02.13G]

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

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

[COMAR 26.11.03.20B]

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

10. TRANSFER OF PERMIT

[COMAR 26.11.02.02E]

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

11. REVISION OF PART 70 PERMITS – GENERAL CONDITIONS

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

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

b. When applying for a revision to a Part 70 permit, the Permittee shall comply with the requirements of COMAR 26.11.03.02 and .03 except that the application for a revision need include only information listed that is related to the proposed change to the source and revision to the permit. This information shall be sufficient to evaluate the proposed change and to determine whether it will comply with all applicable requirements of the Clean Air Act.

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

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

12. SIGNIFICANT PART 70 OPERATING PERMIT MODIFICATIONS

[COMAR 26.11.03.17]

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

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

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

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

(1) An application need include only information pertaining to the proposed change to the source and modification of this permit, including a description of the change and modification, and any new applicable requirements of the Clean Air Act that will apply if the change occurs;

(2) Public participation, and review by affected states and EPA, is limited to only the application and those federally enforceable

terms and conditions of the Part 70 permit that are affected by the significant permit modification.

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

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

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

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

13. MINOR PERMIT MODIFICATIONS

[COMAR 26.11.03.16]

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

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

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

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

(a) Adding new requirements,

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

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

(3) Does not require or modify a:

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

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

(c) Visibility or increment analysis;

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

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

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

(5) Is not a Title I modification; and

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

b. Application for a Minor Permit Modification

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

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

(2) The proposed minor permit modification;

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

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

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

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

c. Permittee's Ability to Make Change

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

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

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

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

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

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

Maryland SIP or in other applicable requirements of the Clean Air Act.

14. ADMINISTRATIVE PART 70 OPERATING PERMIT AMENDMENTS

[COMAR 26.11.03.15]

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

a. An application for an administrative permit amendment shall:

(1) Be in writing;

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

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

b. An administrative permit amendment:

(1) Is a correction of a typographical error;

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

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

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

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

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

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

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

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

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

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

15. OFF-PERMIT CHANGES TO THIS SOURCE

[COMAR 26.11.03.19]

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

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

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

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

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

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

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

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

d. The Permittee shall keep a record describing:

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

(2) The emissions resulting from those changes.

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

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

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

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

16. ON-PERMIT CHANGES TO SOURCES

[COMAR 26.11.03.18]

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

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

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

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

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

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

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

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

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

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

b. The Permittee shall notify the Department and the EPA in writing of a proposed on-permit change under COMAR 26.11.03.18 not later than

7 days before the change is made. The written information shall include the following information:

(1) A description of the proposed change;

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

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

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

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

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

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

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

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

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

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

17. FEE PAYMENT

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

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

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

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

18. REQUIREMENTS FOR PERMITS-TO-CONSTRUCT AND APPROVALS

[COMAR 26.11.02.09.]

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

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

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

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

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

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

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

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

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

19. CONSOLIDATION OF PROCEDURES FOR PUBLIC PARTICIPATION

[COMAR 26.11.02.11C] and [COMAR 26.11.03.01K]

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

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

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

20. PROPERTY RIGHTS

[COMAR 26.11.03.06E(4)]

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

21. SEVERABILITY

[COMAR 26.11.03.06A(5)]

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

22. INSPECTION AND ENTRY

[COMAR 26.11.03.06G(3)]

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

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

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

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

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

23. DUTY TO PROVIDE INFORMATION

[COMAR 26.11.03.06E(5)]

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

For information claimed by the Permittee to be confidential and therefore potentially not disclosable 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)]**

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1.0	**Emissions Unit Number(s): CUP1; G-3, G-4, G-5, & G-6 and CUP2: G-7, G-8 & G-9** **CUP1: G-3, G-4, G-5, & G-6:** Four (4) 4.5-MW Solar Mercury 50, natural gas fired combustion turbine. (Turbine #1 thru #4). **[Reg. Nos.9-0840, 9-0841, 9-0901, 9-0940]** **CUP2: G-7 & G-8:** Two (2) 7.56-MW Solar Taurus 70 #1 & #2, dual-fired combustion turbine. The unit is equipped with a 41.1-MMBtu/hr. natural gas-fired duct burner, heat recovery steam generator (HRSG), and oxidation catalyst and selective catalytic reduction (SCR) emission controls. The primary fuel for the turbine is natural gas. The turbine can also operate using No. 2 fuel oil. **[Reg. Nos. .9-1045 & 9-1046]** **CUP2: G-9**: One (1) 4.4-MW Solar Mercury 50, natural gas-fired combustion turbine. The unit is equipped with a heat recovery steam generator (HRSG), and ultralean premix low-NO_X pre-combustion technology. (Turbine #5) **[Reg No. 9-1050]**
1.1	**Applicable Standards/Limits:** A. Control of Visible Emissions **COMAR 26.11.09.05A** - Visible Emissions: 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

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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."

B. Control of Sulfur Oxides
{Applies to G-7 and G-8}
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. Request for Analyses. "Any person offering to sell or deliver fuel or any person responsible for equipment in which fuel or process gas is burned, upon request, shall submit to the Department or control officer such analyses of fuel or process gas as may be required to determine compliance with this regulation."

Note: Since the COMAR requirement is less stringent than the NSPS Subpart KKKK Sulfur Control requirements for CTs, the NSPS requirement shall apply.

§60.4330 - What emission limits must I meet for sulfur dioxide (SO_2)?
(a) If your turbine is located in a continental area, you must comply with either paragraph (a)(1), (a)(2), or (a)(3) of this section.....
(1) You must not cause to be discharged into the atmosphere from the subject stationary combustion turbine any gases which contain SO_2 in excess of **110 nanograms per Joule (ng/J) (0.90 pounds per megawatt-hour (lb./MWhr)) gross output**;
(2) You must not burn in the subject stationary combustion turbine any fuel which contains total potential sulfur emissions in excess of **26 ng SO_2/J (0.060 lb. SO_2/MMBtu) heat input.** If your turbine simultaneously fires multiple fuels, each fuel must meet this requirement;
[Reference: 40 CFR 60, Subpart KKKK--Standards of Performance for Stationary Combustion Turbines]

Note: The Permittee may satisfy this requirement by meeting the fuel oil sulfur content limitation of 0.05% by weight as specified in a current valid purchase contract, tariff sheet or transportation contract for the fuel per **40 CFR §60.4365(a).** ***The Permittee shall satisfy the sulfur limitation(s) by only firing Ultra Low Sulfur Diesel (ULSD) fuel that has a maximum sulfur content of 15 ppm (0.0015%) sulfur by weight.***

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C. Control of Nitrogen Oxides

(1) **40 CFR 60 Subpart KKKK, 60.4320 – NO_X Standard**

Table 1: Subpart KKKK of Part 60. Nitrogen Oxide Emission Limits for New Stationary Combustion Turbines.

Combustion turbine type	**Combustion turbine heat input at peak load (HHV)**	**NO_X emission standard**
Note: Requirements below apply to **G-7** {Reg. No. 9-1045} & **G-8** {Reg. No. 9-1046} of **CUP2 - Solar Taurus** 70, 7.56-MW (67 MMBtu/hr.) CTs		
New turbine firing natural gas	> 50 MMBtu/hr. and ≤ 850 MMBtu/hr.	**25 ppm** at 15 percent O_2 or 150 ng/J of useful output (1.2 lb./MWhr.).
New turbine firing fuels other than natural gas	> 50 MMBtu/hr. and ≤ 850 MMBtu/hr.	**74 ppm** at 15 percent O_2 or 460 ng/J of useful output (3.6 lb./MWhr.).
Note: Requirements below apply to **G-3, G-4, G-5, & G-6** {Reg. Nos. 9-0840, - 0841, - 0901, & 9-0940} of **CUP1** and **G-9** {Reg. No.9-1050} of **CUP2 – Solar Mercury 50**, 4.5-MW (45 MMBTU/hr.) CTs		
New turbine firing natural gas, electric generating	≤ 50 MM Btu/hr.	**42 ppm** at 15 percent O_2 or 290 ng/J of useful output (2.3 lb./MWhr).

(2) **COMAR 26.11.09.08 – Control of NO_X Emissions for Major Sources**

A. Applicability. (1) This regulation applies to a person who owns or operates an installation that causes emissions of NO_X and is located at premises that have total potential to emit: (a) 25 tons or more per year of NO_X and is located in Baltimore City, or Anne Arundel, Baltimore, Calvert, Carroll, Cecil, Charles, Frederick, Harford, Howard, **Montgomery**, or Prince George's counties.

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.

2) A person who owns or operates a combustion turbine with a capacity factor greater than 15 percent shall meet an hourly average NO_X emission rate of not more than 42 ppm when burning gas or 65 ppm when burning fuel oil (dry

Table IV – 1	
	volume at 15 percent oxygen) or meet applicable Prevention of Significant Deterioration limits, whichever is more restrictive. (*)**Note**: Operator Training. - (a) For purposes of this regulation, the equipment operator to be trained may be the person who maintains the equipment and makes the necessary adjustments for efficient operation. (b) The operator training course sponsored by the Department shall include an in-house training course that is approved by the Department. **{Reference.: COMAR 26.11.09.08b(5)}** D. Operational Limits (1) The two-(2) Solar Taurus 70 combustion turbines (CTs) shall fire only natural gas and distillate ULSD fuel oil in the combustion turbine and natural gas only in the duct burners. The five-(5) Solar Mercury 50 CTs shall fire only natural gas. (2) General Compliance Requirements - Sec. 60.4333 "You must operate and maintain your stationary combustion turbine, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown, and malfunction." (3) The Permittee shall only use Ultra Low Sulfur Diesel (ULSD) fuel that has a maximum sulfur content of 15 ppm (0.0015%) sulfur by weight. (4) The turbines shall be operated and maintained in accordance with the Environmental Management System (EMS) provided by the equipment manufacturer, which includes but is not limited to providing that each of the Solar Taurus 70 and Solar Mercury 50 combustion turbine cogeneration units is equipped with an automated monitoring and control system that provides operators with continuous monitoring of fuel heat inputs and electricity and thermal energy outputs and other parameters that indicate thermal efficiency of the unit. A copy of the EMS operations and maintenance manual shall be maintained on site and made available to the Department upon request. **[Reference: CUP2 – Permit to Construct Nos. 031-2552-9-1045, -1046, -1048, -1049, -1050, and -5-2284]** **Note:** All stationary sources are also subject to the Facility-wide NSR Synthetic-Minor limitations for NO_x. (See Table IV- 4 – Facility-Wide Requirements)
1.2	**Testing Requirements:** A. Control of Visible Emissions See Monitoring Requirements. B. Control of Sulfur Oxides See Monitoring Requirements. C. Control of Nitrogen Oxides

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	The Permittee shall conduct performance test for NO_X in accordance with the methodologies specified in 40 CFR §§ 60.4340 & 60.4400 including but not limited to the following: §60.4340. {(1), below applies to E/Ns G-7 & G-8 – Solar Taurus 70 CTs} (1) Continuous emission monitoring (CEMs) as described in §§60.4335(b) and 60.4345, or {(2), below applies to Solar Mercury 50 CTs E/N to **G-3, G-4, G-5, G-6 & G-9**} (2) Continuous parameter monitoring as follows: (ii) For any lean premix stationary combustion turbine, you must continuously monitor the appropriate parameters to determine whether the unit is operating in low-NO_X mode. (iii) For any turbine that uses SCR to reduce NO_X emissions, you must continuously monitor appropriate parameters to verify the proper operation of the emission controls." **Note**: The Permittee shall assure continuous compliance as stipulated under §60.4340 by operating the CTs in accordance with the Parametric Monitoring Plan (PMP). **[Reference: 40 CFR 60, Subpart KKKK §60.4410 & CUP #1 Permit to Construct Nos. 031-1129-9-0840 & 9-0841 N]** **§60.4400** - How do I conduct the initial and subsequent performance tests, regarding NO_X? " (b)(4) Compliance with the applicable emission limit in § 60.4320 must be demonstrated at each tested load level. Compliance is achieved if the three-run arithmetic average NO_X emission rate at each tested level meets the applicable emission limit in § 60.4320. "(b)(5) If you elect to install a CEMS, the performance evaluation of the CEMS may either be conducted separately or (as described in §60.4405) as part of the initial performance test of the affected unit." **[Periodic Testing]** Note (*): Condition (1) below applies to Units **G-3, G-4, G-5, G-6, & G-9** that the Permittee has opted to use the alternative method to annual testing for demonstrating continuous compliance ("continuous parameter monitoring") for NO_X as specified in 40 CFR §60.4340(b)(2). (1) After the initial compliance test required under 40 CFR §60.8, the owner or operator shall conduct a performance stack test for NO_X for each CT unit at least once every 5 years or at least once during the term of the operating permit (*). The Permittee shall conduct performance test for NO_X in accordance with the methodologies specified in 40 CFR §§ 60.4340 & 60.4400. (2) Performance tests shall be conducted, and data reduced in accordance with the test methods and procedures contained in each applicable subpart unless the Administrator specifies or approves, in specific cases, an alternative reference method. (3) The Permittee shall provide the Department at least 30 days prior notice of any performance test, except as specified under other subparts, to afford the Administrator the opportunity to have an observer present. If after 30 days' notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the owner or operator of an affected facility shall notify the Administrator (the Department) as soon as possible of any delay in the original test date, either by providing at least 7 days prior notice of the rescheduled date of the performance

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	test, or by arranging a rescheduled date with the Administrator (the Department) by mutual agreement. (4) The Permittee shall provide the Department with two copies of the test protocols at least 30 days prior to any scheduled performance tests. **[Reference: COMAR 26.11.01.04 & 40 CFR §60.4340(b)(2) &. §4400]** D. Operational Limits See Record Keeping Requirements.
1.3	**Monitoring Requirements:** A. Control of Visible Emissions The Permittee is required to implement a preventative maintenance plan and maintain on site an operation manual and records of maintenance performed that relate to combustion performance. The Permittee shall properly operate and maintain the CTs in accordance with the manufacturer's recommendations and in a manner to assure compliance with the visible emissions standards. **[Reference: COMAR 26.11.03.06C]** B. Control of Sulfur Oxides **COMAR 26.11.09.07C**. - Request for Analyses. Any person offering to sell or deliver fuel or any person responsible for equipment in which fuel or process gas is burned, upon request, shall submit to the Department or control officer such analyses of fuel or process gas as may be required to determine compliance with this regulation. C. Control of Nitrogen Oxides (1) The Permittee shall conduct performance test for NO_X in accordance with the methodologies specified in 40 CFR §§ 60.4340 & 60.4400 including but not limited to the following: §60.4340. {**Note:** The Permittee has selected to alternative methods to demonstrate continuous compliance for NO_X. See below.} "(b) As an alternative, you may install, calibrate, maintain and operate one of the following continuous monitoring systems: {(b)(1) below applies to Solar Taurus 70 CTs E/Ns G-7 & G-8} "(1) Continuous emission monitoring by (a) Installing, calibrating, maintaining and operating a NO_X Continuous emission monitoring (CEMs) as described in §§60.4335(b) and 60.4345", and (b) Continuously monitor appropriate parameters to verify the proper operation of the SCR emission controls, or "(2) Continuous parameter monitoring as follows: {(ii) applies to Solar Mercury 50 CTs E/Ns G-3, -4,- 5,- 6, &-9} (ii) For any lean premix stationary combustion turbine, you must continuously monitor the appropriate parameters to determine whether the unit is operating in low-NO_X mode. {(iii applies to Solar Taurus 70 CTs E/Ns G-7 & G-8} (iii) For any turbine that uses SCR to reduce NO_X emissions, you must continuously monitor

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	appropriate parameters to verify the proper operation of the emission controls." (2) The Permittee shall establish and document a proper parametric monitoring plan in accordance with § 60.4355. The plan shall include, but not be limited to: selection of indicators to be monitored, ranges of indicators, process used to obtain representative data, quality assurance, frequency of monitoring, and justification for the proposed elements of monitoring **Note**: The Permittee shall demonstrate compliance with 40 CFR §60.4340 for NO_X emissions with continuous parametric monitoring as stipulated in the facility's Parametric Monitoring Plan (PMP) and as stipulated in Condition 1.3 C. (3), below. {The Permittee submitted a revised PMP on November 7, 2008. {*Condition (3) below applies to the Solar Mercury 50 CTs*} (3) The Permittee shall assure continuous compliance as stipulated under § 60.4340 by operating the CTs in accordance with the Parametric Monitoring Plan, which includes operation in Dry Low Emissions (DLE) mode which is indicated by monitoring pilot valve position, which will indicate that "Minimum Pilot Mode" is either "ON" or "OFF". GSA will continuously monitor and record pilot fuel valve position and report any incidence of "Minimum Pilot Mode" = OFF, that is not attributable to combustion turbine start-up or load change, to indicate potential NO_X exceedances. **[Reference: 40 CFR 60, Subpart KKKK & PTC #031-1129-9-0840 & -0841, -9-0901, & -9-0940]** {*Condition (4), (5) & (6) below applies to CTs G-7 & G-8*} (4) § 60.4345 What are the requirements for the continuous emission monitoring system equipment, if I choose to use this option? "(a) Each NO_X diluent CEMS must be installed and certified according to Performance Specification 2 (PS 2) in appendix B to this part, except the 7- day calibration drift is based on unit operating days, not calendar days. With state approval, Procedure 1 in appendix F to this part is not required. Alternatively, a NO_X diluent CEMS that is installed and certified according to appendix A of part 75 of this chapter is acceptable for use under this subpart. The relative accuracy test audit (RATA) of the CEMS shall be performed on a lb./MM Btu basis. "(b) As specified in §60.13(e)(2), during each full unit operating hour, both the NOX monitor and the diluent monitor must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour, to validate the hour. For partial unit operating hours, at least one valid data point must be obtained with each monitor for each quadrant of the hour in which the unit operates. For unit operating hours in which required quality assurance and maintenance activities are performed on the CEMS, a minimum of two valid data points (one in each of two quadrants) are required for each monitor to validate the NO_X emission rate for the hour." "(c) Each fuel flowmeter shall be installed, calibrated, maintained, and operated according to the manufacturer's instructions. Alternatively, with state approval, fuel flowmeters that meet the installation, certification, and quality assurance requirements of appendix D to part 75 of this chapter are acceptable for use under this subpart.

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	"(d) Each watt meter, steam flow meter, and each pressure or temperature measurement device shall be installed, calibrated, maintained, and operated according to manufacturer's instructions." "(e) The owner or operator shall develop and keep on-site a quality assurance (QA) plan for all of the continuous monitoring equipment described in paragraphs (a), (c), and (d) of this section. For the CEMS and fuel flow meters, the owner or operator may, with state approval, satisfy the requirements of this paragraph by implementing the QA program and plan described in Section 1 of appendix B to part 75 of this chapter." D. Operational Limits See Record keeping Requirements.
1.4	**Record Keeping Requirements:** **Note:** The Permittee shall maintain all records required under this permit for at least five (5) years and shall make them available to the Department upon request. **[Reference: COMAR 26.11.03.06C(5)(g)]** A. Control of Visible Emissions The Permittee shall maintain a preventative maintenance plan, operations manual and records of maintenance performed that relate to combustion performance and shall maintain logs of any visible emissions observations performed. **[Reference: 40 CFR 60, Subpart KKKK & COMAR 26.11.03.06C]** B. Control of Sulfur Oxides The Permittee shall maintain records and results of fuel sulfur content monitoring and/or records of fuel quality characteristics from a current, valid purchase contract, tariff sheet or transportation contract for the fuel, specifying that the maximum total sulfur content. **[Reference: COMAR 26.11.03.06C]** C. Control of Nitrogen Oxides (1) The Permittee shall maintain records and results of any tests performed incompliance with testing as required under 40 CFR §60.8 and 40 CFR 60, Subpart KKKK and any other testing required under this permit. The Permittee shall maintain a copy of the parametric monitoring plan in accordance with § 60.4355 and records of pilot fuel valve position and report any incidence of "Minimum Pilot Mode" = OFF to indicate potential NO_X exceedances, in accordance with the plan. **[Reference: 40 CFR 60, Subpart KKKK & COMAR 26.11.03.06C]** (2) The Permittee shall develop, implement, and maintain the Operational and Preventative Maintenance Plan as specified under COMAR 26.11.09.08. (3) The Permittee shall maintain a record of training program attendance for each operator at the site and make these records available to the Department upon request COMAR 26.11.09.08 F & G.

