State of Maryland

DEPARTMENT OF THE ENVIRONMENT
Air and Radiation Management Administration
1800 Washington Boulevard, Suite 720
Baltimore, MD 21230

Martin O'Malley
Governor

Robert M. Summers, Ph.D.
Secretary

Part 70
Operating Permit

Construction Permit

PERMIT NO. 24-009-0021
To be paid in accordance with
PERMIT FEE COMAR 26.11.02.19B

DATE ISSUED November 1, 2013
EXPIRATION DATE July 31, 2018

LEGAL OWNER & ADDRESS
Dominion Resource Services, Inc
5000 Dominion Boulevard
Glen Allen, VA 23060
Attn: Mr. William H. Wilkinson, Manager
Environmental Compliance

SITE
Dominion Cove Point LNG, LP
2100 Cove Point Road
Lusby, MD 20657
Calvert County
AI# 5287

SOURCE DESCRIPTION
One (1) Liquefied natural gas (LNG) storage and terminal facility.

This source is subject to the conditions described on the attached pages.
12. GENERAL RECORDKEEPING .................................................................33
13. GENERAL CONFORMITY .................................................................33
14. ASBESTOS PROVISIONS .................................................................33
15. OZONE DEPLETING REGULATIONS ...........................................34
16. ACID RAIN PERMIT .................................................................34

SECTION IV  PLANT SPECIFIC CONDITIONS ........................................35
SECTION V  INSIGNIFICANT ACTIVITIES ............................................118
SECTION VI  STATE-ONLY ENFORCEABLE CONDITIONS ....................121
SECTION I SOURCE IDENTIFICATION

1. DESCRIPTION OF FACILITY

Dominion Cove Point LNG, L.P (Dominion) operates a liquefied natural gas (LNG) storage and terminal facility on the western shore of the Chesapeake Bay near Cove Point in Lusby (Calvert County) Maryland (the Cove Point terminal). The Cove Point facility receives, stores, and vaporizes imported LNG from sea-going tankers and transports vaporized LNG as pipeline-quality natural gas to interconnection points with transmission and distribution points in the mid-Atlantic region.

The Cove Point terminal currently operates several types of emissions units, including combustion turbines, submerges vaporizers, water-ethylene glycol (WEG) heaters, boilers, emergency generators, fire pumps, and vent heaters.

2. FACILITY INVENTORY LIST

<table>
<thead>
<tr>
<th>Emissions Unit Number</th>
<th>MDE Registration Number</th>
<th>Emissions Unit Name and Description</th>
<th>Date of Installation</th>
</tr>
</thead>
<tbody>
<tr>
<td>S001</td>
<td>009-5-0012 (formerly 9-0032)</td>
<td>One (1) natural gas-fired, simple-cycle General Electric Frame 3 combustion turbine (model MS3142) with a maximum rating of 135.6 MMBTU/hr – used to generate electricity. <strong>Controls:</strong> Selective catalytic reduction (SCR) unit</td>
<td>Turbine – Jan. 1978 SCR – April 2003 SCR-modified 2005</td>
</tr>
<tr>
<td>S002</td>
<td>009-5-0013 (formerly 9-0033)</td>
<td>One (1) natural gas-fired, simple-cycle General Electric Frame 3 combustion turbine (model MS3142) with a maximum rating of 135.6 MMBTU/hr – used to generate electricity. <strong>Controls:</strong> Selective catalytic reduction (SCR) unit</td>
<td>Turbine – Jan. 1978 SCR – April 2003 SCR-modified 2005</td>
</tr>
<tr>
<td>S003</td>
<td>009-5-0014 (formerly 9-0034)</td>
<td>One (1) natural gas-fired, simple-cycle General Electric Frame 3 combustion turbine (model MS3142) with a maximum rating of 135.6 MMBTU/hr – used to generate electricity.</td>
<td>Turbine – Jan. 1978 SCR – April 2003 SCR-</td>
</tr>
<tr>
<td>Source No.</td>
<td>Date of Approval</td>
<td>Description</td>
<td>Controls/Remarks</td>
</tr>
<tr>
<td>------------</td>
<td>-----------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>S004</td>
<td>2005</td>
<td>Ten (10) natural gas-fired submerged gas vaporizers, each with a rating of 72 MMBtu/hr – Used to vaporize LNG</td>
<td>Controls: Selective catalytic reduction (SCR) unit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>S004-16 vaporizer (72 MM BTU/hr)</td>
<td>Burners Replaced March 2003</td>
</tr>
<tr>
<td></td>
<td></td>
<td>S004-17 vaporizer (72 MM BTU/hr)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>S004-18 vaporizer (72 MM BTU/hr)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>S004-19 vaporizer (72 MM BTU/hr)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>S004-20 vaporizer (72 MM BTU/hr)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>S004-21 vaporizer (72 MM BTU/hr)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>S004-22 vaporizer (72 MM BTU/hr)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>S004-23 vaporizer (72 MM BTU/hr)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>S004-24 vaporizer (72 MM BTU/hr)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>S004-25 vaporizer (72 MM BTU/hr)</td>
<td></td>
</tr>
<tr>
<td>S005</td>
<td>1978</td>
<td>One (1) LNG emergency vent heater fated at 2.32 MM BTU/hr – Used, under emergency conditions, to heat cold natural gas vapor for venting to the atmosphere</td>
<td>Controls: Water injection system and air-to-fuel ratios</td>
</tr>
<tr>
<td>S006</td>
<td>1995</td>
<td>One (1) Liquefaction heater rated at 8.9 MM BTU/hr – Used to supply heat for regenerating zeolite molecular sieve used for cleaning pipeline gas</td>
<td>Controls: None</td>
</tr>
<tr>
<td>S007</td>
<td>2003</td>
<td>One (1) hot water boiler with a rating of 12.3 MMBTU/hr equipped with low-NOX burner— Used to heat water-glycol mixture to enable heat exchangers to heat natural gas for use at the facility.</td>
<td>Controls: None</td>
</tr>
<tr>
<td>S008</td>
<td>2003</td>
<td>One (1) hot water boiler with a rating of 12.3 MMBTU/hr equipped with low-NOX burner— Used to heat water-glycol mixture to enable heat exchangers to heat natural gas for use at the facility.</td>
<td>Controls: None</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td><strong>CPX Project</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S009</td>
<td>009-5-0049</td>
<td>One (1) natural gas-fired simple-cycle General Electric Frame 5 Turbine with a maximum rating of 302 MMBtu/hr equipped with dry-low NO(_X) combustion (DLN), SCR and oxidation catalyst (OC) <strong>Controls:</strong> DLN, SCR and OC</td>
<td>2009</td>
</tr>
<tr>
<td>S010</td>
<td>009-5-0050</td>
<td>One (1) natural gas-fired simple-cycle General Electric Frame 5 Turbine with a maximum rating of 302 MMBtu/hr equipped with dry-low NO(_X) combustion (DLN), SCR and oxidation catalyst (OC) <strong>Controls:</strong> DLN, SCR and OC</td>
<td>2009</td>
</tr>
<tr>
<td>S011– S017 through 009-5-0057</td>
<td>009-5-0051</td>
<td>Seven (7) Johnston water-ethylene glycol (WEG) heaters, each with a rating of 82.3 MMBtu/hr, each equipped with ultra low NO(_X) burners (ULNB) <strong>Controls:</strong> None</td>
<td>2009</td>
</tr>
<tr>
<td>S018</td>
<td>009-5-0058</td>
<td>One (1) emergency vent heater rated at 1.3 MMBtu/hr equipped with low-NO(_X) burners (LNB). <strong>Controls:</strong> None</td>
<td>2009</td>
</tr>
<tr>
<td>S019</td>
<td>009-9-0071</td>
<td>One (1) natural gas-fired emergency generator with a rating of 1175 hp (825 kW). <strong>Controls:</strong> None</td>
<td>2009</td>
</tr>
<tr>
<td>S020</td>
<td>009-9-0072</td>
<td>One (1) natural gas-fired emergency generator with a rating of 1175 hp (825 kW). <strong>Controls:</strong> None</td>
<td>2009</td>
</tr>
<tr>
<td>ASU Project</td>
<td>Project Number</td>
<td>Description</td>
<td>Controls</td>
</tr>
<tr>
<td>-------------</td>
<td>----------------</td>
<td>-------------</td>
<td>----------</td>
</tr>
<tr>
<td>S021</td>
<td>009-0021-5-0065</td>
<td>One (1) natural gas-fired, Solar Titan turbine with maximum rating of 137 MMBtu/hr equipped with DLN combustors, SCR, and oxidation catalyst. Controls: DLN, SCR and OC</td>
<td>2007</td>
</tr>
<tr>
<td>S022</td>
<td>N/A</td>
<td>One (1) natural gas-fired process heater equipped with Low NO\textsubscript{X} Burner (LNB) rated at 0.93 MMBtu/hr. Controls: None</td>
<td>2007</td>
</tr>
<tr>
<td>S023</td>
<td>009-0021-9-0082</td>
<td>One (1) Caterpillar natural gas-fired lean burn 4 stroke (black-start) emergency generator rated at 1032 horsepower. Controls: None</td>
<td>2007</td>
</tr>
<tr>
<td>S024</td>
<td>009-0021-5-0060</td>
<td>One (1) Johnston Water-Ethylene Glycol (WEG) natural gas-fired vaporization heater with a rating of 82.3 MMBtu/hr equipped with ULNB. Controls: None</td>
<td>2009</td>
</tr>
<tr>
<td>S025</td>
<td>009-0021-5-0062</td>
<td>One (1) Johnston Water-Ethylene Glycol (WEG) natural gas-fired vaporization heater with a rating of 82.3 MMBtu/hr equipped with ULNB. Controls: None</td>
<td>2009</td>
</tr>
<tr>
<td></td>
<td>009-0021-9-0091</td>
<td>One (1) Onan 605 hp (400 kW) diesel-fired engine intended for emergency purposes. (MDE PTC Issued 1/18/2013)</td>
<td>Spring 2002</td>
</tr>
</tbody>
</table>
SECTION II GENERAL CONDITIONS