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	(4) The Permittee shall maintain records of 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. **[Reference COMAR 26.11.03.09.08]** D. Operational Limits (1) The Permittee shall maintain monthly records of the following: (a) Type and monthly amount of fuel combusted, (b) Fuel supplier certifications, (c) Each combustion turbine & HRSG operating hours, and (d) A verification of the capacity factor for each combustion turbine generator set, which shall include the heat input (in million British thermal units or equivalent units of measure) and/or electric output (expressed in MWe-hr.). (2) The Permittee shall maintain records associated with the operations and maintenance plan and the Environmental Management System and make them available to the Department upon request. **[Reference: COMAR 26.11.03.06C]**
1.5	**Reporting Requirements:** A. Control of Visible Emissions The Permittee shall report incidents of visible emissions in accordance with Permit Condition 4, of Section III, "Report of Excess Emissions and Deviations" **[Reference: COMAR 26.11.03.06C]** B. Control of Sulfur Oxides "(a) For each affected unit required to continuously monitor parameters or emissions, or to periodically determine the fuel sulfur content under this subpart, you must submit reports of excess emissions and monitor downtime, in accordance with Sec.60.7(c). Excess emissions must be reported for all periods of unit operation, including start-up, shutdown, and malfunction." "(b) For each affected unit that performs performance tests in accordance with Sec.60.4340(a), you must submit a written report of the results of each performance test before the close of business on the 60th day following the completion of the performance test." The Permittee shall submit along with their semi-annual reports, fuel supplier certifications that verify that the fuel used complies with the limitations on sulfur content. The reports shall be submitted within 30 days after the end of the last previous semi-annual period covered. **[Reference: 40 CFR 60 Subpart KKKK, §60.4375]** C. Control of Nitrogen Oxides Reporting under §60.4375: "(b) For each affected unit that performs performance tests in accordance with Sec. 60.4340(a), you must submit a written report of the results of each performance test before the close of business on the 60th day following the completion of the performance test."

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	D. Operational Limits See Record Keeping Requirements.

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2.0	**Emissions Unit Number(s): CUP1; G-1 & G-2** **CUP1: G-1:** One (1) 5.7-MW dual-fired Wartsila 18V32 compression-ignition (CI) engine located at CUP1. This unit is equipped with a heat recovery boiler and selection catalytic reduction (SCR) and oxidation emissions control. The primary fuel for the engine is natural gas.The engine can also operate using No. 2 fuel oil. **[Reg. No. 9-0709]** **CUP1: G-2:** One (1) 2.0-MW Cummins 2000, No. 2 oil fired reciprocating compression-ignition (CI) emergency generator. **[Reg. No. 9-0719]**
2.1	**Applicable Standards/Limits:** A. Control of Visible Emissions **COMAR 26.11.09.05E.** - 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." 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

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otherwise exceeds the following limitations: (2) In Areas III and IV: (b) Distillate fuel oils, 0.3 percent."

Note: Since the fuel sulfur limit of the NSPS Subpart IIII §60.4207 (Ref: 40 CFR §80.510) (is more restrictive than the State COMAR, it shall take precedence over COMAR 26.11.09.07A. The Permittee shall satisfy the sulfur limitation(s) by only firing Ultra Low Sulfur Diesel (ULSD) fuel that has a maximum sulfur content of **15 ppm (0.0015%)** sulfur by weight. Any person offering to sell or deliver fuel or any person responsible for equipment in which fuel or process gas is burned, upon request, shall submit to the Department or control officer such analyses of fuel or process gas as may be required to determine compliance with this regulation.

C. Control of Carbon Monoxide Emissions

Applies to Unit G-1: 40 CFR 63 Subpart ZZZZ

§63.6603 - What emission limitations and operating limitations must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions?

Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart.

"(a) If you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to this subpart and the operating limitations in Table 1b and Table 2b to this subpart that apply to you."

Per Table 2D: As stated in §§63.6603 and 63.6640, you must comply with the following requirements for existing stationary RICE located at area sources of HAP emissions:

"3. Non-Emergency, non-black start CI stationary RICE >500 HP.

a. **Limit concentration of CO in the stationary RICE exhaust to 23 ppmvd at 15 percent O_2; or b. Reduce CO emissions by 70 percent or more.**"

During periods of startup, you must minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.

§63.6604 - What fuel requirements must I meet if I own or operate an existing stationary CI RICE? If you own or operate an existing non-emergency, non-black start CI stationary RICE with a site rating of more than 300 brake HP with a displacement of less than 30 liters per cylinder that uses diesel fuel, you must use diesel fuel that meets the requirements in 40 CFR §80.510(b) for nonroad diesel fuel. {See Ref: 40 CFR §80.510 under Condition 2.1B, above}

D. Operational Limits

Applies of Units G1 & G-2

(1) The Permittee shall limit fuel use by the Wartsila (**G-1**) 5.7 MW engine generator to natural gas and No. 2 fuel oil; and the Wartsila engine fuel oil operation shall not exceed 200 hours per year. The Cummins (**G-2**) 2.0 MW standby generator shall fire No. 2 fuel oil only.

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	(2) The Permittee shall construct and maintain the Wartsila 5.7-MW engine-generator and Cummins 2.0-MW standby generator for the site so as to comply with all applicable regulations. (3) The Permittee shall equip and operate the Wartsila 5.7-MW engine-generator with selective catalytic reduction (SCR) technology to control NOx emissions. **[Reference: Permit to Construct Nos. 031-1129-9-0709 & -9- 0710 issued June 8, 2021]**
2.2	**Testing Requirements:** A. Control of Visible Emissions See Monitoring Requirements. B. Control of Sulfur Oxides See Monitoring Requirements. C. Control of Carbon Monoxide Emissions **§63.6615** - When must I conduct subsequent performance tests? If you must comply with the emission limitations and operating limitations, you must conduct subsequent performance tests as specified in Table 3 of this subpart. **Per Table 3** – Subsequent Performance Tests: "4. For each existing non-emergency, non-black start CI stationary RICE >500 HP that are not limited use stationary RICE complying with the requirement to limit or reduce CO emissions and not using a CEMS, you must conduct subsequent performance tests every 8,760 hours or 3 years, whichever comes first." **Per Table 4** —Requirements for Performance Tests: "1. Compliance with the 70% reduction requirement: i. Measure the O_2 at the inlet and outlet of the control device; and ii. Measure the CO at the inlet and the outlet of the control device." "3. Compliance with the 23 ppmvd of CO outlet concentration requirement: i. Select the sampling port location and the number of traverse points using (1) Method 1or 1A of 40 CFR part 60, appendix A. The sampling site must be located at the outlet of the control device; and ii. Determine the O_2 concentration of the stationary RICE exhaust at the sampling port location. Measurements to determine O_2 concentration must be made at the same time and location as the measurements for…CO concentration; and iii. Measure moisture content of the stationary RICE exhaust at the sampling port location. Measurements to determine moisture content must be made at the same time and location as the measurements for…CO concentration; and iv. measure CO at the exhaust of the stationary RICE. CO concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs." **§63.6620** - What performance tests and other procedures must I use? "(a) You must conduct each performance test in Tables 3 and 4 of this subpart that applies to you."

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	D. Operational Limits (1) The Permittee shall conduct performance stack test of the Wartsila engine generator for NOx emissions, at least once every 5 years. The test shall be used to confirm the emission factors being used to calculate NOx emissions in the annual ECR for the Wartsila engine. Stack testing will be performed for natural gas combustion and fuel oil combustion. The Permittee shall conduct performance testing, in accordance with the reference methods and procedures of 40 CFR 60 Appendix A. (2) The Permittee shall test the Wartsila engine generator at or near full load so that the maximum operating parameters can be established. The emissions factors determined as a result of stack testing shall be used for emissions certification reports (ECR) and to determine compliance with the facility-wide NOx synthetic minor operating limit. (3) The Permittee shall perform all testing at a reasonable time and with at least 14-calendar days' notice to allow for representation by the Department personnel. **[Reference: Permit to Construct Nos. 031-1129-9-0709 & -9- 0710 issued June 8, 2021]**
2.3	**Monitoring Requirements:** A. Control of Visible Emissions The Permittee shall properly operate and maintain the generators in accordance with the engines manufacturer's recommendations and in a manner to assure compliance with the visible emissions standards. **[Reference: COMAR 26.11.03.06C]** B. Control of Sulfur Oxides The Permittee shall obtain a certification from the fuel supplier indicating that the oil complies with the limitation on the sulfur content of ULSD fuel oil. **[Reference: COMAR 26.11.03.06C]** C. Control of Carbon Monoxide Emissions **§63.6625** - What are my monitoring, installation, collection, operation, and maintenance requirements? (b) If you are required to install a continuous parameter monitoring system (CPMS) as specified in Table 5 of this subpart, you must install, operate, and maintain each CPMS according to the requirements in paragraphs (b)(1) through (6) of this section. (1) You must prepare a site-specific monitoring plan that addresses the monitoring system design, data collection, and the quality assurance and quality control elements outlined in paragraphs (b)(1)(i) through (v) of this section and in §63.8(d). (2) You must install, operate, and maintain each CPMS in continuous operation according to the procedures in your site-specific monitoring plan. (3) The CPMS must collect data at least once every 15 minutes (see also §63.6635).

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	(4) For a CPMS for measuring temperature range, the temperature sensor must have a minimum tolerance of 2.8 Celsius (5 degrees Fahrenheit) or 1 percent of the measurement range, whichever is larger. (5) You must conduct the CPMS equipment performance evaluation, system accuracy audits, or other audit procedures specified in your site-specific monitoring plan at least annually. (6) You must conduct a performance evaluation of each CPMS in accordance with your site-specific monitoring plan. D. Operational Limits The SCR system shall be in place and in proper operating order while the Wartsila generator is in operation. For every 15,000 hours of Wartsila operation, the second row of catalyst will be replaced with new (previously unused) catalyst. The catalyst that was removed from the second row will be moved into the position of the first row. The catalyst that occupied the first row will be removed from service permanently. **[Reference: Permit to Construct Nos. 031-1129-9-0709 & -9- 0710 issued June 8, 2021]**
2.4	**Record Keeping Requirements:** **Note:** The Permittee shall maintain all records required under this permit for at least five (5) years and shall make them available to the Department upon request. **[Reference: COMAR 26.11.03.06C(5)(g)]** A. Control of Visible Emissions The Permittee shall: (1) Maintain an operation manual(s) and prevention maintenance plan; (2) Maintain all records of the maintenance performed that relates to combustion performance; (3) Maintain a log of visible emissions observations performed and make it available to the Department's representative upon request; and (4) Maintain records of the date and hours that distillate fuel oil is burned. **[Reference: COMAR 26.11.03.06C]** B. Control of Sulfur Oxides The Permittee shall maintain records of all fuel oil certifications indicating that the oil complies with the limitations on sulfur content and make them available to the Department upon request. Certification may include: iii) a fuel supplier certification consisting of the name of the fuel oil supplier and a statement from the supplier that the fuel oil complies with specifications for (ULSD) fuel oil; and/or iv) A certified statement signed by the authorized representative of the Facility, stating that the records of fuel supplier certifications submitted represent all of the fuel oil combusted during the reporting period. **[Reference: COMAR 26.11.03.06C & COMAR 26.11.09.07A(2)(b)]** C. Control of Carbon Monoxide Emissions **§63.6655** - What records must I keep?

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	"(a) If you must comply with the emission and operating limitations, you must keep the records described in paragraphs (a)(1) through (a)(5), (b)(1) through (b)(3) and (c) of this section. (1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in §63.10(b)(2)(xiv). (2) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. (3) Records of performance tests and performance evaluations as required in §63.10(b)(2)(viii). (4) Records of all required maintenance performed on the air pollution control and monitoring equipment. (5) Records of actions taken during periods of malfunction to minimize emissions in accordance with § 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation." "(b) For each CEMS or CPMS, you must keep the records listed in paragraphs (b)(1) through (3) of this section. (1) Records described in §63.10(b)(2)(vi) through (xi). (2) Previous (i.e., superseded) versions of the performance evaluation plan as required in § 63.8(d)(3). (3) Requests for alternatives to the relative accuracy test for CEMS or CPMS as required in § 3.8(f)(6)(i), if applicable." "(d) You must keep the records required in Table 6 of this subpart to show continuous compliance with each emission or operating limitation that applies to you." "(e) You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE; (2) An existing stationary emergency RICE." D. <u>Operational Limits</u> The Permittee shall maintain for at least five (5) years, and shall make available to the Department upon request, records of the following information: (a) Monthly records of the hours of operation and type and amount of fuel combusted in the Wartsila (G-1) engine-generator. (b) Monthly records of the hours of operation, type and amount of fuel combusted and the reason for operation (i.e., maintenance or operational testing, power outage, etc.) of the Cummins (G-2) emergency standby generator. (c) Records of NOx emissions for all fuel burning equipment (i.e., boilers and generators) at CUP #1, 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 month in order to comply with the CUP #1 synthetic minor requirement for NOx. (d) Records of any maintenance performed to the engines and associated emissions control equipment, including verification that maintenance conforms to manufacturer's specification, including manufacturer's and/or vender's

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	operations and maintenance manuals, etc., and records verifying compliance with SCR catalyst replacement requirement. **[Reference: Permit to Construct Nos. 031-1129-9-0709 & -9- 0710 issued June 8, 2021]**
2.5	**Reporting Requirements:** A. Control of Visible Emissions The Permittee shall report incidents of visible emissions in accordance with Permit Condition 4, of Section III, "Report of Excess Emissions and Deviations" **[Reference: COMAR 26.11.03.06C]** B. Control of Sulfur Oxides The Permittee shall submit fuel supplier certifications to the Department upon request. **[Reference: COMAR 26.11.09.07C]** C. Control of Carbon Monoxide Emissions **§63.6645** - What notifications must I submit and when? (a) You must submit all of the notifications in §§ 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified if you own or operate any of the following: (2) An existing stationary RICE located at an area source of HAP emissions. (g) If you are required to conduct a performance test, you must submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required in § 63.7(b)(1). (h) If you are required to conduct a performance test or other initial compliance demonstration as specified in Tables 4 and 5 to this subpart, you must submit a Notification of Compliance Status according to § 63.9(h)(2)(ii). (1) For each initial compliance demonstration required in Table 5 to this subpart that does not include a performance test, you must submit the Notification of Compliance Status before the close of business on the 30th day following the completion of the initial compliance demonstration. (2) For each initial compliance demonstration required in Table 5 to this subpart that includes a performance test conducted according to the requirements in Table 3 to this subpart, you must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to §63.10(d)(2). D. Operational Limits (1) The Permittee shall submit to the Department for review and approval, at least 30 days prior to conducting performance stacking, a test protocol, which shall include the appropriate EPA test method intended to be used. (2) Final testing results shall be submitted to the Department within 45 days of completion of the testing. **[Reference: Permit to Construct Nos. 031-1129-9-0709 & -9- 0710 issued June 8, 2021]**

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2a.0	**Emissions Unit Number(s): CUP1; G-1 & G-2 Cont'd** **CUP1: G-1:** One (1) 5.7-MW dual-fired Wartsila 18V32 compression-ignition (CI) engine located at CUP1. This unit is equipped with a heat recovery boiler and selection catalytic reduction (SCR) and oxidation emissions control. The primary fuel for the engine is natural gas. The engine can also operate using No. 2 fuel oil. **[Reg. No. 9-0709]** **CUP1: G-2:** One (1) 2.0-MW Cummins 2000, No. 2 oil fired reciprocating compression-ignition (CI) emergency generator. **[Reg. No. 9-0710]** **40 CFR Part 63 Subpart ZZZZ—National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines**
2a.1	**Applicable Standards/Limits:** Control of HAP Emissions **Emission and Operating Limitations:** **§63.6603** - What emission limitations, operating limitations, and other requirements must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions? (a) If you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to this subpart and the operating limitations in Table 2b to this subpart that apply to you. ***Applies to G-1 only*** **Per Table 2D**: As stated in §§63.6603 and 63.6640, you must comply with the following requirements for existing stationary RICE located at area sources of HAP emissions: "3. Non-Emergency, non-black start CI stationary RICE >500 HP. a. **Limit concentration of CO in the stationary RICE exhaust to 23 ppmvd at 15 percent O2; or b. Reduce CO emissions by 70 percent or more.**" During periods of startup, you must minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. **§63.6604** - What fuel requirements must I meet if I own or operate an existing stationary CI RICE? If you own or operate an existing non-emergency, non-black start CI stationary RICE with a site rating of more than 300 brake HP with a displacement of less than 30 liters per cylinder that uses diesel fuel, you must use diesel fuel that meets the requirements in 40 CFR §80.510(b) for nonroad diesel fuel.

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	General Compliance Requirements: **§63.6605** - What are my general requirements for complying with this subpart? (a) You must be in compliance with the emission limitations, operating limitations, and other requirements in this subpart that apply to you at all times. (b) 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 which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. ***Applies to G-1 only*** **§63.6615** - When must I conduct subsequent performance tests? If you must comply with the emission limitations and operating limitations, you must conduct subsequent performance tests as specified in Table 3 of this subpart. **Per Table 3** – Subsequent Performance Tests: "4. For each existing non-emergency, non-black start CI stationary RICE >500 HP that are not limited use stationary RICE complying with the requirement to limit or reduce CO emissions and not using a CEMS, you must conduct subsequent performance tests every 8,760 hours or 3 years, whichever comes first." **Per Table 4** —Requirements for Performance Tests: "1. Compliance with the 70% reduction requirement: i. Measure the O2 at the inlet and outlet of the control device; and ii. Measure the CO at the inlet and the outlet of the control device." "3. Compliance with the 23 ppmvd of CO outlet concentration requirement: i. Select the sampling port location and the number of traverse points using (1) Method 1or 1A of 40 CFR part 60, appendix A. The sampling site must be located at the outlet of the control device; and ii. Determine the O2 concentration of the stationary RICE exhaust at the sampling port location. Measurements to determine O2 concentration must be made at the same time and location as the measurements for…CO concentration; and iii. Measure moisture content of the stationary RICE exhaust at the sampling port location. Measurements to determine moisture content must be made at the same time and location as the measurements for…CO concentration; and iv. measure CO at the exhaust of the stationary RICE. CO concentration must be at 15 percent O2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs." **§63.6620** - What performance tests and other procedures must I use? "(a) You must conduct each performance test in Tables 3 and 4 of this subpart that applies to you." **§63.6625 -** What are my monitoring, installation, collection, operation, and maintenance requirements? ***Applies to G-1 only***

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	(b) If you are required to install a continuous parameter monitoring system (CPMS) as specified in Table 5 of this subpart, you must install, operate, and maintain each CPMS according to the requirements in paragraphs (b)(1) through (6) of this section. (1) You must prepare a site-specific monitoring plan that addresses the monitoring system design, data collection, and the quality assurance and quality control elements outlined in paragraphs (b)(1)(i) through (v) of this section and in §63.8(d). (2) You must install, operate, and maintain each CPMS in continuous operation according to the procedures in your site-specific monitoring plan. (3) The CPMS must collect data at least once every 15 minutes (see also §63.6635). (4) For a CPMS for measuring temperature range, the temperature sensor must have a minimum tolerance of 2.8 Celsius (5 degrees Fahrenheit) or 1 percent of the measurement range, whichever is larger. (5) You must conduct the CPMS equipment performance evaluation, system accuracy audits, or other audit procedures specified in your site-specific monitoring plan at least annually. (6) You must conduct a performance evaluation of each CPMS in accordance with your site-specific monitoring plan. ***Applies to G-2 only*** (e) If you own or operate any of the following stationary RICE, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions: (3) An existing emergency or black start stationary RICE located at an area source of HAP emissions. (f) If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an **existing emergency stationary RICE** located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed. ***Applies to G-2 only*** **§63.6640** - <u>How do I demonstrate continuous compliance with the emission limitations, operating limitations, and other requirements?</u> (f) If you own or operate an emergency stationary RICE, you must operate the emergency stationary RICE according to the requirements in paragraphs (f)(1) through (3) of this section. In order for the engine to be considered an emergency stationary RICE under this subpart, any operation other than emergency operation, and maintenance and testing as described in paragraphs (f)(1) through (3) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (3) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

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	(f)(1) There is no time limit on the use of emergency stationary ICE in emergency situations. (f)(2) You may operate your emergency stationary ICE for any combination of the purposes specified in paragraphs (f)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (f)(3) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2). (f)(2)(i) Emergency stationary ICE may be operated 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 owner or operator 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. (f)(4) Emergency stationary RICE located at area sources of HAP 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. The 50 hours per year for nonemergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity. (*)**Note**: Effective May 2, 2016, engines that participate in an EDR are considered "non-emergency" engines under the federal New Source Performance Standards, 40 CFR 60, Subpart IIII for compression ignition and Subpart JJJJ for spark ignition engines, and for existing engines under the National Emission Standards for Hazardous Air Pollutants 40 CFR 63, Subpart ZZZZ (the RICE rule). Therefore, 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. The Permittee has indicated that the proposed engine/generator is for stand-by emergency use only and will not be used load shaving or demand response. **[Ref.: U.S. Court of Appeals for the District of Columbia Circuit May 2, 2016 Vacatur on Participation in Emergency Demand Response (EDR) Programs]**
2a.2	**Testing Requirements:** Control of HAP Emissions See Monitoring Requirements.

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2a.3	**Monitoring Requirements:** Control of HAP Emissions **§63.6625 -** What are my monitoring, installation, collection, operation, and maintenance requirements? (e) If you own or operate any of the following stationary RICE, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions: (3) An existing emergency or black start stationary RICE located at an area source of HAP emissions. (f) If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.
2a.4	**Record Keeping Requirements:** **Note:** The Permittee shall maintain all records required under this permit for at least five (5) years and shall make them available to the Department upon request. **[Reference: COMAR 26.11.03.06C(5)(g)]** Control of HAP Emissions **§63.6655 -** What records must I keep? ***Applies to G-1 only*** "(a) If you must comply with the emission and operating limitations, you must keep the records described in paragraphs (a)(1) through (a)(5), (b)(1) through (b)(3) and (c) of this section. (1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in §63.10(b)(2)(xiv). (2) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. (3) Records of performance tests and performance evaluations as required in §63.10(b)(2)(viii). (4) Records of all required maintenance performed on the air pollution control and monitoring equipment. (5) Records of actions taken during periods of malfunction to minimize emissions in accordance with § 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation." "(b) For each CEMS or CPMS, you must keep the records listed in paragraphs (b)(1) through (3) of this section. (1) Records described in §63.10(b)(2)(vi) through (xi). (2) Previous (i.e., superseded) versions of the performance

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	evaluation plan as required in §63.8(d)(3). (3) Requests for alternatives to the relative accuracy test for CEMS or CPMS as required in § 3.8(f)(6)(i), if applicable." "(d) You must keep the records required in Table 6 of this subpart to show continuous compliance with each emission or operating limitation that applies to you." "(e) You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and aftertreatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE; (2) An existing stationary emergency RICE." ***Applies to G-2 only*** (d) You must keep the records required in Table 6 of this subpart to show continuous compliance with each emission or operating limitation that applies to you. **Per Table 6, Item 9**: If you operate an existing emergency and black start stationary RICE located at an area source of HAP, the Permittee must abide by the following Work or Management practices: i. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or ii. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
2a.5	**Reporting Requirements:** Control of HAP Emissions ***Applies to G-1 only*** **§63.6645** - What notifications must I submit and when? (a) You must submit all of the notifications in §§ 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified if you own or operate any of the following: (2) An existing stationary RICE located at an area source of HAP emissions. (g) If you are required to conduct a performance test, you must submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required in § 63.7(b)(1). (h) If you are required to conduct a performance test or other initial compliance demonstration as specified in Tables 4 and 5 to this subpart, you must submit a Notification of Compliance Status according to § 63.9(h)(2)(ii). (1) For each initial compliance demonstration required in Table 5 to this subpart that does not include a performance test, you must submit the Notification of Compliance Status before the close of business on the 30th day following the completion of the initial compliance demonstration. (2) For each initial compliance demonstration required in Table 5 to this subpart that includes a performance test conducted according to the requirements in Table 3 to this subpart, you must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to §63.10(d)(2).

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	§63.6650 - **What** reports must I submit and when? ***Applies to G-2 only*** (h) If you own or operate an emergency stationary RICE with a site rating of more than 100 brake HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) or that operates for the purpose specified in §63.6640(f)(4)(ii), you must submit an annual report according to the requirements in paragraphs (h)(1) through (3) of this section.

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3.0	**Emissions Unit Number(s): CUP2; G-10 & G-11** **CUP2: G-10 & G-11:** Two (2) 2.25-MW Caterpillar Emergency Diesel generators (EDG) #1 & #2. **[Reg. No. 9-1048 & 9-1049]**
3.1	**Applicable Standards/Limits:** A. Control of Visible Emissions **COMAR 26.11.09.05E.** - 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." 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."

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	40 CFR Part 60 (NSPS) Subpart IIII for Stationary Compression Ignition Internal Combustion Engines **§60.4207** - What fuel requirements must I meet if I am an owner or operator of a stationary CI internal combustion engine subject to this subpart? "(b) Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must purchase diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel." ***Ref: 40 CFR § 80.510***: What are the standards and marker requirements for non-road (NR) locomotive (LM) diesel fuel and ECA marine fuel? "(b) Beginning June 1, 2010. Except as otherwise specifically provided in this subpart, all NR and LM diesel fuel is subject to the following per-gallon standards: **(1) Sulfur content: (i) 15 ppm (0.0015% sulfur by weight) maximum for NR diesel fuel.** (2) Cetane index or aromatic content, as follows: (i) A minimum cetane index of 40; or (ii) A maximum aromatic content of 35 volume percent **Note:** Since the fuel sulfur limit of the NSPS Subpart IIII §60.4207 (Ref: 40 CFR §80.510) (is more restrictive than the State COMAR, it shall take precedence over COMAR 26.11.09.07A. The Permittee shall satisfy the sulfur limitation(s) by only firing Ultra Low Sulfur Diesel (ULSD) fuel that has a maximum sulfur content of **15 ppm (0.0015%)** sulfur by weight. Any person offering to sell or deliver fuel or any person responsible for equipment in which fuel or process gas is burned, upon request, shall submit to the Department or control officer such analyses of fuel or process gas as may be required to determine compliance with this regulation.
3.2	**Testing Requirements:** A. Control of Visible Emissions See Monitoring Requirements. B. Control of Sulfur Oxides See Monitoring Requirements.
3.3	**Monitoring Requirements:** A. Control of Visible Emissions The Permittee shall properly operate and maintain the generators in accordance with the engines manufacturer's recommendations and in a manner to assure compliance with the visible emissions standards. **[Reference: COMAR 26.11.03.06C]** B. Control of Sulfur Oxides The Permittee shall obtain a certification from the fuel supplier indicating that the oil complies with the limitation on the sulfur content of ULSD fuel oil. **[Reference: COMAR 26.11.03.06C]**

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3.4	**Record Keeping Requirements:** **Note:** The Permittee shall maintain all records required under this permit for at least five (5) years and shall make them available to the Department upon request. **[Reference: COMAR 26.11.03.06C(5)(g)]** A. Control of Visible Emissions The Permittee shall: (1) Maintain an operation manual(s) and prevention maintenance plan; (2) Maintain all records of the maintenance performed that relates to combustion performance; (3) Maintain a log of visible emissions observations performed and make it available to the Department's representative upon request; and (4) Maintain records of the date and hours that distillate fuel oil is burned. **[Reference: COMAR 26.11.03.06C]** B. Control of Sulfur Oxides 1) The Permittee shall maintain records of all fuel oil certifications indicating that the oil complies with the limitations on sulfur content and make them available to the Department upon request. 2) Certification may include: iii) a fuel supplier certification consisting of the name of the fuel oil supplier and a statement from the supplier that the fuel oil complies with specifications for (ULSD) fuel oil; and/or iv) A certified statement signed by the authorized representative of the Facility, stating that the records of fuel supplier certifications submitted represent all of the fuel oil combusted during the reporting period. **[Reference: COMAR 26.11.03.06C & COMAR 26.11.09.07A(2)(b)]** 3) The Permittee shall maintain a log for the emergency generator indicating the amounts of fuel oil combusted, the hours of operation, and reason for generator operation (i.e., maintenance or operational testing, power outage, etc.). (4) The Permittee shall maintain on site for the life of the source the following records for the emergency diesel generator(s): (a) Documentation of the manufacture date of the diesel engine, if manufactured prior to April 1, 2006 and the manufacturer model year of the diesel engine; (b) The installation date of each emergency diesel generator; and (c) The certifications of compliance or manufacturer engine test data required by 40 CFR §60.4211 and §60.4214(b). (5) For any NSPS emergency diesel generator the Permittee shall for each fuel delivery obtain 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 §80.510 {ULSD: Sulfur content. 15 ppm maximum}. The Permittee shall maintain the required records on site for at least five (5) years. **[Reference: 40 CFR 60 Subpart IIII and Permit to Construct Nos. 031-2552-9-1045, ... 9-1050, and -5-2284]**

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3.5	**Reporting Requirements:** A. Control of Visible Emissions The Permittee shall report incidents of visible emissions in accordance with Permit Condition 4, of Section III, "Report of Excess Emissions and Deviations" **[Reference: COMAR 26.11.03.06C]** B. Control of Sulfur Oxides The Permittee shall submit fuel supplier certifications to the Department upon request. **[Reference: COMAR 26.11.09.07C]**

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4.0	**Emissions Unit Number(s): CUP1; B-1, B-2, B-3 & CUP2: B-4** **CUP1: B-1, B-2, B-3**: Three (3) 12.3-MMBtu/hr. Johnston Co. Boiler #1, dual-fired boilers. The primary fuel for the boiler is natural gas. If natural gas supply is interrupted, the boiler can operate using No. 2 fuel oil. **[Reg. 5-1294, 5-1295 & 5-1296]** **CUP2: B-4:** One (1) 25.1-MMBtu/hr. Cleaver Brooks Steam Boiler, dual-fired boiler. The primary fuel for the boiler is natural gas. If natural gas supply is interrupted, the boiler can operate using No. 2 fuel oil. **[Reg. 5-2284]** **Note:** GSA CUP boilers fire distillate {ULSD} fuel oil only during periods of gas curtailment, gas supply emergencies, or periodic testing on liquid fuel and are therefore ***exempt*** from the Area Source Boiler MACT Part 63 Subpart JJJJJJ [Ref. 40 CFR §63.11237].
4.1	**Applicable Standards/Limits:** A. Control of Visible Emissions **COMAR 26.11.09.05.** – Visible Emissions "A. 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

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	(b) The visible emissions do not occur for more than 6 consecutive minutes in any sixty-minute period." B. Control of Sulfur Oxides **COMAR 26.11.09.07** – 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. Request for Analyses. "Any person offering to sell or deliver fuel or any person responsible for equipment in which fuel or process gas is burned, upon request, shall submit to the Department or control officer such analyses of fuel or process gas as may be required to determine compliance with this regulation." C. Control of Nitrogen Oxides Emissions **COMAR 26.11.09.08** – Control of NO_x Emissions for Major Stationary Sources "E. 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." D. Operational Limit The Permittee shall fire only natural gas or distillate fuel oil {ULSD}, as emergency backup fuel, only during periods of natural gas curtailment or supply interruption, or periodic testing on liquid fuel in the boilers. **[Permit to Construct Nos. 031-5-1294, 5-1295, 5-1296 & 5-2284]**
4.2	**Testing Requirements:** A. Control of Visible Emissions See Monitoring Requirements. B. Control of Sulfur Oxides See Monitoring Requirements.

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	C. Control of Nitrogen Oxides Emissions See Record Keeping Requirements. D. Operational Limit See Monitoring Requirements.
4.3	**Monitoring Requirements:** A. Control of Visible Emissions (1) The Permittee shall verify that there are no visible emissions when burning distillate fuel oil {ULSD}. The Permittee shall perform a visual observation of stack emissions for a 12-minute period at least once for each 168 hours that the boilers burn oil. If oil is burned for less than 100 hours in a calendar year, this requirement is waived for that calendar year. 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 of operation so that visible emissions are eliminated; and (c) document in writing the results of inspections, adjustments and/or repairs to the boilers. (2) The Permittee shall after 48 hours of operation, if the required adjustments and/or repairs had not eliminated the visible emissions, perform another Method 9 observation once daily when the boilers are operating on No.2 fuel oil for 18 minutes until corrective action have eliminated visible emissions. **[Reference: COMAR 26.11.03.06C]** B. Control of Sulfur Oxides The Permittee shall obtain a certification from the fuel supplier indicating that the oil complies with the limitation on the sulfur content of fuel oil. The Permittee shall maintain records of the fuel oil certifications indicating that the oil complies with the limitations on sulfur content and make them available to the Department upon request. **[Reference: COMAR 26.11.09.07 & COMAR 26.11.03.06C]** C. Control of Nitrogen Oxides Emissions See Record Keeping Requirements. D. Operational Limit The Permittee shall maintain monthly records of the type and amount of fuels fired for each boiler. **[Reference: COMAR 26.11.03.06C]**
4.4	**Record Keeping Requirements:** **Note:** The Permittee shall maintain all records required under this permit for at least five (5) years and shall make them available to the Department upon request. **[Reference: COMAR 26.11.03.06C(5)(g)]**

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	A. Control of Visible Emissions The Permittee shall: (1) Maintain all records of the maintenance performed that relates to combustion performance; (2) Maintain a log of visible emissions observations performed and make it available to the Department's representative upon request; and (3) Maintain records of the date and hours that distillate fuel oil is burned. **[Reference: COMAR 26.11.03.06C]** B. Control of Sulfur Oxides The Permittee shall retain fuel supplier certifications stating that the fuel oil is in compliance with the sulfur content in the fuel limitation and shall make them available to the Department upon request. **[Reference: COMAR 26.11.03.06C]** C. Control of Nitrogen Oxides Emissions (1) The Permittee shall develop, implement, and maintain the Operational and Preventative Maintenance Plan as specified under COMAR 26.11.09.08. (2) The Permittee shall maintain a record of training program attendance for each operator at the site and make these records available to the Department upon request COMAR 26.11.09.08 F & G. (3) The Permittee shall maintain records of 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. **[Reference: COMAR 26.11.09.08]** D. Operational Limit The Permittee maintain the following: (1) Monthly records of the type and amount of fuels fired for each boiler. (2) Logs of visible emissions observations performed. (3) Reports and/or records of the results of any compliance testing. (4) Records of any maintenance performed that may pertain to boiler performance and emissions. **[Reference: COMAR 26.11.03.06C]**
4.5	**Reporting Requirements:** A. Control of Visible Emissions The Permittee shall report incidents of visible emissions in accordance with Permit Condition 4, of Section III, "Report of Excess Emissions and Deviations" **[Reference: COMAR 26.11.03.06C]** B. Control of Sulfur Oxides The Permittee shall submit fuel supplier's certification as part of the annual reporting requirements of 40 CFR 60 Subpart Dc. **[Reference: COMAR 26.11.03.06C]** C. Control of Nitrogen Oxides Emissions (1) When demonstration of compliance with the NO_X emission standards in this regulation is based on CEM data, quarterly emission reports shall be submitted to the Department on or before the thirtieth day of the month following the end of each calendar quarter.

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	(2) When compliance with this regulation is demonstrated by a stack test, the results of the stack tests required by this regulation shall be submitted to the Department within 45 days after completion of the test. (3) A person subject to this regulation shall maintain annual fuel use records on site for not less than 3 years and make these records available to the Department upon request. **[Reference: COMAR 26.11.09.08K]** D. Operational Limit The Permittee shall submit a written report of the results of any performance test performed before the close of business on the 60th day following the completion of the performance test. **[Reference: COMAR 26.11.03.06C]**

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5.0	**Emissions Unit Number(s): Facility-wide Requirements: CUP1; B-1, B-2, B-3 & CUP2: B-4** **CUP1:** **G-1:** One (1) 5.7-MW dual-fired Wartsila 18V32 compression-ignition (CI) engine located at CUP1. This unit is equipped with a heat recovery boiler and selection catalytic reduction (SCR) and oxidation emissions control. The primary fuel for the engine is natural gas. The engine can also operate using No. 2 fuel oil. **[Reg. No. 9-0709]** **G-2:** One (1) 2.0-MW Cummins 2000, No. 2 oil fired reciprocating compression-ignition (CI) emergency generator. **[Reg. No. 9-0719]** **G-3, G-4, G-5, & G-6:** Four (4) 4.5-MW Solar Mercury 50, natural gas fired combustion turbine. (Turbine #1 thru #4). **[Reg. Nos.9-0840, 9-0841, 9-0901, 9-0940]** **CUP2:** **G-7 & G-8:** Two (2) 7.56-MW Solar Taurus 70 #1 & #2, dual-fired combustion turbine. The unit is equipped with a 41.1-MMBtu/hr. natural gas-fired duct burner, heat recovery steam generator (HRSG), and oxidation catalyst and selective catalytic reduction (SCR) emission controls. The primary fuel for the turbine is natural gas. The turbine can also operate using No. 2 fuel oil. **[Reg. Nos. .9-1045 & 9-1046]** **G-9**: One (1) 4.4-MW Solar Mercury 50, natural gas-fired combustion turbine. The unit is equipped with a heat recovery steam generator (HRSG), and ultralean premix low-NO_x pre-combustion technology. (Turbine #5) **[Reg No. 9-1050]** **G-10 & G-11:** Two (2) 2.25-MW Caterpillar Emergency Diesel generators (EDG) #1 & #2. **[Reg. No. 9-1048 & 9-1049]** **B-1, B-2 & B-3**: Three (3) 12.3-MMBtu/hr. Johnston Co. Boiler #1, dual-fired boilers. The primary fuel for the boiler is natural gas. If natural gas supply is