1. DEFINITIONS

[COMAR 26.11.01.01] and [COMAR 26.11.02.01]

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

2. ACRONYMS

ARMA Air and Radiation Management Administration
BACT Best Available Control Technology
Btu British thermal unit
CAA Clean Air Act
CAM Compliance Assurance Monitoring
CEM Continuous Emissions Monitor
CFR Code of Federal Regulations
CO Carbon Monoxide
COMAR Code of Maryland Regulations
EPA United States Environmental Protection Agency
FR Federal Register
gr grains
HAP Hazardous Air Pollutant
MACT Maximum Achievable Control Technology
MDE Maryland Department of the Environment
MVAC Motor Vehicle Air Conditioner
NESHAPS National Emission Standards for Hazardous Air Pollutants
NO\textsubscript{x} Nitrogen Oxides
NSPS New Source Performance Standards
NSR New Source Review
OTR Ozone Transport Region
PM Particulate Matter
PM10 Particulate Matter with Nominal Aerodynamic Diameter of 10 micrometers or less
ppm parts per million
ppb parts per billion
PSD Prevention of Significant Deterioration
PTC Permit to construct
PTO Permit to operate (State)
SIC Standard Industrial Classification
SO\textsubscript{2} Sulfur Dioxide
3. EFFECTIVE DATE

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

4. PERMIT EXPIRATION

[COMAR 26.11.03.13B(2)]

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

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

5. PERMIT RENEWAL

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

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

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

[COMAR 26.11.02.02G]

In accordance with the provisions of the State Government Article, Sec. 10-611 et seq., Annotated Code of Maryland, all information submitted in an application shall be considered part of the public record and available for inspection and copying, unless the Permittee claims that the information is confidential when it is submitted to the Department. At the time of the request for inspection or copying, the Department will make a determination with regard to the confidentiality of the information. The Permittee, when requesting confidentiality, shall identify the information in a manner specified by the Department and, when requested by the Department, promptly provide specific reasons supporting the claim of confidentiality. Information submitted to the Department without a request that the information be deemed confidential may be made available to the public. Subject to approval of the Department, the Permittee may provide a summary of confidential information that is suitable for public review.

The content of this Part 70 permit is not subject to confidential treatment.

7. PERMIT ACTIONS

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

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

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

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

b. The Department or the EPA determines that this Part 70 permit contains a material mistake, or is based on false or inaccurate information supplied by or on behalf of the Permittee;
c. The Department or the EPA determines that this Part 70 permit must be revised or revoked to assure compliance with applicable requirements of the Clean Air Act; or

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

8. PERMIT AVAILABILITY

[COMAR 26.11.02.13G]

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

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

[COMAR 26.11.03.20B]

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

10. TRANSFER OF PERMIT

[COMAR 26.11.02.02E]

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

11. REVISION OF PART 70 PERMITS – GENERAL CONDITIONS

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

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

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

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

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

12. SIGNIFICANT PART 70 OPERATING PERMIT MODIFICATIONS

[COMAR 26.11.03.17]

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

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

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

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

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

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

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

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

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

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

13. MINOR PERMIT MODIFICATIONS

[COMAR 26.11.03.16]

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

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

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

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

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

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

(3) Does not require or modify a:

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

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

(c) Visibility or increment analysis;

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

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

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

(5) Is not a Title I modification; and

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

b. Application for a Minor Permit Modification

The Permittee shall submit to the Department an application for a minor permit modification that satisfies the requirements of COMAR 26.11.03.03 which includes the following:
(1) A description of the proposed change, the emissions resulting from the change, and any new applicable requirements that will apply if the change is made;

(2) The proposed minor permit modification;

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

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

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

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

c. Permittee’s Ability to Make Change

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

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

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

(b) The Permittee is not required to comply with the terms and conditions in the permit it seeks to modify. If the Permittee fails to comply with the terms and conditions in the application during this time, the terms and conditions of both this permit and the application for modification may be enforced against it.
d. The Permittee is subject to enforcement action if it is determined at any time that a change made under COMAR 26.11.03.16 is not within the scope of this regulation.

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

14. ADMINISTRATIVE PART 70 OPERATING PERMIT AMENDMENTS

[COMAR 26.11.03.15]

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

a. An application for an administrative permit amendment shall:

(1) Be in writing;

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

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

b. An administrative permit amendment:

(1) Is a correction of a typographical error;

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

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

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

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

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

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

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

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

e. The Permittee is subject to enforcement action if it is determined at any time that a change made under COMAR 26.11.03.15 is not within the scope of this regulation.
15. OFF-PERMIT CHANGES TO THIS SOURCE

[COMAR 26.11.03.19]

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

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

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

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

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

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

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

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

d. The Permittee shall keep a record describing:

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

   (2) The emissions resulting from those changes.
e. Changes that qualify under COMAR 26.11.03.19 are not subject to the requirements for Part 70 revisions.

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

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

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

16. ON-PERMIT CHANGES TO SOURCES

[COMAR 26.11.03.18]

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

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

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

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

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

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

   (5) The change does not violate a federally enforceable permit term or condition related to monitoring, including test methods, record keeping, reporting, or compliance certification requirements;
(6) The change does not violate a federally enforceable permit term or condition limiting hours of operation, work practices, fuel usage, raw material usage, or production levels if the term or condition has been established to limit emissions allowable under this permit;

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

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

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

(1) A description of the proposed change;

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

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

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

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

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

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

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

f. Upon satisfying the requirements under COMAR 26.11.03.18, the Permittee may make the proposed change.
g. The permit shield in COMAR 26.11.03.23 does not apply to on-permit changes under COMAR 26.11.03.18.

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

17. FEE PAYMENT

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

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

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

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

18. REQUIREMENTS FOR PERMITS-TO-CONSTRUCT AND APPROVALS

[COMAR 26.11.02.09.]

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

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

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

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

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

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

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

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

19. CONSOLIDATION OF PROCEDURES FOR PUBLIC PARTICIPATION

[COMAR 26.11.02.11C] and [COMAR 26.11.03.01K]

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

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

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

[COMAR 26.11.03.06E(4)]

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

21. SEVERABILITY

[COMAR 26.11.03.06A(5)]

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

22. INSPECTION AND ENTRY

[COMAR 26.11.03.06G(3)]

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

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

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

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

d. Sample or monitor any substances or parameters at or related to the emissions units at the facility for the purpose of determining compliance with the permit.
23. **DUTY TO PROVIDE INFORMATION**

[COMAR 26.11.03.06E(5)]

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

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

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

24. **COMPLIANCE REQUIREMENTS**

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

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

a. Enforcement action,

b. Permit revocation or revision,

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

d. Any combination of these actions.

The conditions in this Part 70 permit are enforceable by EPA and citizens under the Clean Air Act except for the State-only enforceable conditions.
Under Environment Article Section 2-609, Annotated Code of Maryland, the Department may seek immediate injunctive relief against a person who violates this permit in such a manner as to cause a threat to human health or the environment.

25. CREDIBLE EVIDENCE

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

26. NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE

[COMAR 26.11.03.06E(2)]

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

27. CIRCUMVENTION

[COMAR 26.11.01.06]

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

28. PERMIT SHIELD

[COMAR 26.11.03.23]

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

a. The emergency order provisions in Section 303 of the Clean Air Act, including the authority of EPA under that section;
b. The liability of the Permittee for a violation of an applicable requirement of the Clean Air Act before or when this permit is issued or for a violation that continues after issuance;

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

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

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

29. ALTERNATE OPERATING SCENARIOS

[COMAR 26.11.03.06A(9)]

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

1. PARTICULATE MATTER FROM CONSTRUCTION AND DEMOLITION

[COMAR 26.11.06.03D]

The Permittee shall not cause or permit any building, its appurtenances, or any 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
8. EMISSIONS CERTIFICATION REPORT

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

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

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

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

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

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

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

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

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

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

   (4) Emissions data from continuous emissions monitors that are required by this permit, including monitor calibration and malfunction information;
(5) Identification, description, and use records of all air pollution control equipment and compliance monitoring equipment including:

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

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

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

9. COMPLIANCE CERTIFICATION REPORT

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

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

a. The compliance certification shall include:

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

(2) The compliance status;

(3) Whether the compliance was continuous or intermittent;

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

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

b. The Permittee shall submit the compliance certification reports to the Department and EPA simultaneously.
10. CERTIFICATION BY RESPONSIBLE OFFICIAL

[COMAR 26.11.02.02F]

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

The certification shall be in the following form:

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

11. SAMPLING AND EMISSIONS TESTING RECORD KEEPING

[COMAR 26.11.03.06C(5)]

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

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

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

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

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

e. The analytical techniques and methods used; and
f. The results of each analysis.

12. GENERAL RECORDKEEPING

[COMAR 26.11.03.06C(6)]

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

These records and support information shall include:

a. All calibration and maintenance records;

b. All original data collected from continuous monitoring instrumentation;

c. Records which support the annual emissions certification; and

d. Copies of all reports required by this permit.

13. GENERAL CONFORMITY

[COMAR 26.11.26.09]

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

14. ASBESTOS PROVISIONS

[40 CFR 61, Subpart M]

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

[40 CFR 82, Subpart F]

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

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

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

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

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

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

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

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

16. **ACID RAIN PERMIT**

Not applicable
SECTION IV  PLANT SPECIFIC CONDITIONS

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

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

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

<table>
<thead>
<tr>
<th>Table IV – 1</th>
</tr>
</thead>
</table>
| **1.0**  
Emissions Unit Number(s): S001, S002 & S003 – Combustion Turbines  |
| **S001, S002, & S003** – (009-5-0012, 009-5-0013, & 009-5-0014 formerly 009-9-0032 to 9-0034).  
Three (3) natural gas-fired, simple-cycle General Electric Frame 3 combustion turbines (model MS3142), each with a maximum rating of 135.6 MMBTU/hr – used to generate electricity.  
**Controls:** Selective catalytic reduction (SCR) unit  |

| 1.1 **Applicable Standards/Limits:**  |
| **A. Control of Visible Emissions**  |
| **COMAR 26.11.09.05 - Visible Emissions.**  |
| “A. Fuel Burning Equipment.  
(1) Areas I, II, V, and VI. In Areas I, II, V, and VI, 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 greater than 20 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.”  |
### Table IV – 1

<table>
<thead>
<tr>
<th>B. Control of Particulate Matter Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>The GE Frame 3 natural gas-fired combustion turbines are subject to PM limit of 0.0066 lbs/MMBtu (filterable) of heat input. Each combustion turbine shall use natural gas as only fuel to meet the PM BACT requirements. [Reference: PSD Approval #PSD-2002-1 issued 8/6/02].</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>C. Control of Nitrogen Oxides</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMAR 26.11.09.08G. - Requirements for Fuel-Burning Equipment with a Capacity Factor of 15 Percent or Less, and Combustion Turbines with a Capacity Factor Greater than 15 Percent.</td>
</tr>
<tr>
<td>“(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.”</td>
</tr>
<tr>
<td>The GE Frame 3 natural gas-fired combustion turbines are subject to the NO(_X) emission limit of 12 ppm of dry gas corrected to 15% O(_2). Compliance with this emission limit shall be assessed on a 30-day rolling average. [Reference: PSD Approval #PSD-2002-1 &amp; NSR Approval #NSR-2002-01 issued 8/6/02].</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>D. Control of VOC Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>See Additional Requirements in Table 9.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>E. Control of Carbon Monoxide (CO) Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>The GE Frame 3 natural gas-fired combustion turbines are subject to the CO BACT emissions limit of 0.045 lbs/MMBtu of heat input assessed by CO stack emission tests. Each combustion turbine shall use natural gas as only fuel and operate within the appropriate ranges of good combustion operating parameters established during performance tests to meet the CO BACT requirements. [Reference: PSD Approval #PSD-2002-1 issued 8/6/02]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>1.2 Testing Requirements:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Control of Visible Emissions</td>
</tr>
<tr>
<td>See Record Keeping Requirements.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B. Control of Particulate Matter Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Permittee shall perform an EPA Reference Test Method 5, 40 CFR Part 60 Appendix A, of the exhaust gases in the stacks of at least one of the</td>
</tr>
</tbody>
</table>
combustion turbines at the facility once during the term of the permit. The combustion turbine shall be operating at no less than 90% of its rated capacity during stack emissions testing. **[Reference: COMAR 26.11.03.06C]**