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	interrupted, the boiler can operate using No. 2 fuel oil. **[Reg. 5-1294, 5-1295 & 5-1296]** **B-4:** One (1) 25.1-MMBtu/hr. Cleaver Brooks Steam Boiler, dual-fired boiler. The primary fuel for the boiler is natural gas. If natural gas supply is interrupted, the boiler can operate using No. 2 fuel oil. [**Reg. 5-2284**]
5.1	**Applicable Standards/Limits:** A. Operational Limits (1) In order to exempt CUP #1 from becoming a "Major Source" of NOx emissions as defined under COMAR 26.11.02.01 C and COMAR 26.11.17.01 and thereby exempt CUP #1 from the any major new source review (NSR) requirements under COMAR 26.11.17, the Permittee shall limit the NOx emissions from all stationary sources at CUP #1, including CUP#1 sources not listed in this Permit to Construct, for any 12-month consecutive period, to less than 25 tons per year. (2) In order to demonstrate compliance with the emissions limitation requirement for NOx, the Permittee shall calculate and record the NOx emissions from all fuel burning equipment (i.e., boilers and generators) at CUP #1, 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 26.11.03.01H]** **[Reference: Permit to Construct Nos. 031-1129-9-0709 & -9- 0710 issued June 8, 2021]** (3) The Permittee shall fire only natural gas or Ultra Low Sulfur Diesel {ULSD} fuel that has a maximum sulfur content of 15 ppm sulfur by weight. **[Reference: Permit to Construct Nos. 031-1129-9-0709, 9-710, 9-0840, 9-0841, 9-0901, 9-0940; 9-1045, 9-1046, 9-1048, 9-1049, 9-1050, 5-1294, 5-1295, 5-1295, 5-1296 & 5-2284]** B. Operations and Maintenance Plans Unless otherwise provided in the specific requirements for an emissions unit or plant, whenever the Permittee is required to develop and implement an operations and maintenance plan for a source within the facility, the plan shall include at minimum: (1) Information that is sufficient to demonstrate that air emissions from each emissions unit within the plant can be expected to comply with all applicable limits and standards during periods of normal operation. Examples of types of information that could be included to support the required demonstrations would be design criteria, vendor specifications and performance guarantees, approved computer modeling studies, and results of testing programs in which approved test methods and procedures were utilized; (2) Procedures that provide for proper operation and maintenance of all active emissions units and air pollution control equipment associated with the source or plant;

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	(3) Provisions for periodic monitoring of operating parameters and emissions as necessary to determine that emissions units and air pollution control equipment are functioning properly; (4) Descriptions of procedures to be followed and corrective actions to be taken when monitoring information indicates that an emissions unit or pollution control device is not functioning properly; and (5) Provisions for developing written or printable electronic records that will show whether prescribed operating, maintenance and monitoring procedures are consistently followed, and whether timely and appropriate corrective actions are taken when malfunctions occur. **[Reference: COMAR 26.11.03.06C]**
5.2	**Testing Requirements:** A. Operational Limits The Permittee shall test the Wartsila engine generator at or near full load so that the maximum operating parameters can be established. The emissions factors determined as a result of stack testing shall be used for emissions certification reports (ECR) and to determine compliance with the facility-wide NOx synthetic minor operating limit. **[Reference: Permit to Construct Nos. 031-1129-9-0709 & -9- 0710 issued June 8, 2021]** B. Operations and Maintenance Plans See General Requirements.
5.3	**Monitoring Requirements:** A. Operational Limits The Permittee shall monitor and record the following: (a) The monthly hours of operation and amount of NO_X emissions of from all stationary sources at both CUP1 and CUP2, to assure that for the previous 12 consecutive calendar months the NO_X emissions limitation of 25 tons per year for any 12-month consecutive period, for each CUP is not exceed, as stipulated in Condition 4.1 B; and (b) The monthly amounts and types of fuel burned. **[Reference: COMAR 26.11.03.06C]** B. Operations and Maintenance Plans See General Requirements.
5.4	**Record Keeping Requirements:** **Note:** The Permittee shall maintain all records required under this permit for at least five (5) years and shall make them available to the Department upon request. **[Reference: COMAR 26.11.03.06C(5)(g)]** A. Operational Limits The Permittee shall maintain for at least five (5) years, and shall make available to the Department upon request, records of NOx emissions for all fuel burning

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	equipment (i.e., boilers and generators) at CUP #1, 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 month in order to comply with the CUP #1 synthetic minor requirement for NOx. **[Reference: Permit to Construct Nos. 031-1129-9-0709 & -9- 0710 issued June 8, 2021]** B. Operations and Maintenance Plans See General Requirements.
5.5	**Reporting Requirements:** A. Operational Limits The Permittee shall submit a semi-annual certification report no later than 30 days after the end of each semi-annual period, which shows compliance with the CUP #1 synthetic minor operating requirement for NOx emissions, verifying that NOx emissions for all fuel burning equipment (i.e., boilers and generators) at CUP #1, for the previous 12 consecutive calendar months were less than 25 tons. **[Reference: Permit to Construct Nos. 031-1129-9-0709 & -9- 0710 issued June 8, 2021]** By April 1 of each year, the Permittee shall submit to the Department, for the previous calendar year, a certified emissions statement verifying that for the previous 12-month consecutive period, the NO_X emissions limitation as stated in Section IV-4 (b) of this permit, was not exceeded. **[Reference: COMAR 26.11.03.06C]** B. Operations and Maintenance Plans See General Requirements.

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6.0	**Emissions Unit Number(s): EPP: G-13, G-14, G-15, G-16 & G-17** **EPP: G-13, G-14, G-15, G-16 & G-17:** Five (5) 2500-kW Cummins QSK78 Emergency Diesel Generator (EDG) #1 thru #5. **[Reg. Nos. 9-1090 thru 9-1094]** **Note:** Compliance with the RICE MACT is satisfied by meeting NSPS Subpart IIII requirements. These EDGs directly service certain critical FDA buildings in the event of a power failure.
6.1	**Applicable Standards/Limits:** A. Control of Visible Emissions **COMAR 26.11.09.05E.** - Stationary Internal Combustion Engine Powered Equipment.

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"(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."

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."

***Note**: Since the sulfur emissions limitation specified in COMAR 26.11.09.07A is less stringent than the 40 CFR 60, Subpart IIII and PTC No. 031-2552-9-1048 & -1049 standards, the PTC and federal standard will supersede the State standard. The testing, monitoring, recordkeeping, and reporting requirements under NSPS IIII will be used to demonstrate compliance with all sulfur standards.*

"**C.** Request for Analyses. Any person offering to sell or deliver fuel or any person responsible for equipment in which fuel or process gas is burned, upon request, shall submit to the Department or control officer such analyses of fuel or process gas as may be required to determine compliance with this regulation."

40 CFR Part 60 (NSPS) Subpart IIII for Stationary Compression Ignition Internal Combustion Engines
§60.4207 - What fuel requirements must I meet if I am an owner or operator of a stationary CI internal combustion engine subject to this subpart?
"(b) Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must purchase diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel."

Ref: 40 CFR § 80.510: What are the standards and marker requirements for non-road (NR) locomotive (LM) diesel fuel and ECA marine fuel?
"(b) Beginning June 1, 2010. Except as otherwise specifically provided in this subpart, all NR and LM diesel fuel is subject to the following per-gallon standards: **(1) Sulfur content: (i) 15 ppm (0.0015% sulfur by weight)**

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maximum for NR diesel fuel. (2) Cetane index or aromatic content, as follows: (i) A minimum cetane index of 40; or (ii) A maximum aromatic content of 35 volume percent

Note: Since the fuel sulfur limit of the NSPS Subpart IIII §60.4207 (Ref: 40 CFR §80.510)(is more restrictive than the State COMAR, it shall take precedence over COMAR 26.11.09.07A. The Permittee shall satisfy the sulfur limitation(s) by only firing Ultra Low Sulfur Diesel (ULSD) fuel that has a maximum sulfur content of **15 ppm (0.0015%)** sulfur by weight. Any person offering to sell or deliver fuel or any person responsible for equipment in which fuel or process gas is burned, upon request, shall submit to the Department or control officer such analyses of fuel or process gas as may be required to determine compliance with this regulation.

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.

D. Operational Limits

The emergency diesel generators shall only fire ULSD which has a maximum sulfur content of 15 ppm sulfur by weight. **[Reference: Permit to Construct Nos. 021-2552-9-1048 & -9-1049]**

***Note**: Since the sulfur emission limitation specified in PTC No. 031-2252-9-1048 & -1049 and 40 CFR 60, Subpart IIII are more stringent than the standard in COMAR 26.11.09.07A, the federal and PTC standard will supersede the State standards.*

E. NSPS Requirements

40 CFR Part 60 (NSPS) Subpart IIII for Stationary Compression Ignition Internal Combustion Engines

For 2007 model year and later emergency stationary CI ICE with a displacement of less than 30 L/cylinder, the Permittee shall meet the emission limits in

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	60.4202(b) for all pollutants. The exhaust emission standards are as follows: 6.4, 3.5, 0.20 g/kW-hr for THC+NO_X, CO, and PM, respectively. The Permittee must comply with the emissions standards by purchasing an engine certified to the emissions standards in 60.4205(b) for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications. If the emergency stationary CI does not meet the standards applicable to nonemergency engines, the Permittee must install a non-resettable hour meter prior to startup of the engine. As per **40 CFR §60.4211(f)(2),** the Permittee may operate the engine for no more than 100 hours per calendar year for maintenance checks and readiness testing as specified in (f)(1)(i) through (iii). There is no time limit on the use of emergency stationary ICE in emergency situations. Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement less than 30 L/cylinder must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel (15 ppm maximum sulfur content), except that any existing diesel fuel purchased prior to October 1, 2010, may be used until depleted.
6.2	**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 a combustion analysis and optimize combustion at least once annually for any of the engines that operates more than 500 hours during a calendar year. **[Reference: COMAR 26.11.09.08G(1)(b)]** D. Operational Limits See Monitoring Requirements. E. NSPS Requirements See Monitoring Requirements.
6.3	**Monitoring Requirements:** A. Control of Visible Emissions The Permittee shall properly operate and maintain the engines in a manner to prevent visible emissions. **[Reference: COMAR 26.11.03.06C]**

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	B. Control of Sulfur Oxides The Permittee shall obtain a certification from the fuel supplier indicating that the oil complies with the limitation on the sulfur content of ULSD fuel oil. **[Reference: COMAR 26.11.03.06C]** C. Control of Nitrogen Oxides Emissions The Permittee shall calculate the capacity factor of the engine within 30 days after the end of each month. **[Reference: COMAR 26.11.03.06C]** D. Operational Limits The Permittee shall obtain from 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 80.510. **[Reference: Permit to Construct Nos. 031-2552-9-1090, -9-1091, -9-1093, -9-1094]**. E. NSPS Requirements The Permittee must comply with the emissions standards specified in this subpart over the entire life of the engine. The Permittee shall: 1) operate and maintain the stationary CI ICE and control device according to the manufacturer's emission-related written instruction; 2) change only those emission-related settings that are permitted by the manufacturer; and 3) meet the requirements of 40 CFR 89, 94, and/or 1068, as they apply to you. The Permittee shall maintain a log indicating the amounts of fuel oil combusted, the hours of operation, the time of operation, and reason for generator operation. For each fuel delivery the Permittee shall obtain 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 80.510. **[Reference: 40 CFR Part 60. §4206, §4211(c), §4214(b) & Permit to Construct Nos. 031-2552-9-1090, 9-1091, 9-1092, 9-1093, 9-1094]**
6.4	**Record Keeping Requirements:** **Note:** The Permittee shall maintain all records required under this permit for at least five (5) years and shall make them available to the Department upon request. **[Reference: COMAR 26.11.03.06C(5)(g)]** A. Control of Visible Emissions The Permittee shall: (1) Maintain all records of the maintenance performed that relates to combustion performance; (2) Maintain a log of visible emissions observations performed and make it available to the Department's representative upon request; and (3) Maintain records of the date and hours that engines are operated. **[Reference: COMAR 26.11.03.06C]**

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B. Control of Sulfur Oxides

1) The Permittee shall maintain records of all fuel oil certifications indicating that the oil complies with the limitations on sulfur content and make them available to the Department upon request.

2) Certification may include: iii) a fuel supplier certification consisting of the name of the fuel oil supplier and a statement from the supplier that the fuel oil complies with specifications for (ULSD) fuel oil; and/or iv) A certified statement signed by the authorized representative of the Facility, stating that the records of fuel supplier certifications submitted represent all of the fuel oil combusted during the reporting period. **[Reference: COMAR 26.11.03.06C & COMAR 26.11.09.07A(2)(b)]**

3) The Permittee shall maintain a log for the emergency generator indicating the amounts of fuel oil combusted, the hours of operation, and reason for generator operation (i.e., maintenance or operational testing, power outage, etc.).

(4) The Permittee shall maintain on site for the life of the source the following records for the emergency diesel generator(s): (a) Documentation of the manufacture date of the diesel engine, if manufactured prior to April 1, 2006 and the manufacturer model year of the diesel engine; (b) The installation date of each emergency diesel generator; and (c) The certifications of compliance or manufacturer engine test data required by 40 CFR §60.4211 and §60.4214(b).

(5) For any NSPS emergency diesel generator the Permittee shall for each fuel delivery obtain 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 §80.510 {ULSD: Sulfur content. 15 ppm maximum}. The Permittee shall maintain the required records on site for at least five (5) years. **[Reference: 40 CFR 60 Subpart IIII and Permit to Construct No. 031-2552-9-1045, ... 9-1050, and -5-2284]**

C. Control of Nitrogen Oxides Emissions

The Permittee shall maintain records of the results of the combustion analyses on site for at least five years and make them available to the Department and EPA upon request. The Permittee shall maintain records of training program attendance for each operator on site for at least five years and make the records available to the Department upon request. The Permittee shall maintain annual fuel use records on site for not less than 3 years and make these records available to the Department upon request. **[Reference: COMAR 26.11.09.08G(1)(c), COMAR 26.11.09.08G(1)(e); COMAR 26.11.09.08K(3) & COMAR 26.11.03.06C]**

D. Operational Limits

The Permittee shall maintain the required fuel oil supplier records on site for at least 5 years and make available to the Department upon request. **[Reference: Permit to Construct Nos. 031-2552-9-1090, -9-1091, -9-1093, -9-1094 & COMAR 26.11.03.06C]**.

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	E. NSPS Requirements The Permittee shall maintain onsite for the life of the engine the following records for the emergency diesel generators: 1) documentation of the manufacture date of the diesel engine, if manufactured prior to April 1, 2006 and the manufacturer model year of the diesel engine; 2) the installation date of each emergency diesel generator; 3) the certification of compliance or manufacturer engine test data required by 40 CFR 60.4211 and 60.4214(b); and 4) the operations and maintenance manuals for each generator. The Permittee shall maintain the maintenance manuals for each generator. The Permittee shall maintain the required fuel oil certification records onsite for at least five (5) years. **[Reference: Permit to Construct Nos. 031-2552-9-1090, -9-1091, -9-1093, -9-1094].**
6.5	**Reporting Requirements:** A. Control of Visible Emissions The Permittee shall 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. The Permittee shall report all occurrences of excess emissions in the facility's semi-annual and annual compliance reports. 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 listed under COMAR 26.11.01.07C(2). **[Reference: COMAR 26.11.01.07 & COMAR 26.11.03.06C]** B. Control of Sulfur Oxides The Permittee shall submit fuel supplier certifications to the Department upon request. **[Reference: COMAR 26.11.09.07C]** C. Control of Nitrogen Oxides Emissions The Permittee shall provide certification of the capacity factor of the equipment to the Department in writing as part of the April 1 certification report. The Permittee shall submit a list of trained operators to the Department upon request **[Reference: COMAR 26.11.09.08G(1)(e); & COMAR 26.11.03.06C]** D. Operational Limits See Record Keeping Requirements. E. NSPS Requirements If the stationary CI ICE is an emergency stationary ICE, the Permittee is not required to submit an initial notification. **[Reference: 40 CFR §60.4214(b)]**

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

(2) ✓ 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;

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

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

(b) No. 150 Storage of lubricating oils;
Container sizes range from 1 gallon to 5,000 gallons; Inventory of small containers varies throughout year (150 is approx. avg. no. containers)

(c) No. 10 Unheated storage of VOC with an initial boiling point of 300 °F (149 °C) or greater;
(Inventory varies throughout the year (10 represents approx. avg. no. containers)

(d) No. 14 Storage of Numbers 1, 2, 4, 5, and 6 fuel oil and aviation jet engine fuel;
Four 20,000-gal ULSD tanks at CUP2; two-day tanks; and eight emergency generator belly tanks.

(e) No. 200 The storage of VOC normally used as solvents, diluents, thinners, inks, colorants, paints, lacquers, enamels, varnishes, liquid resins, or other surface coatings and having individual capacities of 2,000 gallons (7.6 cubic meters) or less;

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

SECTION VI STATE-ONLY ENFORCEABLE CONDITIONS

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

1. Applicable Regulations:

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."

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."

GSA FEDERAL RESEARCH CENTER AT WHITE OAK
10901/10903 NEW HAMPSHIRE AVENUE
SILVER SPRING, MD 20903
PART 70 OPERATING PERMIT NO. 24-031-1129
FACT SHEET

BACKGROUND

The General Services Administration (GSA) owns the 662-acre White Oak site which is used primarily as the headquarters campus for the Food and Drug Administration (FDA). The site also includes two central utility plants (CUPs) and one (1) emergency power plant (EPP). CUP1, CUP2, and the EPP are operated by Honeywell Building Solutions, SES. Collectively the principal purpose of CUP1, CUP2 and the EPP is to provide heating, cooling and electricity to the GSA Campus. Therefore, the primary SIC code associated with the Honeywell's operations is 4931 (electric and other services combined). The emissions units associated with these facilities are fuel-burning equipment units as well as insignificant activities.

NSPS and MACT Regulations:

(1) **40 CFR 60 Subpart KKKK** - Federal Standards of Performance for Stationary Gas Turbines, for the control of emissions from stationary combustion turbines that commenced construction, modification or reconstruction after February 18, 2005.

(2) **40 CFR 60 Subpart IIII** - Federal Standards of Performance for Stationary Compression Ignition Internal Combustion Engines for applicable to manufacturers, owners, and operators of stationary compression ignition (CI) internal combustion engines (ICE) that commence construction after July 11, 2005, and where the stationary CI ICE are manufactured after April 1, 2006.

(3) **40 CFR 60 Subpart Dc** - Federal Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, for facilities which commenced construction after June 9, 1989.

(4) **40 CFR 63 Subpart ZZZZ**—National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, for both new and existing area sources. {For both non-emergency & emergency RICE}

(5) **40 CFR 63 Subpart JJJJJJ**—National Emissions Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources – The FRCWO CUP #1 & #2 boilers are equipped to fire natural gas as the primary fuel and distillate {ULSD} fuel oil as stand-by backup. The GSA CUP boilers fire ULSD fuel oil only during periods of gas curtailment, gas supply emergencies, or periodic testing on liquid fuel and are therefore ***exempt*** from the Area Source Boiler MACT Part 63 Subpart JJJJJJ. [Reference §63.11195(e) & §63.11237]

The following table summarizes the actual emissions from GSA Federal Research Center at White Oak based on its Annual Emission Certification Reports:

Table 2: Actual Emissions

Year	NO_X (TPY)	SO_X (TPY)	PM_{10} (TPY)	CO (TPY)	VOC (TPY)	Total HAP (TPY)
2019	9.17	2.11	5.80	13.3	2.4	0.6
2018	16.2	2.4	6.3	13.6	2.5	0.8
2017	17.9	2.5	6.4	12.8	2.4	0.8
2016	22.1	0.1	6.6	11.0	2.1	0.7
2015	17.5	0.2	6.6	11.6	2.4	0.6

The major source threshold for triggering Title V permitting requirements in Montgomery County 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 emissions from the facility are greater than the major source threshold, GSA Federal Research Center at White Oak is required to obtain a Title V – Part 70 Operating Permit under COMAR 26.11.03.01.

Changes since the last Title V Permit

On July 12, 2018, the ownership of the FDA Generators, previously permitted under premises number 031-2552, was transferred to GSA. These five-(5) Cummins emergency diesel generators are now Emission Units G-13 through G-17 in the renewal application. These emergency generators were never hooked up to the CUP "grid" and operate independently of said grid to directly service certain critical FDA buildings in the event that these buildings suffer a power failure.