C. **Control of Nitrogen Oxides**  
See Monitoring Requirements.

D. **Control of VOC Emissions**  
See Additional Requirements in Table 9.

E. **Control of Carbon Monoxide (CO) Emissions**  
The Permittee shall perform stack testing to demonstrate compliance with CO BACT emission limit in the exhaust gases of the stack of at least one of the combustion turbines once during the term of this permit. The combustion turbine shall be operating at no less than 90% of its rated capacity during stack emission testing. **[Permit to Construct #009-9-0032 to 9-0034 issued on 8/6/02 (modified on 4/1/05)]**

### 1.3 Monitoring Requirements:

A. **Control of Visible Emissions**  
See Record Keeping Requirements.

B. **Control of Particulate Matter Emissions**  
The Permittee shall perform routine and preventative maintenance in accordance with manufacturer’s specifications. **[Reference: COMAR 26.11.03.06C]**

C. **Control of Nitrogen Oxides**  
The Permittee shall continuously monitor the NO\textsubscript{X} emission of the stack gases using a NO\textsubscript{X} Continuous Emission Monitor (CEM) that is certified in accordance 40 CFR Part 60, Appendix B, or Part 75, Appendix A and meet the quality assurance criteria in 40 CFR Part 60, Appendix F. **[Reference: COMAR 26.11.09.08(B)(2)(b&c)]**

D. **Control of VOC Emissions**  
See Additional Requirements in Table 9

E. **Control of Carbon Monoxide (CO) Emissions**  
The Permittee shall perform routine and preventative maintenance in accordance with manufacturer’s specifications. **[Reference: COMAR 26.11.03.06C]**
1.4 **Record Keeping Requirements:**

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

<table>
<thead>
<tr>
<th>A. Control of Visible Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Permittee shall record any incidences of visible emissions and the corrective actions. [Reference: COMAR 26.11.03.06C].</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B. Control of Particulate Matter Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Permittee shall maintain the following on site for at least 5 years: records of stack testing results; record of the date, time and description of maintenance performed on the combustion turbines and shall submit records to the Department upon request. [Reference: COMAR 26.11.03.06C]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>C. Control of Nitrogen Oxides</th>
</tr>
</thead>
<tbody>
<tr>
<td>The following records shall be kept on the premises for at least 5 years and shall be made available to the Department upon request:</td>
</tr>
<tr>
<td>(a) The amount of natural gas burned in each combustion turbine, million BTU per month;</td>
</tr>
<tr>
<td>(b) The amount of chemical reagent usage for NO(_x) emission control, pounds per month;</td>
</tr>
<tr>
<td>(c) All CEM system monitoring data, which are used to demonstrate compliance with the emission limits;</td>
</tr>
<tr>
<td>(d) All stack emissions test report;</td>
</tr>
<tr>
<td>(e) NO(_x) emission rates, pounds per million BTU of heat input, for each combustion turbine;</td>
</tr>
<tr>
<td>(f) Monthly NO(_x) emissions from each combustion turbine.</td>
</tr>
<tr>
<td>(g) All CEM certifications and calibration results; and</td>
</tr>
<tr>
<td>(h) The repairs and maintenance made to the SCR or oxidation catalyst emission control devices or the NO(_x) CEM system. [Reference: MDE Permit to Construct #009-9-0032 to 9-0034 issued on 8/6/02 (modified on 4/1/05) and NSR Approval #NSR-2002-01 issued 8/6/02]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>D. Control of VOC Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>See Additional Requirements in Table 9.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>E. Control of Carbon Monoxide (CO) Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Permittee shall maintain the following records on site for a period of at least 5 years:</td>
</tr>
<tr>
<td>(1) Plans with the appropriate ranges established for good combustion</td>
</tr>
</tbody>
</table>
operating parameters to reduce CO emissions from the combustion turbines;
(2) The cause and time periods, except during start-up and shut-down phases, which the combustion turbines did not operate within the appropriate ranges of the good combustion operating parameters established for air emission reduction; and.
(3) Stack testing results and record of the date, time and description of maintenance performed on the combustion turbines

[Reference: PSD Approval #PSD-2002-1 issued 8/6/02; COMAR 26.11.03.06C]

1.5 Reporting Requirements:

A. Control of Visible Emissions
The Permittee shall report incidences of excess emissions and related corrective actions taken in accordance with excess emissions reporting requirements. [Reference: COMAR 26.11.01.07C]

B. Control of Particulate Matter Emissions
The Permittee shall submit a test protocol to the Department, for approval, at least 30 days prior to the scheduled test date. The Permittee shall report the results of the stack tests to the Department within 60 days of completion of the tests. [Reference: COMAR 26.11.03.06C]

C. Control of Nitrogen Oxides
The Permittee shall submit a quarterly summary report to the Department not later than 30 days following each calendar quarter. The report shall be in a format approved by the Department, and shall include the following:
(i) The cause, time periods, and magnitude of all emissions which exceed the applicable emission standards;
(ii) The source downtime including the time and date of the beginning and end of each downtime period and whether the source downtime was planned or unplanned;
(iii) The time periods and cause of all CEM downtime including records of any repairs, adjustments, or maintenance that may affect the validity of emission data;
(iv) Quarterly totals of excess emissions, installation downtime, and CEM downtime during the calendar quarter;
(v) Quarterly quality assurance activities; and
(vi) Daily calibration activities that include reference values, actual values, absolute or percent of span differences, and drift status; and
(vii) Other information required by the Department that is determined to be necessary to evaluate the data, to ensure that compliance is achieved, or to
Table IV – 1

determine the applicability of this regulation.” [Reference: COMAR 26.11.03.06C]

CEM System Downtime Reporting Requirement: The Permittee shall report all system downtime that lasts or is expected to last more than 24 hours to the Department by telephone before 10 a.m. of the first regular business day following the breakdown. The system breakdown report shall include the reason, if known, for the breakdown and the estimated period of time that the CEM will be down. The owner or operator of the CEM shall notify the Department by telephone when an out-of-service CEM is back in operation and producing valid data. [Reference: COMAR 26.11.03.06C]

D. Control of VOC Emissions
See Additional Requirements in Table 9.

E. Control of Carbon Monoxide (CO) Emissions
The Permittee shall submit a test protocol to the Department, for approval, at least 30 days prior to the scheduled test date. The Permittee shall report the results of the stack tests to the Department within 60 days of completion of the tests. The stack test reports shall include the following information:
(1) Emissions data including the pollutant concentration, gas volume, temperature, and oxygen content of the combustion exhaust gases leaving the exhaust stack;
(2) Hourly fuel usage rate of fuel consumed by the emission source during the testing period, million Btu/hr; and
(3) The operation procedures of good combustion practices.
[Reference: MDE Permit to Construct #009-9-0032 to 9-0034 issued on 8/6/02 (modified on 4/1/05)]

A permit shield shall cover the applicable requirements of the Clean Air Act that are listed in the table above
Table IV – 2

2.0 **Emissions Unit Number(s): S004 - Vaporizers**

**S004** – (009-5-0016 through 009-5-0025).
Ten (10) T-Thermal (model HV-12049) natural gas-fired submerged combustion vaporizers (SCV), each with a rating of 72 MMBtu/hr, equipped with a water injection system.: – Used to vaporize LNG

- S004-16 vaporizer (72 MM BTU/hr)
- S004-17 vaporizer (72 MM BTU/hr)
- S004-18 vaporizer (72 MM BTU/hr)
- S004-19 vaporizer (72 MM BTU/hr)
- S004-20 vaporizer (72 MM BTU/hr)
- S004-21 vaporizer (72 MM BTU/hr)
- S004-22 vaporizer (72 MM BTU/hr)
- S004-23 vaporizer (72 MM BTU/hr)
- S004-24 vaporizer (72 MM BTU/hr)
- S004-25 vaporizer (72 MM BTU/hr)

**Controls:** Water injection system and air-to-fuel ratios

2.1 **Applicable Standards/Limits:**

A. **Control of Visible Emissions**

**COMAR 26.11.09.05 - Visible Emissions.**

“A. Fuel Burning Equipment.

(1) Areas I, II, V, and VI. In Areas I, II, V, and VI, 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 greater than 20 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 Particulate Matter Emissions**

The ten (10) natural gas-fired submerged combustion vaporizers (SCV) are subject to PM limitation from the ten vaporizers to 0.0076 lbs/MMBtu (filterable) of heat input. **[Reference: PSD Approval #PSD-2002-1 issued 8/6/02].**
Table IV – 2

<table>
<thead>
<tr>
<th>C. Control of Nitrogen Oxides</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>COMAR 26.11.09.08B.</strong> - General Requirements and Conditions.</td>
</tr>
<tr>
<td>“(1) Emission Standards and Requirements.</td>
</tr>
<tr>
<td>(a) A person who owns or operates an installation that causes NO(_X) emissions subject to this regulation is in compliance with this regulation if the person establishes compliance with the emissions standards in §B(1)(c) of this regulation.</td>
</tr>
<tr>
<td>(b) Not Applicable.</td>
</tr>
<tr>
<td>(c) Emission Standards in Pounds of NO(_X) per Million Btu of heat input. – Gas only: 0.2. “</td>
</tr>
</tbody>
</table>

The ten (10) natural gas-fired SCV are subject to the NO\(_X\) emission limit from the ten vaporizers of 0.0605 lb/MMBtu of heat input. [Reference: PSD Approval #PSD-2002-1 issued 8/6/02].

D. Control of VOC Emissions

See Additional Requirements in Table 9.

E. Control of Carbon Monoxide (CO) Emissions

The ten (10) natural gas-fired submerged combustion vaporizers (SCV) are subject to the CO BACT emissions limit of 0.16 lbs/MBtu of heat input. Each vaporizer shall use natural gas as only fuel and operate within the appropriate ranges of good combustion operating parameters established during performance tests to meet the CO BACT requirements. [Reference: PSD Approval #PSD-2002-1 issued 8/6/02]

2.2 Testing Requirements:

A. Control of Visible Emissions

See Record Keeping Requirements.

B. Control of Particulate Matter Emissions

See Monitoring Requirements.

C. Control of Nitrogen Oxides

See Monitoring Requirements.

D. Control of VOC Emissions

See Additional Requirements in Table 9.

E. Control of Carbon Monoxide (CO) Emissions

See Monitoring Requirements.
### 2.3 Monitoring Requirements:

<table>
<thead>
<tr>
<th>A. Control of Visible Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>See Record Keeping Requirements.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B. Control of Particulate Matter Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Permittee shall perform routine and preventative maintenance in accordance with manufacturer’s specifications. [Reference: COMAR 26.11.03.06C]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>C. Control of Nitrogen Oxides</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Permittee shall perform routine and preventative maintenance in accordance with manufacturer’s specifications. [Reference: COMAR 26.11.03.06C]</td>
</tr>
<tr>
<td>The Permittee shall operate each vaporizer, for normal operation, with the water injection system to reduce NO\textsubscript{X} emissions. The water injection rate shall range from 7 to 22 gallons per hour (gph) per burner on a 3-hour block average established during the NO\textsubscript{X} emission testing. The Permittee shall monitor and record the water injection rate (gph) on a 3-hour block average when the vaporizer is operating. [Reference: MDE Permit to Construct #009-5-0016 to 0025M issued 6/26/06, PSD Approval #PSD-2002-1, and NSR Approval #NSR-2002-01 issued on 8/6/02]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>D. Control of VOC Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>See Additional Requirements in Table 9.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>E. Control of Carbon Monoxide (CO) Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Permittee shall perform routine and preventative maintenance in accordance with manufacturer’s specifications. [Reference: COMAR 26.11.03.06C]</td>
</tr>
<tr>
<td>Each vaporizer shall use natural gas only and shall be operated at an air-to-natural gas (A/G) ratio of 10.75 or greater on a 3-hour block average (Good Combustion Practice Parameters) unless the Permittee has demonstrated to the Department’s satisfaction that the vaporizers meet the CO limit of 0.16 lbs/MMBtu of heat input at a lower A/G value. [Reference: COMAR 26.11.03.06C and PSD Approval #PSD-2002-1 issued 8/6/06]</td>
</tr>
</tbody>
</table>

### 2.4 Record Keeping Requirements:

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

<table>
<thead>
<tr>
<th>A. Control of Visible Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Permittee shall record any incidences of visible emissions and the</td>
</tr>
</tbody>
</table>
corrective actions. [Reference: COMAR 26.11.03.06C].

B. Control of Particulate Matter Emissions
The Permittee shall maintain a record of the date, time and description of maintenance performed on the vaporizers and shall submit records to the Department upon request. [Reference: COMAR 26.11.03.06C]

C. Control of Nitrogen Oxides
The Permittee shall maintain the following records on-site for a period of at least five years:
(1) Monthly natural gas usage in millions BTU per month for each vaporizer;
(2) Water injection rate (gph) on a 3-hour block average to each burner to reduce NO\textsubscript{X} emissions from the vaporizers; and
(3) Monthly NO\textsubscript{X} emissions from each vaporizer.
(4) Record of the date, time and description of maintenance performed on the vaporizers and shall submit records to the Department upon request.
[Reference: COMAR 26.11.03.06C, PSD Approval #PSD-2002-1, and NSR Approval #NSR-2002-01 issued 8/6/02]

D. Control of VOC Emissions
See Additional Requirements in Table 9.

E. Control of Carbon Monoxide (CO) Emissions
The Permittee shall maintain the following records on-site for a period of at least five years:
(1) Air-to-gas ratio on a 3-hour block average;
(2) The plans with the appropriate ranges established for good combustion operating parameters to reduce CO emissions from the vaporizers; and
(3) The cause and time periods, except during start-up and shut-down phases, which the vaporizers did not operate within the appropriate ranges of the good combustion operating parameters established for CO emission reduction.
(4) Record of the date, time and description of maintenance performed on the vaporizers and shall submit records to the Department upon request.
[Reference: COMAR 26.11.03.06C and PSD Approval #PSD-2002-1 issued 8/6/06]