On June 8, 2021, a permit to construct modification was issued to address the following changes: (1) delete the requirement to record the reason of operation for the G-1 Wartsila unit since G-1 is not an emergency generator; and (2) modify the operation restriction of the Central Utility Plant (CUP) 1 Cummins emergency diesel generator (G-2) to match those of the CUP 2 emergency diesel generators G-10 and G-11 following the requirements of 40 CFR 63, Subpart ZZZZ.

Compliance Assurance Monitoring (CAM)

CAM is intended to provide a reasonable assurance of compliance with applicable requirements under the Clean Air Act for large emission units that rely on air pollution control (APC) equipment to achieve compliance. The CAM approach establishes monitoring for the purpose of: (1) documenting continued operation of the control measures within ranges of specified indicators of

performance (such as emissions, control device parameters, and process parameters) that are designed to provide a reasonable assurance of compliance with applicable requirements; (2) indicating any excursions from these ranges; and (3) responding to the data so that the cause or causes of the excursions are corrected. In order for a unit to be subject to CAM, the unit must be located at a major source, be subject to an emission limitation or standard, use a control device to achieve compliance, have post-control emissions of at least 100% of the major source amount (for initial CAM submittals), and must not otherwise be exempt from CAM. Applicability determinations are made on a pollutant-by-pollutant basis for each emission unit.

GSA Federal Research Center White Oak conducted a CAM analysis, and the results are as follows:
Emission Unit G-1, the Wartsila 18V32 Internal Combustion Engine, has a control device which is used to comply with an emissions standard for CO. It is not subject to CAM requirements because the engine has potential pre-control device emissions of CO that are less than 100 percent of the amount, in tons per year, required for a source to be classified as a major source. The engine also has SCR to control NO_x emissions. It is exempted from the requirements of CAM based on exemption of §64.2b(1)(i) because the NO_x standard is one proposed by the EPA after November 15, 1990, pursuant to section 111 or112 of the Act.

Emission Units G-7 and G-8, the Solar Taurus 70 Turbines #1 and #2, each have a control device to comply with a NO_x emissions standard. They are exempted from the requirements of CAM based on exemption of §64.2b(1)(i) because the NO_x standard is one proposed by the EPA after November 15, 1990, pursuant to section 112 of the Act, 40 CFR Part 63 Subpart ZZZZ. The combustion turbines have an oxidation catalyst but are not subject to an emission standard for CO, so the turbines are not subject to CAM requirements for CO.

The other Emissions Units at GSA do not have a control device to control any pollutant, so they are not subject to any CAM requirements.

GREENHOUSE GAS (GHG) EMISSIONS

GSA Federal Research Center White Oak emits the following greenhouse gases (GHGs) related to Clean Air Act requirements: carbon dioxide, methane, and nitrous oxide. These GHGs originate from various fuel-burning or combustion processes at the facility (i.e., internal combustion engines, combustion turbine generators and boilers). The facility has not triggered Prevention of Significant Deterioration (PSD) requirements for GHG emissions; therefore, there are no applicable GHG Clean Air Act requirements. While there may be no applicable

requirements as a result of PSD, emission certifications report for the years 2017, 2018, and 2019, showed that GSA Federal Research Center White Oak 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 GSA Federal Research Center White Oak based on its Annual Emission Certification Reports:

Table 3: Greenhouse Gases Emissions Summary

GHG	Conversion factor	2017 tpy CO_2e	2018 tpy CO_2e	2019 tpy CO_2e
Carbon dioxide CO_2	1	86,372	86,442	82,904.72
Methane CH_4	25	1.8	1.6	1.56
Nitrous Oxide N_2O	298	0.17	0.17	0.15
Total GHG CO_{2eq}		**86,468**	**86,533**	**82,906**

EMISSION UNIT IDENTIFICATION

GSA Federal Research Center White Oak has identified the following emission units as being subject to Title V permitting requirements and having applicable requirements.

Table 4: Emission Unit Identification

Emissions Unit Number	MDE - ARA Registration Number	Emissions Unit Name and Description	Date of Installation
		Central Utility Plant 1 (CUP1)	
G-1	9-0709	5.7-MW dual-fired Wartsila 18V32 compression-ignition (CI) engine located at CUP1. This unit is equipped with a heat recovery boiler and selection catalytic reduction (SCR) and oxidation emissions control. The primary fuel for the engine is natural gas. The engine can also operate on No. 2 fuel oil.	Modified 2021; Modified 2012; Nov 2003
G-2	9-0710	2.0-MW Cummins 2000, No. 2 oil fired reciprocating compression-ignition (CI) emergency generator.	Modified 2021; Modified

Emissions Unit Number	MDE - ARA Registration Number	Emissions Unit Name and Description	Date of Installation
			2012; Nov 2003
G-3	9-0840	4.5-MW Solar Mercury 50, natural gas fired combustion turbine. (Turbine #1)	Sept 2007
G-4	9-0841	4.5-MW Solar Mercury 50, natural gas fired combustion turbine. (Turbine #2)	April 2008
G-5	9-0901	4.5-MW Solar Mercury 50, natural gas fired combustion turbine. (Turbine #3)	Mar 2009
G-6	9-0940	4.5-MW Solar Mercury 50, natural gas fired combustion turbine. (Turbine #4)	May 2010
B-1	5-1294	12.3-MMBtu/hr. Johnston Co. Boiler #1, dual-fired boiler. The primary fuel for the boiler is natural gas. If natural gas supply is interrupted, the boiler can operate using No. 2 fuel oil.	Mar 2003
B-2	5-1295	12.3-MMBtu/hr. Johnston Co. Boiler #2, dual-fired boiler. The primary fuel for the boiler is natural gas. If natural gas supply is interrupted, the boiler can operate using No. 2 fuel oil.	Mar 2003
B-3	5-1296	12.3-MMBtu/hr. Johnston Co. Boiler #3, dual-fired boiler. The primary fuel for the boiler is natural gas. If natural gas supply is interrupted, the boiler can operate using No. 2 fuel oil.	Mar 2003
		Central Utility Plant 2 (CUP2)	
G-7	9-1045	7.56-MW Solar Taurus 70 #1, dual-fired combustion turbine. The unit is equipped with a 41.1-MMBtu/hr. natural gas-fired duct burner, heat recovery steam generator (HRSG), and oxidation catalyst and selective catalytic reduction (SCR) emission controls. The primary fuel for the turbine is natural gas. The turbine can also operate using No. 2 fuel oil.	Aug 2013
G-8	9-1046	7.56-MW Solar Taurus 70 #2, dual-fired combustion turbine. The unit is equipped with a 41.1-MMBtu/hr. natural gas-fired duct burner, heat recovery steam generator (HRSG), and oxidation catalyst and selective catalytic reduction (SCR) emission controls. The primary fuel for the turbine is natural gas. The turbine can also operate using No. 2 fuel oil.	July 2013
G-9	9-1050	4.4-MW Solar Mercury 50, natural gas-fired combustion turbine. The unit is equipped with a heat recovery steam generator (HRSG), and	June 2013

Emissions Unit Number	MDE - ARA Registration Number	Emissions Unit Name and Description	Date of Installation
		ultralean premix low-NO_X pre-combustion technology. (Turbine #5)	
G-10	9-1048	2.25-MW Caterpillar Emergency Diesel generator (EDG) #1.	Sept 2013
G-11	9-1049	2.25-MW Caterpillar Emergency Diesel generator (EDG) #2.	Sept 2013
B-4	5-2284	25.1-MMBtu/hr. Cleaver Brooks Steam Boiler, dual-fired boiler. The primary fuel for the boiler is natural gas. If natural gas supply is interrupted, the boiler can operate using No. 2 fuel oil.	Feb 2013
		Emergency Power Plant (EPP)	
G-13	9-1090	2500-kW Cummins QSK78 Emergency Diesel Generator (EDG) #1.	April 2014
G-14	9-1091	2500-kW Cummins QSK78 Emergency Diesel Generator (EDG) #2.	April 2014
G-15	9-1092	2500-kW Cummins QSK78 Emergency Diesel Generator (EDG) #3	April 2014
G-16	9-1093	2500-kW Cummins QSK78 Emergency Diesel Generator (EDG) #4.	April 2014
G-17	9-1094	2500-kW Cummins QSK78 Emergency Diesel Generator (EDG) #5.	April 2014

AN OVERVIEW OF THE PART 70 PERMIT

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

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

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

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

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

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

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

REGULATORY REVIEW/TECHNICAL REVIEW/COMPLIANCE METHODOLOGY

Emission Unit(s): CUP1; G-3, G-4, G-5, & G-6 and CUP2: G-7, G-8 & G-9

CUP1: G-3, G-4, G-5, & G-6: Four (4) 4.5-MW Solar Mercury 50, natural gas fired combustion turbine. (Turbine #1 thru #4). **[Reg. Nos.9-0840, 9-0841, 9-0901, 9-0940]**

CUP2: G-7 & G-8: Two (2) 7.56-MW Solar Taurus 70 #1 & #2, dual-fired combustion turbine. The unit is equipped with a 41.1-MMBtu/hr. natural gas-fired duct burner, heat recovery steam generator (HRSG), and oxidation catalyst and selective catalytic reduction (SCR) emission controls. The primary fuel for the turbine is natural gas. If natural gas supply is interrupted, the turbine can operate using No. 2 fuel oil. **[Reg. Nos. .9-1045 & 9-1046]**

CUP2: G-9: One (1) 4.4-MW Solar Mercury 50, natural gas-fired combustion turbine. The unit is equipped with a heat recovery steam generator (HRSG), and ultra-lean premix low-NO_X pre-combustion technology. (Turbine #5) **[Reg No. 9-1050]**

Compliance Status
On December 4, 2020, performance testing was conducted on **G-6** firing on natural gas. The results are as follows:

Unit	NOx Test Result (ppm @ 15% Excess O_2)	NOx Limit (ppm @ 15% Excess O_2)	SO_2 Test Result (lb./MMBtu)	SO_2 Limit (lb./MMBtu)
G-6	3.4	42	0.00016	0.060

On February 26, 2020, the Department conducted a full compliance evaluation, the results are as follows: No visible emissions were observed. Method 9 observation of the **G-9** combustion turbine was performed. Reviewed data for **G-3, G-4 and G-5** on December 20, 2019; reviewed data for **G-6** on June 6, 2019, and reviewed data for **G-9** on December 25, 2019 - there were no instances where these turbines were operated at out of DLE mode while the turbines were at a steady state load.

The **G-7 and G-8** CT's have NOx CEMS. The facility has a Continuous Emissions Monitoring System QA/QC Plan dated January 20, 2020. A RATA was performed on the **G-7 and G-8** CEMS on November 25 and 26, 2019 – the CEMS passed the audit O&M plan was submitted to the Department in July 2020 for the CTs at the facility

On January 9, 2019, **G-7 and G-8** combustion turbines were stack tested for NOx while combusting Natural Gas and Fuel Oil. The Natural Gas and Fuel Oil were sampled and tested for sulfur concentration. The results are as follows:
G-7 NG: 1.9 ppmv @ 15% O_2 (**STD = 25**); NG sulfur content: 7.2 E-5 lb./MMBtu **(STD = 0.060)**
G-7 ULSD: 2.1 ppmv @ 15% O_2 (**STD = 65**); ULSD sulfur content: 6.4 ppmv (**STD = 15**)
G-8 NG: 1.3 ppmv @ 15% O_2 (**STD = 25**); NG sulfur content reported same as **G-7**
G-8 ULSD: 1.1 ppmv @ 15%O_2 (**STD = 65**);ULSD sulfur content reported same as **G-7**

On July 19 & 20, 2018, **G-4 and G-5** natural gas fired Combustion Turbines were stack tested for 40 CFR Part 60 Subpart KKKK compliance, which limits NOx emissions to 42 ppm at 15% excess O_2 and limits SO_2 emissions to 0.060 lb./MMBtu. Both units demonstrated compliance with the standards:

Unit	NOx Test Result (ppm @ 15% Excess O_2)	SO_2 Test Result (lb./MMBtu)
G-4 (Test Date 7/19/18)	3.4	0.00016
G-5 (Test Date 7/20/18)	3.3	0.00017

On February 28, 2018, **G-9** combustion turbine was stack tested. This CT had been damaged during commissioning in 2013 and was rebuilt in 2017. This is the first stack test for the rebuilt system. The stack test result demonstrated compliance with 40 CFR Part 60 Subpart KKKK which limits NOx emissions to 42 ppm at 15% excess oxygen;

the test result was 4.0 ppm at 15% excess oxygen (0.015 lb./MMBtu). One natural gas fuel sample was collected for the determination of total sulfur content using ASTM Method D-3246; the test result was 1.4 E-4 lb./MMBtu.

Applicable Standards and Limits

A. Control of Visible Emissions

COMAR 26.11.09.05A - Visible Emissions: 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 is required to implement a preventative maintenance plan and maintain on site an operation manual and records of maintenance performed that relate to combustion performance. The Permittee shall properly operate and maintain the CTs in accordance with the manufacturer's recommendations and in a manner to assure compliance with the visible emissions standards. **[Reference: COMAR 26.11.03.06C]**

The Permittee shall maintain a preventative maintenance plan, operations manual and records of maintenance performed that relate to combustion performance and shall maintain logs of any visible emissions observations performed. **[Reference: 40 CFR 60, Subpart KKKK & COMAR 26.11.03.06C]**

The Permittee shall report incidents of visible emissions in accordance with Permit Condition 4, of Section III, "Report of Excess Emissions and Deviations" **[Reference: COMAR 26.11.03.06C]**

B. Control of Sulfur Oxides

{Applies to G-7 and G-8}

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. Request for Analyses. "Any person offering to sell or deliver fuel or any person responsible for equipment in which fuel or process gas is burned, upon request, shall submit to the Department or control officer such analyses of fuel or process gas as may be required to determine compliance with this regulation."

Note: Since the COMAR requirement is less stringent than the NSPS Subpart KKKK Sulfur Control requirements for CTs, the NSPS requirement shall apply.

§60.4330 - What emission limits must I meet for sulfur dioxide (SO_2)?
(a) If your turbine is located in a continental area, you must comply with either paragraph (a)(1), (a)(2), or (a)(3) of this section.....
(1) You must not cause to be discharged into the atmosphere from the subject stationary combustion turbine any gases which contain SO_2 in excess of **110 nanograms per Joule (ng/J) (0.90 pounds per megawatt-hour (lb/MWh)) gross output**;
(2) You must not burn in the subject stationary combustion turbine any fuel which contains total potential sulfur emissions in excess of **26 ng SO_2/J (0.060 lb. SO_2/MMBtu) heat input.** If your turbine simultaneously fires multiple fuels, each fuel must meet this requirement;
[Reference: 40 CFR 60, Subpart KKKK--Standards of Performance for Stationary Combustion Turbines]

Note: The Permittee may satisfy this requirement by meeting the fuel oil sulfur content limitation of 0.05% by weight as specified in a current valid purchase contract, tariff sheet or transportation contract for the fuel per **40 CFR §60.4365(a)**. ***The Permittee shall satisfy the sulfur limitation(s) by only firing Ultra Low Sulfur Diesel (ULSD) fuel that has a maximum sulfur content of 15 ppm (0.0015%) sulfur by weight.***

Compliance Demonstration

COMAR 26.11.09.07C. - Request for Analyses. Any person offering to sell or deliver fuel or any person responsible for equipment in which fuel or process gas is burned, upon request, shall submit to the Department or control officer such analyses of fuel or process gas as may be required to determine compliance with this regulation.
"(a) For each affected unit required to continuously monitor parameters or emissions, or to periodically determine the fuel sulfur content under this subpart, you must submit reports of excess emissions and monitor downtime, in accordance with Sec.60.7(c). Excess emissions must be reported for all periods of unit operation, including start-up, shutdown, and malfunction."
"(b) For each affected unit that performs performance tests in accordance with Sec.60.4340(a), you must submit a written report of the results of each performance test before the close of business on the 60th day following the completion of the performance test."
The Permittee shall submit along with their semi-annual reports, fuel supplier certifications that verify that the fuel used complies with the limitations on sulfur content. The reports shall be submitted within 30 days after the end of the last previous semi-annual period covered. **[Reference: 40 CFR 60 Subpart KKKK, §60.4375]**

C. Control of Nitrogen Oxides
(1) **40 CFR 60 Subpart KKKK, 60.4320 – NO_X Standard**
Table 1: Subpart KKKK of Part 60. Nitrogen Oxide Emission Limits for New Stationary Combustion Turbines.

Combustion turbine type	Combustion turbine heat input at peak load (HHV)	NO_X emission standard
Note: Requirements below apply to **G-7** {Reg. No. 9-1045} & **G-8** {Reg. No. 9-1046} of **CUP2 - Solar Taurus** 70, 7.56-MW (67 MMBtu/hr.) CTs		
New turbine firing natural gas	> 50 MMBtu/hr. and ≤ 850 MMBtu/hr.	**25 ppm** at 15 percent O_2 or 150 ng/J of useful output (1.2 lb./MW/hr.).
New turbine firing fuels other than natural gas	> 50 MMBtu/hr. and ≤ 850 MMBtu/hr.	**74 ppm** at 15 percent O_2 or 460 ng/J of useful output (3.6 lb./MW/hr.).
Note: Requirements below apply to **G-3, G-4, G-5, & G-6** {Reg. Nos. 9-0840, - 0841, -0901, & 9-0940} of **CUP1** and **G-9** {Reg. No.9-1050} of **CUP2 – Solar Mercury 50**, 4.5-MW (45 MMBtu/hr.) CTs		
New turbine firing natural gas, electric generating	≤ 50 MMBtu/hr.	**42 ppm** at 15 percent O_2 or 290 ng/J of useful output (2.3 lb./MW/hr.).

(2) **COMAR 26.11.09.08 – Control of NO_X Emissions for Major Sources**
A. Applicability. (1) This regulation applies to a person who owns or operates an installation that causes emissions of NO_X and is located at premises that have total potential to emit: (a) 25 tons or more per year of NO_X and is located in Baltimore City, or Anne Arundel, Baltimore, Calvert, Carroll, Cecil, Charles, Frederick, Harford, Howard, **Montgomery**, or Prince George's counties.
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.
2) A person who owns or operates a combustion turbine with a capacity factor greater than 15 percent shall meet an hourly average NO_X emission rate of not more than 42 ppm when burning gas or 65 ppm when burning fuel oil (dry volume at 15 percent oxygen) or meet applicable Prevention of Significant Deterioration limits, whichever is more restrictive.

(*)**Note**: Operator Training. - (a) For purposes of this regulation, the equipment operator to be trained may be the person who maintains the equipment and makes the necessary adjustments for efficient operation. (b) The operator training course sponsored by the

Department shall include an in-house training course that is approved by the Department. **{Reference.: COMAR 26.11.09.08b(5)}**

Compliance Demonstration

The Permittee shall conduct performance test for NO_X in accordance with the methodologies specified in 40 CFR §§ 60.4340 & 60.4400 including but not limited to the following: §60.4340.

{(1), below applies to E/Ns G-7 & G-8 – Solar Taurus 70 CTs}

(1) Continuous emission monitoring (CEMs) as described in §§60.4335(b) and 60.4345, or {(2), below applies to Solar Mercury 50 CTs E/N to G-3, G-4, G-5,G-6 & G-9} (2) Continuous parameter monitoring as follows: (ii) For any lean premix stationary combustion turbine, you must continuously monitor the appropriate parameters to determine whether the unit is operating in low-NO_X mode. (iii) For any turbine that uses SCR to reduce NO_X emissions, you must continuously monitor appropriate parameters to verify the proper operation of the emission controls."

Note: The Permittee shall assure continuous compliance as stipulated under §60.4340 by operating the CTs in accordance with the Parametric Monitoring Plan (PMP).