2.5 Reporting Requirements:

A. Control of Visible Emissions
The Permittee shall report incidences of excess emissions and related corrective actions taken in accordance with excess emissions reporting requirements. [Reference: COMAR 26.11.01.07C]
Table IV – 2

B. Control of Particulate Matter Emissions
The Permittee shall submit records of maintenance performed on the vaporizers upon request. [Reference: COMAR 26.11.03.06C]

C. Control of Nitrogen Oxides
The Permittee shall submit to the Department not later than 30 days following each calendar quarter a quarterly summary report. The report shall be in a format approved by the Department and shall include the following information for the water injection rate to each burner:
(a) Total operating time for each vaporizer during the quarter;
(b) The cause, time periods, and dates, and the magnitude of water flow faults except start-up and shut-down phases;
(c) The source downtime including the time and date of the beginning and end of each downtime period and whether the source downtime was planned or unplanned;
(d) The time periods and cause of all Combustion Monitoring System downtime including records of any repair, adjustment, or maintenance that may affect the validity of the water injection rate;
(e) Quarterly totals of water flow faults;
(f) General maintenance and repair activities conducted; and
(g) Monthly NO\textsubscript{X} emissions from each vaporizer.
[Reference: COMAR 26.11.03.06C and MDE Permit to Construct #009-5-0016 through 5-0025M issued 6/26/06]

D. Control of VOC Emissions
See Additional Requirements in Table 9.

E. Control of Carbon Monoxide (CO) Emissions
The Permittee shall submit to the Department not later than 30 days following each calendar quarter a quarterly summary report. The report shall be in a format approved by the Department and shall include the following information of the A/G ratio for each vaporizer:
(a) Total operating time for each vaporizer during the quarter;
(b) The cause, time periods, and dates, and the magnitude of non-compliance of the A/G ratio except start-up and shut-down phases;
(c) The source downtime including the time and date of the beginning and end of each downtime period and whether the source downtime was planned or unplanned;
(d) The time periods and cause of all Combustion Monitoring System downtime including records of any repair, adjustment, or maintenance that may affect the validity of A/G ratio;
(e) Quarterly totals of non-compliance of A/G ratio; and
Table IV – 2

(f) General maintenance and repair activities conducted.
[Reference: COMAR 26.11.03.06C]

A permit shield shall cover the applicable requirements of the Clean Air Act that are listed in the table above.

Table IV – 3

3.0 Emissions Unit Number(s): S005, S006, S007 & S008 – Heaters & Boilers

S005 – (009-5-0015).
One (1) Black, Sivalls & Bryson (model 2500 SGIH) natural gas-fired LNG emergency vent heater rated at 2.32 MM BTU/hr.: – Used, under emergency conditions, to heat cold natural gas vapor for venting to the atmosphere

Controls: None

S006 – (009-9-0022).
One (1) HEATEC (model HCI-6010-50G) natural gas-fired Liquefaction heater rated at 8.9 MM BTU/hr – Used to supply heat for regenerating zeolite molecular sieve used for cleaning pipeline gas

Controls: None

S007 & S008 – (009-5-0032 & 009-5-0033).
Two (2) Johnston Boiler Co. (PFTA-300-4-G) natural gas-fired packaged fi retube hot water boilers, each with a rating of 12.3 MMBTU/hr and equipped with low-NOx burner: – Used to heat water-glycol mixture to enable heat exchangers to heat natural gas for use at the facility.

Controls: None

3.1 Applicable Standards/Limits:

A. Control of Visible Emissions

COMAR 26.11.09.05 - Visible Emissions.

“A. Fuel Burning Equipment.
(1) Areas I, II, V, and VI. In Areas I, II, V, and VI, 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 greater than 20 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 Nitrogen Oxides

COMAR 26.11.09.08B(5) - Operator Training.
(a) “For purposes of this regulation, the equipment operator to be trained may be the person who maintains the equipment and makes the necessary adjustments for efficient operation.
(b) The operator training course sponsored by the Department shall include an in-house training course that is approved by the Department.”

COMAR 26.11.09.08E. - Requirements for Fuel-Burning Equipment with a Rated Heat Input Capacity of 100 Million Btu Per Hour or Less. “A person who owns or operates fuel-burning equipment with a rated heat input capacity of 100 Million Btu per hour or less shall:
(1) Submit to the Department an identification of each affected installation, the rated heat input capacity of each installation, and the type of fuel burned in each; (Already Completed)
(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.”

C. Control of VOC Emissions
See Additional Requirements in Table 9.

D. Operational Limits

CO/NO\textsubscript{X}/PM BACT Limitations: The BACT requirements include use of natural gas, good combustion practices, and installation of low NO\textsubscript{X} burners with flue gas re-circulation. [Reference: MDE Permit to Construct Number 009-0021-5-0032 & 009-0021-5-0033 issued on 6/21/12]

E. NSPS for PM and SO\textsubscript{X} Emissions

40 CFR Part 60 Subpart Dc—Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units §60.40c - Applicability and delegation of authority.
(a) Except as provided in paragraphs (d), (e), (f), and (g) of this section, the affected facility to which this subpart applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/h)) or less, but greater than or equal to 2.9 MW (10 MMBtu/h). Since the heaters are fired on natural gas only, the record keeping and reporting requirements §60.48c apply.

### Table IV – 3

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(a)</td>
<td>Except as provided in paragraphs (d), (e), (f), and (g) of this section, the affected facility to which this subpart applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/h)) or less, but greater than or equal to 2.9 MW (10 MMBtu/h). Since the heaters are fired on natural gas only, the record keeping and reporting requirements §60.48c apply.</td>
</tr>
</tbody>
</table>

### 3.2 Testing Requirements:

A. Control of Visible Emissions  
See Reporting Requirements.

B. Control of Nitrogen Oxides  
See Monitoring Requirements.

C. Control of VOC Emissions  
See Additional Requirements in Table 9.

D. Operational Limits  
See Monitoring Requirements.

E. NSPS for PM and SO\textsubscript{x} Emissions  
See Record Keeping Requirements.

### 3.3 Monitoring Requirements:

A. Control of Visible Emissions  
See Reporting Requirements.

B. Control of Nitrogen Oxides  
The Permittee shall perform combustion analysis on the heaters and boilers at least once per year and optimize combustion based on the analysis.  
[Reference: COMAR 26.11.09.08E(2)]

C. Control of VOC Emissions  
See Additional Requirements in Table 9.

D. Operational Limits  
The Permittee shall monitor the amount of fuel used.  
[Reference: COMAR 26.11.03.06C]
3.4 **Record Keeping Requirements:**

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

A. **Control of Visible Emissions**

The Permittee shall record incidences of excess emissions and related corrective actions taken in accordance with excess emissions reporting requirements. [Reference: COMAR 26.11.03.06C]

B. **Control of Nitrogen Oxides**

The Permittee shall maintain the following records on-site for a period of at least five years:

1. Training program attendance for each operator at the site and make these records available to the Department upon request.
2. Results of combustion analysis.  
[Reference: COMAR 26.11.09.09E(3)&(5)]

C. **Control of VOC Emissions**

See Additional Requirements in Table 9.

D. **Operational Limits**

The Permittee shall maintain records on-site for a period of at least five years and make available to the Department upon request: fuel combusted in million Btu per month and applicable operating/maintenance actions. [Reference: COMAR 26.11.03.06C]

E. **NSPS for PM and SO\textsubscript{x} Emissions**

§60.48c - Reporting and recordkeeping requirements. “(g)(1) Except as provided under paragraphs (g)(2) and (g)(3) of this section, the owner or operator of each affected facility shall record and maintain records of the amount of each fuel combusted during each operating day.”

3.5 **Reporting Requirements:**

A. **Control of Visible Emissions**

The Permittee shall report incidences of excess emissions and related corrective actions taken in accordance with excess emissions reporting requirements. [Reference: COMAR 26.11.01.07C]
Table IV – 3

B. Control of Nitrogen Oxides
   The Permittee shall submit:
   (1) The results of combustion analysis to the department and the EPA upon request. [Reference: COMAR 26.11.09.08E(3)]
   (2) A record of training program attendance for each operator to the Department upon request. [Reference: COMAR 26.11.09.08E(5)].

C. Control of VOC Emissions
   See Additional Requirements in Table 9.

D. Operational Limits
   See Record Keeping Requirements.

E. NSPS for PM and SO\textsubscript{X} Emissions
   Not Applicable.

A permit shield shall cover the applicable requirements of the Clean Air Act that are listed in the table above.

Table IV – 4

4.0 Emissions Unit Number(s): FL1-FL6
   FL1-FL6 – (009-0021-9-0022)
   Liquefaction equipment components (LEC)

4.1 Applicable Standards/Limits:

A. Control of Visible Emissions
   COMAR 26.11.06.02C. - Visible Emission Standards.
   “(1) In Areas I, II, V, and VI a person may not cause or permit the discharge of emissions from any installation or building, other than water in an uncombined form, which is greater than 20 percent opacity.
   COMAR 26.11.06.02A. - General Exceptions
   (2) The visible emissions standards in §C of this regulation do not apply to emissions during start-up and process modifications or adjustments, or occasional cleaning of control equipment, if:
   (a) The visible emissions are not greater than 40 percent opacity; and
   (b) The visible emissions do not occur for more than 6 consecutive minutes in any 60 minute period. ”

B. Control of VOC Emissions
   COMAR 26.11.06.06B. - Control of VOC from Installations.
   “(2) The following requirements apply in Calvert, Cecil, Charles, and
Frederick counties:
(c) Installations Constructed On or After November 15, 1992. Except as provided in §E of this regulation, a person may not cause or permit the discharge of VOC from any installation constructed on or after November 15, 1992 in excess of 20 pounds (9.07 kilograms) per day unless the discharge is reduced by 85 percent or more overall. “

The VOC emissions are limited to 33.8 tons for any 12-month period rolling monthly for emission units associated with the 2002 re-activation project and the CPX expansion. The VOC emissions are limited to 48.7 tons for any 12-month period, rolling monthly, for the re-activation sources only. [Reference: NSR Approval #NSR-2005-01 issued 6/26/06 & MDE Permit to Construct Number 009-0021-9-0022 issued on 8/8/11].

C. Operational Limits
The shutdown venting of refrigerant shall be limited to four (4) occurrences during any 12-month period, rolling monthly. The Permittee shall take all necessary precautions to prevent any unnecessary shutdown venting of refrigerant. [Reference: MDE Permit to Construct Number 009-0021-9-0022 issued 8/8/11]

4.2 Testing Requirements:
A. Control of Visible Emissions
See Reporting Requirements.

B. Control of VOC Emissions
See Monitoring Requirements.

C. Operational Limits
See Record Keeping Requirements.

4.3 Monitoring Requirements:
A. Control of Visible Emissions
See Record Keeping Requirements.

B. Control of VOC Emissions
The Permittee shall continuously monitor the constituents of the refrigerant while the liquefaction unit is operating. The Permittee shall monitor the amount of isopentane added to the liquefier from the tanker storage. The Permittee shall monitor the leaks from flanges, connectors, valves, and seals associated with the liquefaction unit and shall repair each leak within
### Table IV – 4

| 24 hours after it is detected. The Permittee shall utilize a flow meter to measure the amount of natural gas burned in the liquefaction heater. |
| [Reference: MDE Permit to Construct Number 009-0021-9-0022 issued 8/8/11 & COMAR 26.11.03.06C] |

### C. Operational Limits
See Record Keeping Requirements.

### 4.4 Record Keeping Requirements:

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

#### A. Control of Visible Emissions
The Permittee shall record incidences of excess emissions and related corrective actions taken in accordance with excess emissions reporting requirements.  
[Reference: COMAR 26.11.03.06C]

#### B. Control of VOC Emissions
The Permit shall maintain on site for at least five years and make available to the Department upon request records of the following:
- Amount of refrigerant added to the system and the date it was added.
- For each VOC leak, the date of each leak being detected, the location of the leak, and the date of the leak was repaired.
- For each shutdown venting of the refrigerant, the cause and date for each shutdown venting, and how much refrigerant and VOC emission was released to the atmosphere.  
[Reference: MDE Permit to Construct #009-021-9-0022 issued 8/8/11]

The Permit shall maintain on site for at least five years and make available to the Department upon request records of the following: premise-wide VOC emissions for any 12-month period, rolling monthly.  
[Reference: MDE Permit to Construct #009-021-9-0022 issued 8/8/11 and NSR Approval #NSR-2005-01 issued 6/26/06]

#### C. Operational Limits
The Permittee shall maintain records on-site for a period of at least five years and make available to the Department upon request: total number of shutdown venting occurrences for any 12-month period, rolling monthly.  
[Reference: MDE Permit to Construct #009-021-9-0022 issued 8/8/11 & COMAR 26.11.03.06C]
### Table IV – 4

<table>
<thead>
<tr>
<th>4.5</th>
<th>Reporting Requirements:</th>
</tr>
</thead>
</table>
| A. | **Control of Visible Emissions**  
The Permittee shall report incidences of excess emissions and related corrective actions taken in accordance with excess emissions reporting requirements.  
[Reference: COMAR 26.11.01.07C] |
| B. | **Control of VOC Emissions**  
The Permittee shall report incidents of excess emissions and related corrective actions taken in accordance with excess emissions reporting requirements.  
[Reference: COMAR 26.11.01.07C] |

The Permittee shall submit to the Department no later than 30 days following each calendar quarter a quarterly report. The report shall be in a format approved by the Department and shall include monthly VOC emission calculations.  
[Reference: MDE Permit to Construct #009-0021-9-0022 issued on 8/8/11 & NSR Approval #NSR-2005-01 issued 6/26/06] |

| C. | **Operational Limits**  
See Record Keeping Requirements. |

A permit shield shall cover the applicable requirements of the Clean Air Act that are listed in the table above.

### Table IV – 5

<table>
<thead>
<tr>
<th>5.0</th>
<th>Emissions Unit Number(s): S009 &amp; S010 – Combustion Turbines</th>
</tr>
</thead>
</table>
| **S009 & S010** | (009-5-0049 & 009-5-0050).  
Two (2) General Electric Frame 5 Turbine natural gas-fired simple-cycle with a maximum rating of 302 MMBtu/hr equipped with dry-low NO\textsubscript{x} combustion (DLN), SCR and oxidation catalyst (OC)  
**Controls:** DLN, SCR and OC. |

<table>
<thead>
<tr>
<th>5.1</th>
<th>Applicable Standards/Limits:</th>
</tr>
</thead>
</table>
| A. | **Control of Visible Emissions**  
COMAR 26.11.09.05 - Visible Emissions.  
“A. Fuel Burning Equipment.  
(1) Areas I, II, V, and VI. In Areas I, II, V, and VI, 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 greater than 20 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 Particulate Matter Emissions
The GE Frame 5 natural gas-fired combustion turbines are subject to PM limit of 0.0066 lbs/MMBtu (filterable) of heat input. Each combustion turbine shall use natural gas as only fuel to meet the PM BACT requirements.
[Reference: PSD Approval #PSD-2005-01 issued 6/26/06].