[Reference: 40 CFR 60, Subpart KKKK §60.4410 & CUP #1 Permit to Construct Nos. 031-1129-9-0840 & 9-0841 N]

§60.4400 - How do I conduct the initial and subsequent performance tests, regarding NO_X? "

(b)(4) Compliance with the applicable emission limit in § 60.4320 must be demonstrated at each tested load level. Compliance is achieved if the three-run arithmetic average NO_X emission rate at each tested level meets the applicable emission limit in § 60.4320. "(b)(5) If you elect to install a CEMS, the performance evaluation of the CEMS may either be conducted separately or (as described in §60.4405) as part of the initial performance test of the affected unit."

[Periodic Testing]

Note(*): Condition (1) below applies to Units G-3, G-4, G-5, G-6, & G-9 that the Permittee has opted to use the alternative method to annual testing for demonstrating continuous compliance ("continuous parameter monitoring") for NO_X as specified in 40 CFR §60.4340(b)(2).

(1) After the initial compliance test required under 40 CFR §60.8, the owner or operator shall conduct a performance stack test for NO_X for each CT unit at least once every 5 years or at least once during the term of the operating permit(*). The Permittee shall conduct performance test for NO_X in accordance with the methodologies specified in 40 CFR §§ 60.4340 & 60.4400.

(2) Performance tests shall be conducted, and data reduced in accordance with the test methods and procedures contained in each applicable subpart unless the Administrator specifies or approves, in specific cases, an alternative reference method.

(3) The Permittee shall provide the Department at least 30 days prior notice of any performance test, except as specified under other subparts, to afford the Administrator the opportunity to have an observer present. If after 30 days' notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the owner or operator of an affected facility shall notify the Administrator (the Department) as soon as possible of any delay in the

original test date, either by providing at least 7 days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Administrator (the Department) by mutual agreement. (4) The Permittee shall provide the Department with two copies of the test protocols at least 30 days prior to any scheduled performance tests.
[Reference: COMAR 26.11.01.04 & 40 CFR §60.4340(b)(2) & .§4400]
(1) The Permittee shall conduct performance test for NO_X in accordance with the methodologies specified in 40 CFR §§ 60.4340 & 60.4400 including but not limited to the following: §60.4340.
{**Note:** The Permittee has selected to alternative methods to demonstrate continuous compliance for NO_X. See below.}

"(b) As an alternative, you may install, calibrate, maintain and operate one of the following continuous monitoring systems:
{(b)(1) below applies to Solar Taurus 70 CTs E/Ns G-7 & G-8}
"(1) Continuous emission monitoring by (a) Installing, calibrating, maintaining and operating a NO_X Continuous emission monitoring (CEMs) as described in §§60.4335(b) and 60.4345", and (b) Continuously monitor appropriate parameters to verify the proper operation of the SCR emission controls, or
"(2) Continuous parameter monitoring as follows: {(ii) applies to Solar Mercury 50 CTs E/Ns G-3, -4,- 5,- 6, &-9} (ii) For any lean premix stationary combustion turbine, you must continuously monitor the appropriate parameters to determine whether the unit is operating in low-NO_X mode.
{(iii applies to Solar Taurus 70 CTs E/Ns G-7 & G-8} (iii) For any turbine that uses SCR to reduce NO_X emissions, you must continuously monitor
appropriate parameters to verify the proper operation of the emission controls." (2) The Permittee shall establish and document a proper parametric monitoring plan in accordance with § 60.4355. The plan shall include, but not be limited to selection of indicators to be monitored, ranges of indicators, process used to obtain representative data, quality assurance, frequency of monitoring, and justification for the proposed elements of monitoring
Note: The Permittee shall demonstrate compliance with 40 CFR §60.4340 for NO_X emissions with continuous parametric monitoring as stipulated in the facility's Parametric Monitoring Plan (PMP) and as stipulated in Condition 1.3 C. (3), below. {The Permittee submitted a revised PMP on November 7, 2008.
{Condition (3) below applies to the Solar Mercury 50 CTs}
(3) The Permittee shall assure continuous compliance as stipulated under § 60.4340 by operating the CTs in accordance with the Parametric Monitoring Plan, which includes operation in Dry Low Emissions (DLE) mode, which is indicated by monitoring pilot valve position, which will indicate that "Minimum Pilot Mode" is either "ON" or "OFF". GSA will continuously monitor and record pilot fuel valve position and report any incidence of "Minimum Pilot Mode" = OFF, that is not attributable to combustion turbine start-up or load change, to indicate potential NO_X exceedances.
[Reference: 40 CFR 60, Subpart KKKK & PTC #031-1129-9-0840 & -0841, -9- 0901, & -9-0940]

{Condition (4), (5) & (6) below applies to CTs G-7 & G-8}

(4) § 60.4345 What are the requirements for the continuous emission monitoring system equipment, if I choose to use this option? "(a) Each NO_X diluent CEMS must be installed and certified according to Performance Specification 2 (PS 2) in appendix B to this part, except the 7- day calibration drift is based on unit operating days, not calendar days. With state approval, Procedure 1 in appendix F to this part is not required. Alternatively, a NO_X diluent CEMS that is installed and certified according to appendix A of part 75 of this chapter is acceptable for use under this subpart. The relative accuracy test audit (RATA) of the CEMS shall be performed on a lb./MM Btu basis.
"(b) As specified in §60.13(e)(2), during each full unit operating hour, both the NO_X monitor and the diluent monitor must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour, to validate the hour.
For partial unit operating hours, at least one valid data point must be obtained with each monitor for each quadrant of the hour in which the unit operates. For unit operating hours in which required quality assurance and maintenance activities are performed on the CEMS, a minimum of two valid data points (one in each of two quadrants) are required for each monitor to validate the NO_X emission rate for the hour."
"(c) Each fuel flowmeter shall be installed, calibrated, maintained, and operated according to the manufacturer's instructions. Alternatively, with state approval, fuel flowmeters that meet the installation, certification, and quality assurance requirements of appendix D to part 75 of this chapter are acceptable for use under this subpart.
"(d) Each watt meter, steam flow meter, and each pressure or temperature measurement device shall be installed, calibrated, maintained, and operated according to manufacturer's instructions."
"(e) The owner or operator shall develop and keep on-site a quality assurance (QA) plan for all of the continuous monitoring equipment described in paragraphs (a), (c), and (d) of this section. For the CEMS and fuel flow meters, the owner or operator may, with state approval, satisfy the requirements of this paragraph by implementing the QA program and plan described in Section 1 of appendix B to part 75 of this chapter."

(1) The Permittee shall maintain records and results of any tests performed incompliance with testing as required under 40 CFR §60.8 and 40 CFR 60, Subpart KKKK and any other testing required under this permit.
The Permittee shall maintain a copy of the parametric monitoring plan in accordance with § 60.4355 and records of pilot fuel valve position and report any incidence of "Minimum Pilot Mode" = OFF to indicate potential NO_X exceedances, in accordance with the plan. **[Reference: 40 CFR 60, Subpart KKKK & COMAR 26.11.03.06C]**

(2) The Permittee shall develop, implement, and maintain the Operational and Preventative Maintenance Plan as specified under COMAR 26.11.09.08.
(3) The Permittee shall maintain a record of training program attendance for each operator at the site and make these records available to the Department upon request COMAR 26.11.09.08 F & G.
(4) The Permittee shall maintain records of 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**[Reference COMAR 26.11.03.09.08]**
Reporting under §60.4375:

"(b) For each affected unit that performs performance tests in accordance with Sec. 60.4340(a), you must submit a written report of the results of each performance test before the close of business on the 60th day following the completion of the performance test."

D. Operational Limits

(1) The two-(2) Solar Taurus 70 combustion turbines (CTs) shall fire only natural gas and distillate ULSD fuel oil in the combustion turbine and natural gas only in the duct burners. The five-(5) Solar Mercury 50 CTs shall fire only natural gas. (2) General Compliance Requirements - Sec. 60.4333 "You must operate and maintain your stationary combustion turbine, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown, and malfunction."
(3) The Permittee shall only use Ultra Low Sulfur Diesel (ULSD) fuel that has a maximum sulfur content of 15 ppm (0.0015%) sulfur by weight.
(4) The turbines shall be operated and maintained in accordance with the Environmental Management System (EMS) provided by the equipment manufacturer, which includes but is not limited to providing that each of the Solar Taurus 70 and Solar Mercury 50 combustion turbine cogeneration units is equipped with an automated monitoring and control system that provides operators with continuous monitoring of fuel heat inputs and electricity and thermal energy outputs and other parameters that indicate thermal efficiency of the unit. A copy of the EMS operations and maintenance manual shall be maintained on site and made available to the Department upon request. **[Reference: CUP2 – Permit to Construct Nos. 031-2552-9-1045, -1046, -1048, -1049, -1050, and -5-2284]**

Note: All stationary sources are also subject to the Facility-wide NSR Synthetic-Minor limitations for NO_x. (See Table IV- 4 – Facility-Wide Requirements)

Compliance Demonstration

(1) The Permittee shall maintain monthly records of the following: (a) Type and monthly amount of fuel combusted, (b) Fuel supplier certifications, (c) Each combustion turbine & HRSG operating hours, and (d) A verification of the capacity factor for each combustion turbine generator set, which shall include the heat input (in million British thermal units or equivalent units of measure) and/or electric output (expressed in MWe-hr)..
(2) The Permittee shall maintain records associated with the operations and maintenance plan and the Environmental Management System and make them available to the Department upon request. **[Reference: COMAR 26.11.03.06C]**

Emission Unit(s): CUP1; G-1 & G-2

CUP1: G-1: One (1) 5.7-MW dual-fired Wartsila 18V32 compression-ignition (CI) engine located at CUP1. This unit is equipped with a heat recovery boiler and selection

catalytic reduction (SCR) and oxidation emissions control. The primary fuel for the engine is natural gas. The engine can also operate using No. 2 fuel oil. **[Reg. No. 9-0709]**

CUP1: G-2: One (1) 2.0-MW Cummins 2000, No. 2 oil fired reciprocating compression-ignition (CI) emergency generator. **[Reg. No. 9-0719]**

Compliance Status
On February 26, 2020, the Department conducted a full compliance evaluation, the results are as follows: No visible emissions were observed. The hours of operation logs for the **G-1** and **G-2** engines were in the CUP-1 control room. Records provided demonstrated that Wartsila (**G-1**) fuel oil use is documented on a monthly basis.
On July 17-18, 2020, the Wartsila Engine (**G-1**) was stack tested. The results are as follows: **Dual Fuel** – NOx 1.70 lb./hr. & 8.8 ppmvd @15% O_2; **CO 0.995 lb./hr. & 8.2 ppmvd @ 15%O_2 [STD = 23];** sulfur content of fuel = 0.3% by weight for fuel oil. **ULSD Fuel** – NOx 6.25 lb./hr. & 30.8 ppmvd @15% O_2; **CO 0.259 lb./hr. & 2.1 ppmvd @15%O_2 [STD=23];** sulfur content of fuel = less than 0.3% by weight

Applicable Standards and Limits

A. Control of Visible Emissions
COMAR 26.11.09.05E. - 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 shall properly operate and maintain the generators in accordance with the engines manufacturer's recommendations and in a manner to assure compliance with the visible emissions standards. The Permittee shall: (1) Maintain an operation manual(s) and prevention maintenance plan; (2) Maintain all records of the maintenance performed that relates to combustion performance; (3) Maintain a log of visible emissions observations performed and make it available to the Department's representative upon request; and (4) Maintain records of the date and hours that distillate fuel oil is burned. The Permittee shall report incidents of visible emissions in

accordance with Permit Condition 4, of Section III, "Report of Excess Emissions and Deviations" **[Reference: COMAR 26.11.03.06C]**

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."

Note: Since the fuel sulfur limit of the NSPS Subpart IIII §60.4207 (Ref: 40 CFR §80.510)(is more restrictive than the State COMAR, it shall take precedence over COMAR 26.11.09.07A. The Permittee shall satisfy the sulfur limitation(s) by only firing Ultra Low Sulfur Diesel (ULSD) fuel that has a maximum sulfur content of **15 ppm (0.0015%)** sulfur by weight. Any person offering to sell or deliver fuel or any person responsible for equipment in which fuel or process gas is burned, upon request, shall submit to the Department or control officer such analyses of fuel or process gas as may be required to determine compliance with this regulation.

Compliance Demonstration

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

The Permittee shall maintain records of all fuel oil certifications indicating that the oil complies with the limitations on sulfur content and make them available to the Department upon request. Certification may include: iii) a fuel supplier certification consisting of the name of the fuel oil supplier and a statement from the supplier that the fuel oil complies with specifications for (ULSD) fuel oil; and/or iv) A certified statement signed by the authorized representative of the Facility, stating that the records of fuel supplier certifications submitted represent all of the fuel oil combusted during the reporting period. **[Reference: COMAR 26.11.03.06C & COMAR 26.11.09.07A(2)(b)]**

The Permittee shall submit fuel supplier certifications to the Department upon request. **[Reference: COMAR 26.11.09.07C]**

C. Control of Carbon Monoxide Emissions

Applies to Unit G-1: 40 CFR 63 Subpart ZZZZ

§63.6603 - What emission limitations and operating limitations must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions?

Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart.

"(a) If you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to this subpart and the operating limitations in Table 1b and Table 2b to this subpart that apply to you."

Per Table 2D: As stated in §§63.6603 and 63.6640, you must comply with the following requirements for existing stationary RICE located at area sources of HAP emissions:

"3. Non-Emergency, non-black start CI stationary RICE >500 HP.

a. **Limit concentration of CO in the stationary RICE exhaust to 23 ppmvd at 15 percent O_2; or b. Reduce CO emissions by 70 percent or more.**"
During periods of startup, you must minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.
§63.6604 - What fuel requirements must I meet if I own or operate an existing stationary CI RICE? If you own or operate an existing non-emergency, non-black start CI stationary RICE with a site rating of more than 300 brake HP with a displacement of less than 30 liters per cylinder that uses diesel fuel, you must use diesel fuel that meets the requirements in 40 CFR §80.510(b) for nonroad diesel fuel. {See Ref: 40 CFR §80.510 under Condition 2.1B, above}

Compliance Demonstration

§63.6615 - When must I conduct subsequent performance tests? If you must comply with the emission limitations and operating limitations, you must conduct subsequent performance tests as specified in Table 3 of this subpart.
Per Table 3 – Subsequent Performance Tests: "4. For each existing non-emergency, non-black start CI stationary RICE >500 HP that are not limited use stationary RICE complying with the requirement to limit or reduce CO emissions and not using a CEMS, you must conduct subsequent performance tests every 8,760 hours or 3 years, whichever comes first."
Per Table 4 —Requirements for Performance Tests: "1. Compliance with the 70% reduction requirement: i. Measure the O_2 at the inlet and outlet of the control device; and ii. Measure the CO at the inlet and the outlet of the control device." "3. Compliance with the 23 ppmvd of CO outlet concentration requirement: i. Select the sampling port location and the number of traverse points using (1) Method 1or 1A of 40 CFR part 60, appendix A. The sampling site must be located at the outlet of the control device; and ii. Determine the O_2 concentration of the stationary RICE exhaust at the sampling port location. Measurements to determine O_2 concentration must be made at the same time and location as the measurements for CO concentration; and iii. Measure moisture content of the stationary RICE exhaust at the sampling port location. Measurements to determine moisture content must be made at the same time and location as the measurements for CO concentration; and iv. measure CO at the exhaust of the stationary RICE. CO concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs."
§63.6620 - What performance tests and other procedures must I use? "(a) You must conduct each performance test in Tables 3 and 4 of this subpart that applies to you."

§63.6625 - What are my monitoring, installation, collection, operation, and maintenance requirements?
(b) If you are required to install a continuous parameter monitoring system (CPMS) as specified in Table 5 of this subpart, you must install, operate, and maintain each CPMS according to the requirements in paragraphs (b)(1) through (6) of this section.

(1) You must prepare a site-specific monitoring plan that addresses the monitoring system design, data collection, and the quality assurance and quality control elements outlined in paragraphs (b)(1)(i) through (v) of this section and in §63.8(d).
(2) You must install, operate, and maintain each CPMS in continuous operation according to the procedures in your site-specific monitoring plan.
(3) The CPMS must collect data at least once every 15 minutes (see also §63.6635).
(4) For a CPMS for measuring temperature range, the temperature sensor must have a minimum tolerance of 2.8 Celsius (5 degrees Fahrenheit) or 1 percent of the measurement range, whichever is larger.
(5) You must conduct the CPMS equipment performance evaluation, system accuracy audits, or other audit procedures specified in your site-specific monitoring plan at least annually.
(6) You must conduct a performance evaluation of each CPMS in accordance with your site-specific monitoring plan.

§63.6655 - What records must I keep?

"(a) If you must comply with the emission and operating limitations, you must keep the records described in paragraphs (a)(1) through (a)(5), (b)(1) through (b)(3) and (c) of this section.
(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in §63.10(b)(2)(xiv).
(2) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. (3) Records of performance tests and performance evaluations as required in §63.10(b)(2)(viii).
(4) Records of all required maintenance performed on the air pollution control and monitoring equipment.
(5) Records of actions taken during periods of malfunction to minimize emissions in accordance with § 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation."
"(b) For each CEMS or CPMS, you must keep the records listed in paragraphs (b)(1) through (3) of this section. (1) Records described in §63.10(b)(2)(vi) through (xi). (2) Previous (i.e., superseded) versions of the performance evaluation plan as required in §63.8(d)(3). (3) Requests for alternatives to the relative accuracy test for CEMS or CPMS as required in § 3.8(f)(6)(i), if applicable." "(d) You must keep the records required in Table 6 of this subpart to show continuous compliance with each emission or operating limitation that applies to you."
"(e) You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE; (2) An existing stationary emergency RICE."

§63.6645 - What notifications must I submit and when?

(a) You must submit all of the notifications in §§ 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified if you own or operate any of the following; (2) An existing stationary RICE located at an area source of HAP emissions. (g) If you are required to conduct a performance test, you must submit a

Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required in § 63.7(b)(1). (h) If you are required to conduct a performance test or other initial compliance demonstration as specified in Tables 4 and 5 to this subpart, you must submit a Notification of Compliance Status according to § 63.9(h)(2)(ii). (1) For each initial compliance demonstration required in Table 5 to this subpart that does not include a performance test, you must submit the Notification of Compliance Status before the close of business on the 30th day following the completion of the initial compliance demonstration. (2) For each initial compliance demonstration required in Table 5 to this subpart that includes a performance test conducted according to the requirements in Table 3 to this subpart, you must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to §63.10(d)(2)..

D. Operational Limits

Applies of Units G1 & G-2

(1) The Permittee shall limit fuel use by the Wartsila (**G-1**) 5.7 MW engine generator to natural gas and No. 2 fuel oil; and the Wartsila engine fuel oil operation shall not exceed 200 hours per year. The Cummins (**G-2**) 2.0 MW standby generator shall fire No. 2 fuel oil only.

(2) The Permittee shall construct and maintain the Wartsila 5.7-MW engine-generator and Cummins 2.0-MW standby generator for the site so as to comply with all applicable regulations.

(3) The Permittee shall equip and operate the Wartsila 5.7-MW engine-generator with selective catalytic reduction (SCR) technology to control NOx emissions.

[Reference: Permit to Construct Nos. 031-1129-9-0709 & 031-1129-9- 0710 issued June 8, 2021]

Compliance Demonstration

(1) The Permittee shall conduct performance stack test of the Wartsila engine generator for NOx emissions, at least once every 5 years. The test shall be used to confirm the emission factors being used to calculate NOx emissions in the annual ECR for the Wartsila engine. Stack testing will be performed for natural gas combustion and fuel oil combustion. The Permittee shall conduct performance testing, in accordance with the reference methods and procedures of 40 CFR 60 Appendix A.

(2) The Permittee shall test the Wartsila engine generator at or near full load so that the maximum operating parameters can be established. The emissions factors determined as a result of stack testing shall be used for emissions certification reports (ECR) and to determine compliance with the facility-wide NOx synthetic minor operating limit.

(3) The Permittee shall perform all testing at a reasonable time and with at least 14-calendar days' notice to allow for representation by the Department personnel.

The SCR system shall be in place and in proper operating order while the Wartsila generator is in operation. For every 15,000 hours of Wartsila operation, the second row of catalyst will be replaced with new (previously unused) catalyst. The catalyst that was removed from the second row will be moved into the position of the first row. The catalyst that occupied the first row will be removed from service permanently.

The Permittee shall maintain for at least five (5) years, and shall make available to the Department upon request, records of the following information:
(a) Monthly records of the hours of operation and type and amount of fuel combusted in the Wartsila (G-1) engine-generator.
(b) Monthly records of the hours of operation, type and amount of fuel combusted and the reason for operation (i.e., maintenance or operational testing, power outage, etc.) of the Cummins (G-2) emergency standby generator.
(c) Records of NOx emissions for all fuel burning equipment (i.e., boilers and generators) at CUP #1, 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 month in order to comply with the CUP #1 synthetic minor requirement for NOx.
(d) Records of any maintenance performed to the engines and associated emissions control equipment, including verification that maintenance conforms to manufacturer's specification, including manufacturer's and/or vender's operations and maintenance manuals, etc., and records verifying compliance with SCR catalyst replacement requirement.
(1) The Permittee shall submit to the Department for review and approval, at least 30 days prior to conducting performance stacking, a test protocol, which shall include the appropriate EPA test method intended to be used.
(2) Final testing results shall be submitted to the Department within 45 days of completion of the testing.
[Reference: Permit to Construct Nos. 031-1129-9-0709 & -9- 0710 issued June 8, 2021]

Emission Unit(s): CUP1; G-1 & G-2 Cont'd

CUP1: G-1: One (1) 5.7-MW dual-fired Wartsila 18V32 compression-ignition (CI) engine located at CUP1. This unit is equipped with a heat recovery boiler and selection catalytic reduction (SCR) and oxidation emissions control. The primary fuel for the engine is natural gas. The engine can also operate using No. 2 fuel oil. **[Reg. No. 9-0709]**

CUP1: G-2: One (1) 2.0-MW Cummins 2000, No. 2 oil fired reciprocating compression-ignition (CI) emergency generator. **[Reg. No. 9-0719].** *This unit is for on-site emergency operation only.*

40 CFR Part 63 Subpart ZZZZ—National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

Compliance Status
On February 26, 2020, the Department conducted a full compliance evaluation, the results are as follows: No visible emissions were observed. Reviewed PM maintenance on the Cummins for 6/7/2018, 9/7/2019, 11/19/2019, 11/19/2019.

Applicable Standards and Limits

Control of HAP Emissions

Emission and Operating Limitations:

§63.6603 - What emission limitations, operating limitations, and other requirements must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions?

(a) If you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to this subpart and the operating limitations in Table 2b to this subpart that apply to you.

Applies to G-1 only

Per Table 2D: As stated in §§63.6603 and 63.6640, you must comply with the following requirements for existing stationary RICE located at area sources of HAP emissions: "3. Non-Emergency, non-black start CI stationary RICE >500 HP.

a. **Limit concentration of CO in the stationary RICE exhaust to 23 ppmvd at 15 percent O2; or b. Reduce CO emissions by 70 percent or more.**"

During periods of startup, you must minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.

§63.6604 - What fuel requirements must I meet if I own or operate an existing stationary CI RICE? If you own or operate an existing non-emergency, non-black start CI stationary RICE with a site rating of more than 300 brake HP with a displacement of less than 30 liters per cylinder that uses diesel fuel, you must use diesel fuel that meets the requirements in 40 CFR §80.510(b) for nonroad diesel fuel.

General Compliance Requirements:

§63.6605 - What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emission limitations, operating limitations, and other requirements in this subpart that apply to you at all times.

(b) 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 which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

Applies to G-1 only

§63.6615 - When must I conduct subsequent performance tests? If you must comply with the emission limitations and operating limitations, you must conduct subsequent performance tests as specified in Table 3 of this subpart.

Per Table 3 – Subsequent Performance Tests: "4. For each existing non-emergency, non-black start CI stationary RICE >500 HP that are not limited use stationary RICE complying with the requirement to limit or reduce CO emissions and not using a CEMS,

you must conduct subsequent performance tests every 8,760 hours or 3 years, whichever comes first."
Per Table 4 —Requirements for Performance Tests: "1. Compliance with the 70% reduction requirement: i. Measure the O2 at the inlet and outlet of the control device; and ii. Measure the CO at the inlet and the outlet of the control device." "3. Compliance with the 23 ppmvd of CO outlet concentration requirement: i. Select the sampling port location and the number of traverse points using (1) Method 1or 1A of 40 CFR part 60, appendix A. The sampling site must be located at the outlet of the control device; and ii. Determine the O2 concentration of the stationary RICE exhaust at the sampling port location. Measurements to determine O2 concentration must be made at the same time and location as the measurements for...CO concentration; and iii. Measure moisture content of the stationary RICE exhaust at the sampling port location. Measurements to determine moisture content must be made at the same time and location as the measurements for...CO concentration; and iv. measure CO at the exhaust of the stationary RICE. CO concentration must be at 15 percent O2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs."
§63.6620 - What performance tests and other procedures must I use? "(a) You must conduct each performance test in Tables 3 and 4 of this subpart that applies to you."

§63.6625 - What are my monitoring, installation, collection, operation, and maintenance requirements?
Applies to G-1 only
(b) If you are required to install a continuous parameter monitoring system (CPMS) as specified in Table 5 of this subpart, you must install, operate, and maintain each CPMS according to the requirements in paragraphs (b)(1) through (6) of this section.
(1) You must prepare a site-specific monitoring plan that addresses the monitoring system design, data collection, and the quality assurance and quality control elements outlined in paragraphs (b)(1)(i) through (v) of this section and in §63.8(d).
(2) You must install, operate, and maintain each CPMS in continuous operation according to the procedures in your site-specific monitoring plan.
(3) The CPMS must collect data at least once every 15 minutes (see also §63.6635).
(4) For a CPMS for measuring temperature range, the temperature sensor must have a minimum tolerance of 2.8 Celsius (5 degrees Fahrenheit) or 1 percent of the measurement range, whichever is larger.
(5) You must conduct the CPMS equipment performance evaluation, system accuracy audits, or other audit procedures specified in your site-specific monitoring plan at least annually.
(6) You must conduct a performance evaluation of each CPMS in accordance with your site-specific monitoring plan.

Applies to G-2 only
(e) If you own or operate any of the following stationary RICE, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing

emissions: (3) An existing emergency or black start stationary RICE located at an area source of HAP emissions.
(f) If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an **existing emergency stationary RICE** located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.

Applies to G-2 only
§63.6640 - How do I demonstrate continuous compliance with the emission limitations, operating limitations, and other requirements?
(f) If you own or operate an emergency stationary RICE, you must operate the emergency stationary RICE according to the requirements in paragraphs (f)(1) through (3) of this section. In order for the engine to be considered an emergency stationary RICE under this subpart, any operation other than emergency operation, and maintenance and testing as described in paragraphs (f)(1) through (3) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (3) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

(f)(1) There is no time limit on the use of emergency stationary ICE in emergency situations.

(f)(2) You may operate your emergency stationary ICE for any combination of the purposes specified in paragraphs (f)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (f)(3) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2)

(f)(2)(i) Emergency stationary ICE may be operated 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 owner or operator 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.

(f)(4) Emergency stationary RICE located at area sources of HAP 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. The 50 hours per year for nonemergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(')**Note:** Effective May 2, 2016, engines that participate in an EDR are considered "non-emergency" engines under the federal New Source Performance Standards, 40 CFR 60, Subpart IIII for compression ignition and Subpart JJJJ for spark ignition engines, and for existing engines under the National Emission Standards for Hazardous Air Pollutants 40 CFR 63, Subpart ZZZZ (the RICE rule). Therefore, 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. The Permittee has indicated that the proposed engine/generator is for stand-by emergency use only and will not be used load shaving or demand response. **[Ref.: U.S. Court of Appeals for the District of Columbia Circuit May 2, 2016 Vacatur on Participation in Emergency Demand Response (EDR) Programs]**

Compliance Demonstration

§63.6625 - What are my monitoring, installation, collection, operation, and maintenance requirements?

(e) If you own or operate any of the following stationary RICE, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions: (3) An existing emergency or black start stationary RICE located at an area source of HAP emissions.

(f) If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.

§63.6655 - What records must I keep?

Applies to G-1 only

"(a) If you must comply with the emission and operating limitations, you must keep the records described in paragraphs (a)(1) through (a)(5), (b)(1) through (b)(3) and (c) of this section.

(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in §63.10(b)(2)(xiv).

(2) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. (3) Records of performance tests and performance evaluations as required in §63.10(b)(2)(viii).

(4) Records of all required maintenance performed on the air pollution control and monitoring equipment.

(5) Records of actions taken during periods of malfunction to minimize emissions in accordance with § 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation."

"(b) For each CEMS or CPMS, you must keep the records listed in paragraphs (b)(1) through (3) of this section. (1) Records described in §63.10(b)(2)(vi) through (xi). (2) Previous (i.e., superseded) versions of the performance evaluation plan as required in §63.8(d)(3). (3) Requests for alternatives to the relative accuracy test for CEMS or CPMS as required in § 3.8(f)(6)(i), if applicable." "(d) You must keep the records required

in Table 6 of this subpart to show continuous compliance with each emission or operating limitation that applies to you."
"(e) You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and aftertreatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE; (2) An existing stationary emergency RICE."
§63.6645 - What notifications must I submit and when?
(a) You must submit all of the notifications in §§ 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified if you own or operate any of the following: (2) An existing stationary RICE located at an area source of HAP emissions. (g) If you are required to conduct a performance test, you must submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required in § 63.7(b)(1). (h) If you are required to conduct a performance test or other initial compliance demonstration as specified in Tables 4 and 5 to this subpart, you must submit a Notification of Compliance Status according to § 63.9(h)(2)(ii).
(1) For each initial compliance demonstration required in Table 5 to this subpart that does not include a performance test, you must submit the Notification of Compliance Status before the close of business on the 30th day following the completion of the initial compliance demonstration. (2) For each initial compliance demonstration required in Table 5 to this subpart that includes a performance test conducted according to the requirements in Table 3 to this subpart, you must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to §63.10(d)(2).
§63.6645 - What notifications must I submit and when?
(a) You must submit all of the notifications in §§ 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified if you own or operate any of the following: (2) An existing stationary RICE located at an area source of HAP emissions. (g) If you are required to conduct a performance test, you must submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required in § 63.7(b)(1). (h) If you are required to conduct a performance test or other initial compliance demonstration as specified in Tables 4 and 5 to this subpart, you must submit a Notification of Compliance Status according to § 63.9(h)(2)(ii).
(1) For each initial compliance demonstration required in Table 5 to this subpart that does not include a performance test, you must submit the Notification of Compliance Status before the close of business on the 30th day following the completion of the initial compliance demonstration. (2) For each initial compliance demonstration required in Table 5 to this subpart that includes a performance test conducted according to the requirements in Table 3 to this subpart, you must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to §63.10(d)(2).

Applies to G-2 only
(d) You must keep the records required in Table 6 of this subpart to show continuous compliance with each emission or operating limitation that applies to you.

Per Table 6, Item 9: If you operate an existing emergency and black start stationary RICE located at an area source of HAP, the Permittee must abide by the following Work or Management practices:
i. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or
ii. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
§63.6650 - What reports must I submit and when?
(h) If you own or operate an emergency stationary RICE with a site rating of more than 100 brake HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) or that operates for the purpose specified in §63.6640(f)(4)(ii), you must submit an annual report according to the requirements in paragraphs (h)(1) through (3) of this section.

Emission Unit(s): CUP2; G-10 & G-11

CUP2: G-10 & G-11: Two (2) 2.25-MW Caterpillar Emergency Diesel generators (EDG) #1 & #2. **[Reg. Nos. 9-1048 & 9-1049]**

Compliance Status
On February 26, 2020, the Department conducted a full compliance evaluation, the results are as follows: No visible emissions were observed. The hours of operation log for the **G-10** and **G-11** were observed in the field.

Applicable Standards and Limits

A. Control of Visible Emissions
COMAR 26.11.09.05E. - 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 shall properly operate and maintain the generators in accordance with the engines manufacturer's recommendations and in a manner to assure compliance with the visible emissions standards. **[Reference: COMAR 26.11.03.06C]**
The Permittee shall: (1) Maintain an operation manual(s) and prevention maintenance plan; (2) Maintain all records of the maintenance performed that relates to combustion performance; (3) Maintain a log of visible emissions observations performed and make it available to the Department's representative upon request; and (4) Maintain records of the date and hours that distillate fuel oil is burned. **[Reference: COMAR 26.11.03.06C]**
The Permittee shall report incidents of visible emissions in accordance with Permit Condition 4, of Section III, "Report of Excess Emissions and Deviations" **[Reference: COMAR 26.11.03.06C]**

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."

40 CFR Part 60 (NSPS) Subpart IIII for Stationary Compression Ignition Internal Combustion Engines
§60.4207 - What fuel requirements must I meet if I am an owner or operator of a stationary CI internal combustion engine subject to this subpart?
"(b) Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must purchase diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel."

Ref: 40 CFR § 80.510: What are the standards and marker requirements for non-road (NR) locomotive (LM) diesel fuel and ECA marine fuel?
"(b) Beginning June 1, 2010 . Except as otherwise specifically provided in this subpart, all NR and LM diesel fuel is subject to the following per-gallon standards: **(1) Sulfur content: (i) 15 ppm (0.0015% sulfur by weight) maximum for NR diesel fuel**. (2) Cetane index or aromatic content, as follows: (i) A minimum cetane index of 40; or (ii) A maximum aromatic content of 35 volume percent

Note: Since the fuel sulfur limit of the NSPS Subpart IIII §60.4207 (Ref: 40 CFR §80.510)(is more restrictive than the State COMAR, it shall take precedence over COMAR 26.11.09.07A. The Permittee shall satisfy the sulfur limitation(s) by only firing Ultra Low Sulfur Diesel (ULSD) fuel that has a maximum sulfur content of **15 ppm (0.0015%)** sulfur by weight. Any person offering to sell or deliver fuel or any person responsible for equipment in which fuel or process gas is burned, upon request, shall submit to the Department or control officer such analyses of fuel or process gas as may be required to determine compliance with this regulation.

Compliance Demonstration

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

1) The Permittee shall maintain records of all fuel oil certifications indicating that the oil complies with the limitations on sulfur content and make them available to the Department upon request.

2) Certification may include: iii) a fuel supplier certification consisting of the name of the fuel oil supplier and a statement from the supplier that the fuel oil complies with specifications for (ULSD) fuel oil; and/or iv) A certified statement signed by the authorized representative of the Facility, stating that the records of fuel supplier certifications submitted represent all of the fuel oil combusted during the reporting period. **[Reference: COMAR 26.11.03.06C & COMAR 26.11.09.07A(2)(b)]**

3) The Permittee shall maintain a log for the emergency generator indicating the amounts of fuel oil combusted, the hours of operation, and reason for generator operation (i.e., maintenance or operational testing, power outage, etc.).

(4) The Permittee shall maintain on site for the life of the source the following records for the emergency diesel generator(s): (a) Documentation of the manufacture date of the diesel engine, if manufactured prior to April 1, 2006 and the manufacturer model year of the diesel engine; (b) The installation date of each emergency diesel generator; and (c) The certifications of compliance or manufacturer engine test data required by 40 CFR §60.4211 and §60.4214(b).

(5) For any NSPS emergency diesel generator the Permittee shall for each fuel delivery obtain 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 §80.510 {ULSD: Sulfur content. 15 ppm maximum}. The Permittee shall maintain the required records on site for at least five (5) years. **[Reference: 40 CFR 60 Subpart IIII and Permit to Construct Nos. 031-2552-9-1045, ... 9-1050, and -5-2284]**

The Permittee shall submit fuel supplier certifications to the Department upon request. **[Reference: COMAR 26.11.09.07C]**

Emission Unit(s): CUP1; B-1, B-2, B-3 & CUP2: B-4

CUP1: B-1, B-2, B-3: Three (3) 12.3-MMBtu/hr. Johnston Co. Boiler #1, dual-fired boilers. The primary fuel for the boiler is natural gas. If natural gas supply is interrupted, the boiler can operate using No. 2 fuel oil. **[Reg Nos. 5-1294, 5-1295 & 5-1296]**

CUP2: B-4: One (1) 25.1-MMBtu/hr. Cleaver Brooks Steam Boiler, dual-fired boiler. The primary fuel for the boiler is natural gas. If natural gas supply is interrupted, the boiler can operate using No. 2 fuel oil. **[Reg No. 5-2284]**

Note: GSA CUP boilers fire distillate {ULSD} fuel oil only during periods of gas curtailment, gas supply emergencies, or periodic testing on liquid fuel and are therefore ***exempt*** from the Area Source Boiler MACT Part 63 Subpart JJJJJJ **[Reference. 40 CFR §63.11237]**.

Compliance Status
On February 26, 2020, the Department conducted a full compliance evaluation, the results are as follows: No visible emissions were observed. Reviewed records by month when fuel oil was combusted by the boilers. O&M plan was submitted to the Department in July 2020 for the boilers at the facility. Combustion analysis was conducted in 2019 on all four boilers. The boilers do not have CEM data and they have not been stack tested for NOX within the past 5 years.

Applicable Standards and Limits

A. Control of Visible Emissions
COMAR 26.11.09.05. – Visible Emissions
"A. 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

(1) The Permittee shall verify that there are no visible emissions when burning distillate fuel oil {ULSD}. The Permittee shall perform a visual observation of stack emissions for a 12-minute period at least once for each 168 hours that the boilers burn oil. If oil is burned for less than 100 hours in a calendar year, this requirement is waived for that calendar year. 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 of operation so that visible emissions are eliminated; and
(c) document in writing the results of inspections, adjustments and/or repairs to the boilers.
(2) The Permittee shall after 48 hours of operation, if the required adjustments and/or repairs had not eliminated the visible emissions, perform another Method 9 observation once daily when the boilers are operating on No.2 fuel oil for 18 minutes until corrective action have eliminated visible emissions. The Permittee shall:;(1) Maintain all records of the maintenance performed that relates to combustion performance; (2) Maintain a log of visible emissions observations performed and make it available to the Department's representative upon request; and (3) Maintain records of the date and hours that distillate fuel oil is burned. The Permittee shall report incidents of visible emissions in accordance with Permit Condition 4, of Section III, "Report of Excess Emissions and Deviations" **[Reference: COMAR 26.11.03.06C]**

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. Request for Analyses. "Any person offering to sell or deliver fuel or any person responsible for equipment in which fuel or process gas is burned, upon request, shall submit to the Department or control officer such analyses of fuel or process gas as may be required to determine compliance with this regulation."

Compliance Demonstration

The Permittee shall obtain a certification from the fuel supplier indicating that the oil complies with the limitation on the sulfur content of fuel oil. The Permittee shall maintain records of the fuel oil certifications indicating that the oil complies with the limitations on sulfur content and make them available to the Department upon request. **[Reference: COMAR 26.11.09.07 & COMAR 26.11.03.06C]**

The Permittee shall retain fuel supplier certifications stating that the fuel oil is in compliance with the sulfur content in the fuel limitation and shall make them available to the Department upon request. The Permittee shall submit fuel supplier's certification as part of the annual reporting requirements of 40 CFR 60 Subpart Dc. **[Reference: COMAR 26.11.03.06C]**

C. Control of Nitrogen Oxides Emissions

COMAR 26.11.09.08 – Control of NO_x Emissions for Major Stationary Sources

"E. 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

(1) The Permittee shall develop, implement, and maintain the Operational and Preventative Maintenance Plan as specified under COMAR 26.11.09.08. (2) The Permittee shall maintain a record of training program attendance for each operator at the

site and make these records available to the Department upon request COMAR 26.11.09.08 F & G. (3) The Permittee shall maintain records of 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. **[Reference: COMAR 26.11.09.08]**
(1) When demonstration of compliance with the NO_X emission standards in this regulation is based on CEM data, quarterly emission reports shall be submitted to the Department on or before the thirtieth day of the month following the end of each calendar quarter.
(2) When compliance with this regulation is demonstrated by a stack test, the results of the stack tests required by this regulation shall be submitted to the Department within 45 days after completion of the test.
(3) A person subject to this regulation shall maintain annual fuel use records on site for not less than 3 years and make these records available to the Department upon request. **[Reference: COMAR 26.11.09.08K]**

D. Operational Limit
The Permittee shall fire only natural gas or distillate fuel oil {ULSD}, as emergency backup fuel, only during periods of natural gas curtailment or supply interruption, or periodic testing on liquid fuel in the boilers. **[Permit to Construct Nos. 031-5-1294, 5-1295, 5-1296 & 5-2284]**

Compliance Demonstration
The Permittee shall maintain monthly records of the type and amount of fuels fired for each boiler. The Permittee maintain the following:
(1) Monthly records of the type and amount of fuels fired for each boiler.
(2) Logs of visible emissions observations performed.
(3) Reports and/or records of the results of any compliance testing.
(4) Records of any maintenance performed that may pertain to boiler performance and emissions. The Permittee shall submit a written report of the results of any performance test performed before the close of business on the 60th day following the completion of the performance test. **[Reference: COMAR 26.11.03.06C]**

Emission Unit(s): Facility-wide Requirements: CUP1; B-1, B-2, B-3 & CUP2: B-4

CUP1:
G-1: One (1) 5.7-MW dual-fired Wartsila 18V32 compression-ignition (CI) engine located at CUP1. This unit is equipped with a heat recovery boiler and selection catalytic reduction (SCR) and oxidation emissions control. The primary fuel for the engine is natural gas. The engine can operate using No. 2 fuel oil. **[Reg. No. 9-0709]**
G-2: One (1) 2.0-MW Cummins 2000, No. 2 oil fired reciprocating compression-ignition (CI) emergency generator. **[Reg. No. 9-0719]**

G-3, G-4, G-5, & G-6: Four (4) 4.5-MW Solar Mercury 50, natural gas fired combustion turbine. (Turbine #1 thru #4). **[Reg. Nos.9-0840, 9-0841, 9-0901, 9-0940]**

CUP2:
G-7 & G-8: Two (2) 7.56-MW Solar Taurus 70 #1 & #2, dual-fired combustion turbine. The unit is equipped with a 41.1-MMBtu/hr. natural gas-fired duct burner, heat recovery steam generator (HRSG), and oxidation catalyst and selective catalytic reduction (SCR) emission controls. The primary fuel for the turbine is natural gas. If natural gas supply is interrupted, the turbine can operate using No. 2 fuel oil. **[Reg. Nos. .9-1045 & 9-1046]**
G-9: One (1) 4.4-MW Solar Mercury 50, natural gas-fired combustion turbine. The unit is equipped with a heat recovery steam generator (HRSG), and ultralean premix low-NO_X pre-combustion technology. (Turbine #5) **[Reg No. 9-1050]**
G-10 & G-11: Two (2) 2.25-MW Caterpillar Emergency Diesel generators (EDG) #1 & #2. **[Reg. No. 9-1048 & 9-1049]**
B-1, B-2 & B-3: Three (3) 12.3-MMBtu/hr. Johnston Co. Boiler #1, dual-fired boilers. The primary fuel for the boiler is natural gas. If natural gas supply is interrupted, the boiler can operate using No. 2 fuel oil. **[Reg. 5-1294, 5-1295 & 5-1296]**
B-4: One (1) 25.1-MMBtu/hr. Cleaver Brooks Steam Boiler, dual-fired boiler. The primary fuel for the boiler is natural gas. If natural gas supply is interrupted, the boiler can operate using No. 2 fuel oil. **[Reg. 5-2284]**

Compliance Status
On February 26, 2020, the Department conducted a full compliance evaluation, the results are as follows: No visible emissions were observed. The 2019 ECR certified 9.7 tons of NO_X total from the facility. The12-month rolling NOx emissions are included in the Semi-Annual Compliance Reports submitted to the Department.

Applicable Standards and Limits

A. Operational Limits
(1) In order to exempt CUP #1 from becoming a "Major Source" of NOx emissions as defined under COMAR 26.11.02.01 C and COMAR 26.11.17.01 and thereby exempt CUP #1 from the any major new source review (NSR) requirements under COMAR 26.11.17, the Permittee shall limit the NOx emissions from all stationary sources at CUP #1, including CUP#1 sources not listed in this Permit to Construct, for any 12-month consecutive period, to less than 25 tons per year.
(2) In order to demonstrate compliance with the emissions limitation requirement for NOx, the Permittee shall calculate and record the NOx emissions from all fuel burning equipment (i.e., boilers and generators) at CUP #1, 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 26.11.03.01H]**
[Reference: Permit to Construct Nos. 031-1129-9-0709 & -9- 0710 issued June 8, 2021]
(3) The Permittee shall fire only natural gas or Ultra Low Sulfur Diesel {ULSD} fuel that has a maximum sulfur content of 15 ppm sulfur by weight. **[Reference: Permit to Construct Nos. 031-1129-9-0709, 9-710, 9-0840, 9-0841, 9-0901, 9-0940; 9-1045, 9-1046, 9-1048, 9-1049, 9-1050, 5-1294, 5-1295, 5-1295, 5-1296 & 5-2284]**

Compliance Demonstration

The Permittee shall test the Wartsila engine generator at or near full load so that the maximum operating parameters can be established. The emissions factors determined as a result of stack testing shall be used for emissions certification reports (ECR) and to determine compliance with the facility-wide NOx synthetic minor operating limit. **[Reference: Permit to Construct Nos. 031-1129-9-0709 & -9- 0710 issued June 8, 2021]**

The Permittee shall monitor and record the following: (a) The monthly hours of operation and amount of NO_X emissions of from all stationary sources at both CUP1 and CUP2, to assure that for the previous 12 consecutive calendar months the NO_X emissions limitation of 25 tons per year for any 12-month consecutive period, for each CUP is not exceed, as stipulated in Condition 4.1 B; and (b) The monthly amounts and types of fuel burned. **[Reference: COMAR 26.11.03.06C]**

The Permittee shall maintain for at least five (5) years, and shall make available to the Department upon request, records of NOx emissions for all fuel burning equipment (i.e., boilers and generators) at CUP #1, 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 month in order to comply with the CUP #1 synthetic minor requirement for NOx.

The Permittee shall submit a semi-annual certification report no later than 30 days after the end of each semi-annual period, which shows compliance with the CUP #1 synthetic minor operating requirement for NOx emissions, verifying that NOx emissions for all fuel burning equipment (i.e., boilers and generators) at CUP #1, for the previous 12 consecutive calendar months were less than 25 tons. **[Reference: Permit to Construct Nos. 031-1129-9-0709 & -9- 0710 issued June 8, 2021]**

By April 1 of each year, the Permittee shall submit to the Department, for the previous calendar year, a certified emissions statement verifying that for the previous 12-month consecutive period, the NO_X emissions limitation as stated in Section IV-4 (b) of this permit, was not exceeded. **[Reference: COMAR 26.11.03.06C]**

B. Operations and Maintenance Plans

Unless otherwise provided in the specific requirements for an emissions unit or plant, whenever the Permittee is required to develop and implement an operations and maintenance plan for a source within the facility, the plan shall include at minimum:

(1) Information that is sufficient to demonstrate that air emissions from each emissions unit within the plant can be expected to comply with all applicable limits and standards during periods of normal operation. Examples of types of information that could be included to support the required demonstrations would be design criteria, vendor specifications and performance guarantees, approved computer modeling studies, and results of testing programs in which approved test methods and procedures were utilized;

(2) Procedures that provide for proper operation and maintenance of all active emissions units and air pollution control equipment associated with the source or plant;

(3) Provisions for periodic monitoring of operating parameters and emissions as necessary to determine that emissions units and air pollution control equipment are functioning properly;
(4) Descriptions of procedures to be followed and corrective actions to be taken when monitoring information indicates that an emissions unit or pollution control device is not functioning properly; and
(5) Provisions for developing written or printable electronic records that will show whether prescribed operating, maintenance and monitoring procedures are consistently followed, and whether timely and appropriate corrective actions are taken when malfunctions occur.

[Reference: COMAR 26.11.03.06C]

Compliance Demonstration
See General Requirements.

Emission Unit(s): EPP: G-13, G-14, G-15, G-16 & G-17

EPP: G-13, G-14, G-15, G-16 & G-17: Five (5) 2500-kW Cummins QSK78 Emergency Diesel Generator (EDG) #1 thru #5. **[Reg. Nos. 9-1090 thru 9-1094]**
Note: Compliance with the RICE MACT is satisfied by meeting NSPS Subpart IIII requirements.

Compliance Status
On February 26, 2020, the Department conducted a full compliance evaluation, the results are as follows: No visible emissions were observed.

Applicable Standards and Limits
A. Control of Visible Emissions
COMAR 26.11.09.05E. - 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 shall properly operate and maintain the engines in a manner to prevent visible emissions. **[Reference: COMAR 26.11.03.06C]**

The Permittee shall: (1) Maintain all records of the maintenance performed that relates to combustion performance; (2) Maintain a log of visible emissions observations performed and make it available to the Department's representative upon request; and (3) Maintain records of the date and hours that engines are operated. **[Reference: COMAR 26.11.03.06C]**

The Permittee shall 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. The Permittee shall report all occurrences of excess emissions in the facility's semi-annual and annual compliance reports. 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 listed under COMAR 26.11.01.07C(2). **[Reference: COMAR 26.11.01.07 & COMAR 26.11.03.06C]**

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."

***Note**: Since the sulfur emissions limitation specified in COMAR 26.11.09.07A is less stringent than the 40 CFR 60, Subpart IIII and PTC No. 031-2552-9-1048 & -1049 standards, the PTC and federal standard will supersede the State standard. The testing, monitoring, recordkeeping, and reporting requirements under NSPS IIII will be used to demonstrate compliance with all sulfur standards.*

"**C**. Request for Analyses. Any person offering to sell or deliver fuel or any person responsible for equipment in which fuel or process gas is burned, upon request, shall submit to the Department or control officer such analyses of fuel or process gas as may be required to determine compliance with this regulation."

40 CFR Part 60 (NSPS) Subpart IIII for Stationary Compression Ignition Internal Combustion Engines

§60.4207 - What fuel requirements must I meet if I am an owner or operator of a stationary CI internal combustion engine subject to this subpart?

"(b) Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must purchase diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel."

Ref: 40 CFR § 80.510: What are the standards and marker requirements for non-road (NR) locomotive (LM) diesel fuel and ECA marine fuel?

"(b) Beginning June 1, 2010 . Except as otherwise specifically provided in this subpart, all NR and LM diesel fuel is subject to the following per-gallon standards: **(1) Sulfur content: (i) 15 ppm (0.0015% sulfur by weight) maximum for NR diesel fuel**. (2) Cetane index or aromatic content, as follows: (i) A minimum cetane index of 40; or (ii) A maximum aromatic content of 35 volume percent

Note: Since the fuel sulfur limit of the NSPS Subpart IIII §60.4207 (Ref: 40 CFR §80.510)(is more restrictive than the State COMAR, it shall take precedence over COMAR 26.11.09.07A. The Permittee shall satisfy the sulfur limitation(s) by only firing Ultra Low Sulfur Diesel (ULSD) fuel that has a maximum sulfur content of **15 ppm (0.0015%)** sulfur by weight. Any person offering to sell or deliver fuel or any person responsible for equipment in which fuel or process gas is burned, upon request, shall submit to the Department or control officer such analyses of fuel or process gas as may be required to determine compliance with this regulation.

Compliance Demonstration

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

1) The Permittee shall maintain records of all fuel oil certifications indicating that the oil complies with the limitations on sulfur content and make them available to the Department upon request.

2) Certification may include: iii) a fuel supplier certification consisting of the name of the fuel oil supplier and a statement from the supplier that the fuel oil complies with specifications for (ULSD) fuel oil; and/or iv) A certified statement signed by the authorized representative of the Facility, stating that the records of fuel supplier certifications submitted represent all of the fuel oil combusted during the reporting period. **[Reference: COMAR 26.11.03.06C & COMAR 26.11.09.07A(2)(b)]**

3) The Permittee shall maintain a log for the emergency generator indicating the amounts of fuel oil combusted, the hours of operation, and reason for generator operation (i.e., maintenance or operational testing, power outage, etc.).

(4) The Permittee shall maintain on site for the life of the source the following records for the emergency diesel generator(s): (a) Documentation of the manufacture date of the diesel engine, if manufactured prior to April 1, 2006 and the manufacturer model year of the diesel engine; (b) The installation date of each emergency diesel generator; and (c) The certifications of compliance or manufacturer engine test data required by 40 CFR §60.4211 and §60.4214(b).

(5) For any NSPS emergency diesel generator the Permittee shall for each fuel delivery obtain 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 §80.510 {ULSD: Sulfur content. 15 ppm maximum}. The Permittee shall maintain the required records on site for at least five (5) years. **[Reference: 40 CFR 60 Subpart IIII and Permit to Construct No. 031-2552-9-1045, ... 9-1050, and -5-2284]**

The Permittee shall submit fuel supplier certifications to the Department upon request. **[Reference: COMAR 26.11.09.07C]**

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

The Permittee shall calculate the capacity factor of the engine within 30 days after the end of each month. **[Reference: COMAR 26.11.03.06C]**

The Permittee shall maintain records of the results of the combustion analyses on site for at least five years and make them available to the Department and EPA upon request. The Permittee shall maintain records of training program attendance for each operator on site for at least five years and make the records available to the Department upon request. The Permittee shall maintain annual fuel use records on site for not less than 3 years and make these records available to the Department upon request. **[Reference: COMAR 26.11.09.08G(1)(c), COMAR 26.11.09.08G(1)(e); COMAR 26.11.09.08K(3) & COMAR 26.11.03.06C]**

The Permittee shall provide certification of the capacity factor of the equipment to the Department in writing as part of the April 1 certification report. The Permittee shall submit a list of trained operators to the Department upon request **[Reference: COMAR 26.11.09.08G(1)(e); & COMAR 26.11.03.06C]**

D. Operational Limits

The emergency diesel generators shall only fire ULSD which has a maximum sulfur content of 15 ppm sulfur by weight. **[Reference: Permit to Construct Nos. 021-2552-9-1048 & -9-1049]**

***Note**: Since the sulfur emission limitation specified in PTC No. 031-2252-9-1048 & -1049 and 40 CFR 60, Subpart IIII are more stringent than the standard in COMAR 26.11.09.07A, the federal and PTC standard will supersede the State standards.*

Compliance Demonstration

The Permittee shall obtain from 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 80.510. **[Reference: Permit to Construct Nos. 031-2552-9-1090, -9-1091, -9-1093, -9-1094]**.

The Permittee shall maintain the required fuel oil supplier records on site for at least 5 years and make available to the Department upon request. **[Reference: Permit to Construct Nos. 031-2552-9-1090, -9-1091, -9-1093, -9-1094 & COMAR 26.11.03.06C]**.

E. NSPS Requirements

40 CFR Part 60 (NSPS) Subpart IIII for Stationary Compression Ignition Internal Combustion Engines

For 2007 model year and later emergency stationary CI ICE with a displacement of less than 30 L/cylinder, the Permittee shall meet the emission limits in 60.4202(b) for all pollutants. The exhaust emission standards are as follows: 6.4, 3.5, 0.20 g/kW-hr for THC+NO_X, CO, and PM, respectively.

The Permittee must comply with the emissions standards by purchasing an engine certified to the emissions standards in 60.4205(b) for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications.

If the emergency stationary CI does not meet the standards applicable to nonemergency engines, the Permittee must install a non-resettable hour meter prior to startup of the engine.

As per **40 CFR §60.4211(f)(2),** the Permittee may operate the engine for no more than 100 hours per calendar year for maintenance checks and readiness testing as specified in (f)(1)(i) through (iii).

There is no time limit on the use of emergency stationary ICE in emergency situations. Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement less than 30 L/cylinder must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel (15 ppm maximum sulfur content), except that any existing diesel fuel purchased prior to October 1, 2010 may be used until depleted.

Compliance Demonstration

The Permittee must comply with the emissions standards specified in this subpart over the entire life of the engine. The Permittee shall: 1) operate and maintain the stationary CI ICE and control device according to the manufacturer's emission-related written instruction; 2) change only those emission-related settings that are permitted by the manufacturer; and 3) meet the requirements of 40 CFR 89, 94, and/or 1068, as they apply to you. The Permittee shall maintain a log indicating the amounts of fuel oil combusted, the hours of operation, the time of operation, and reason for generator operation. For each fuel delivery the Permittee shall obtain 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 80.510. **[Reference: 40 CFR 60.§4206, §4211(c), §4214(b) & Permit to Construct Nos. 031-2552-9-1090, 9-1091, 9-1092, 9-1093, 9-1094]**

The Permittee shall maintain onsite for the life of the engine the following records for the emergency diesel generators: 1) documentation of the manufacture date of the diesel engine, if manufactured prior to April 1, 2006 and the manufacturer model year of the diesel engine; 2) the installation date of each emergency diesel generator; 3) the certification of compliance or manufacturer engine test data required by 40 CFR 60.4211 and 60.4214(b); and 4) the operations and maintenance manuals for each generator. The Permittee shall maintain the maintenance manuals for each generator. The Permittee shall maintain the required fuel oil certification records onsite for at least five (5) years. **[Reference: Permit to Construct Nos. 031-2552-9-1090, -9-1091, -9-1093, -9-1094]**.

If the stationary CI ICE is an emergency stationary ICE, the Permittee is not required to submit an initial notification. **[Reference: 40 CFR §60.4214(b)]**

COMPLIANCE SCHEDULE

GSA Federal Research Center White Oak is currently in compliance with all applicable air quality regulations.

TITLE IV – ACID RAIN

Not Applicable.

TITLE VI – OZONE DEPLETING SUBSTANCES

GSA Federal Research Center White Oak is not subject to Title VI requirements.

SECTION 112(r) – ACCIDENTAL RELEASE

GSA Federal Research Center White Oak is not subject to the requirements of Section 112(r).

PERMIT SHIELD

GSA Federal Research Center White Oak did not request a permit shield.

INSIGNIFICANT ACTIVITIES

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

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

(2) ✓ 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;

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

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

(b) No. 150 Storage of lubricating oils;
Container sizes range from 1 gallon to 5,000 gallons; Inventory of small containers varies throughout year (150 is approx. avg. no. containers)

(c) No. 10 Unheated storage of VOC with an initial boiling point of 300 °F (149 °C) or greater;
(Inventory varies throughout the year (10 represents approx. avg. no. containers)

(d) No. 14 Storage of Numbers 1, 2, 4, 5, and 6 fuel oil and aviation jet engine fuel;
Four 20,000-gal ULSD tanks at CUP2; two-day tanks; and eight emergency generator belly tanks.

(e) No. 200 The storage of VOC normally used as solvents, diluents, thinners, inks, colorants, paints, lacquers, enamels, varnishes, liquid resins, or other surface coatings and having individual capacities of 2,000 gallons (7.6 cubic meters) or less;

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

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:

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."

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."