C. Control of Nitrogen Oxides
COMAR 26.11.09.08G. - Requirements for Fuel-Burning Equipment with a Capacity Factor of 15 Percent or Less, and Combustion Turbines with a Capacity Factor Greater than 15 Percent.
“(2) A person who owns or operates a combustion turbine with a capacity factor greater than 15 percent shall meet an hourly average NO\textsubscript{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. “


Emission Limits
§60.4315 - What pollutants are regulated by this subpart?
The pollutants regulated by this subpart are nitrogen oxide (NO\textsubscript{X}) and sulfur dioxide (SO\textsubscript{2}).
§60.4320 - What emission limits must I meet for nitrogen oxides (NO\textsubscript{X})?
You must meet the emission limits for NO\textsubscript{X} specified in Table 1 to this subpart.

<table>
<thead>
<tr>
<th>Table 1 to Subpart KKKK of Part 60—Nitrogen Oxide Emission Limits for New Stationary Combustion Turbines</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Combustion turbine type</strong></td>
</tr>
<tr>
<td>------------------------------</td>
</tr>
<tr>
<td>New turbine firing natural gas</td>
</tr>
</tbody>
</table>

The GE Frame 5 natural gas-fired combustion turbines are subject to the NO\textsubscript{X} LAER requirements listed in the NSR-2005-01 and the NO\textsubscript{X} BACT...
Table IV – 5

requirements listed in the PSD-2005-1: NO\textsubscript{X} emission limit on a 1-hr average for each combustion turbine of 2.5 ppmvd corrected to 15% O\textsubscript{2} during baseload operating condition. “Baseload Operating Condition” is defined as the turbine operating condition where the dry low-NO\textsubscript{X} combustors function effectively at or about 73% load. [Reference: PSD Approval #PSD-2005-01 & NSR Approval #NSR-2005-01 issued 6/26/06].

D. Control of SO\textsubscript{X} Emissions
§60.4330 - What emission limits must I meet for sulfur dioxide (SO\textsubscript{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. If your turbine is located in Alaska, you do not have to comply with the requirements in paragraph (a) of this section until January 1, 2008.
(1) You must not cause to be discharged into the atmosphere from the subject stationary combustion turbine any gases which contain SO\textsubscript{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\textsubscript{2}/J (0.060 lb SO\textsubscript{2}/MMBtu) heat input. If your turbine simultaneously fires multiple fuels, each fuel must meet this requirement.

E. Control of VOC Emissions
The Frame 5 combustion turbines are subject to the VOC LAER requirements listed in the NSR Approval #NSR-2005-01: VOC limit of 0.003 lbs/MMBtu of heat input which shall be assessed by VOC stack emission tests. Each combustion turbine shall only use natural gas for fuel and shall be equipped with a catalytic oxidation system to comply with the VOC emission limit. [Reference: NSR Approval #NSR-2005-01 issued 6/26/06].

F. Control of Carbon Monoxide (CO) Emissions
The Frame 5 combustion turbines are subject to the CO BACT requirements listed in the PSD Approval #PSD-2005-1: CO emission limit is 6 ppmvd corrected to 15% O\textsubscript{2} assessed by CO stack emission tests. Each combustion turbine shall be equipped with a CO oxidation catalyst to comply with the CO BACT limit. [Reference: PSD Approval #PSD-2005-01 issued 6/26/06]
<table>
<thead>
<tr>
<th></th>
<th>Testing Requirements:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>5.2</strong></td>
<td><strong>Control of Visible Emissions</strong></td>
</tr>
<tr>
<td></td>
<td>See Record Keeping Requirements.</td>
</tr>
<tr>
<td><strong>B. Control of Particulate Matter Emissions</strong></td>
<td>The Permittee shall perform an EPA Reference Test Method 5, 40 CFR Part 60 Appendix A, of the exhaust gases in the stacks of at least one of the combustion turbines at the facility once during the term of the permit. During emission testing, the combustion turbine shall operate at 90% or higher of its rated capacity. [Reference: COMAR 26.11.03.06C &amp; PSD Approval #PSD-2005-01 issued 6/26/06]</td>
</tr>
<tr>
<td><strong>C. Control of Nitrogen Oxides</strong></td>
<td>The Permittee shall conduct performance test for NO(_X) in accordance with the methodologies specified in 40 CFR §60.4340 &amp; §60.4400. §60.4340 - How do I demonstrate continuous compliance for NO(_X) if I do not use water or steam injection? “(b) As an alternative, you may install, calibrate, maintain and operate one of the following continuous monitoring systems: (1) Continuous emission monitoring as described in §60.4335(b) and §60.4345.”</td>
</tr>
<tr>
<td><strong>D. Control of SO(_X) Emissions</strong></td>
<td>The Permittee shall conduct performance test for SO(_X) in accordance with the methodologies specified in 40 CFR §60.4415. Note: Dominion Cove Point LNG maintains records of the FERC Gas Tariff for gas delivered to Cove Point to comply with this requirement.</td>
</tr>
<tr>
<td><strong>E. Control of VOC Emissions</strong></td>
<td>The Permittee shall perform stack testing to demonstrate compliance with VOC LAER emission limit in the exhaust gases of the stack of each of the combustion turbines once during the term of this permit. [Reference: NSR Approval #NSR-2005-01 issued 6/26/06 &amp; COMAR 26.11.03.06C]</td>
</tr>
<tr>
<td><strong>F. Control of Carbon Monoxide (CO) Emissions</strong></td>
<td>The Permittee shall perform stack testing to demonstrate compliance with CO BACT emission limit in the exhaust gases of the stack of each of the combustion turbines once during the term of this permit. During emission testing, each combustion turbine shall operate at 90% or higher of its rated capacity. [Reference: COMAR 26.11.03.06C &amp; PSD Approval #PSD-2005-01 issued 6/26/06]</td>
</tr>
</tbody>
</table>
5.3 Monitoring Requirements:

A. Control of Visible Emissions
See Record Keeping Requirements.

B. Control of Particulate Matter Emissions
The Permittee shall perform routine and preventative maintenance in accordance with manufacturer’s specifications. [Reference: COMAR 26.11.03.06C]

C. Control of Nitrogen Oxides
The Permittee shall continuously monitor the NO\textsubscript{X} emission of the stack gases using a NO\textsubscript{X} Continuous Emission Monitor (CEM) that is certified in accordance 40 CFR Part 60, Appendix B, or Part 75, Appendix A and meet the quality assurance criteria in 40 CFR Part 60, Appendix F. [Reference: COMAR 26.11.09.08(B)(2)(b&c)]

The Permittee shall demonstrate continuous compliance with NO\textsubscript{X} in accordance with 40 CFR §60.4340 as follows:

“(b) As an alternative, you may install, calibrate, maintain and operate one of the following continuous monitoring systems:
(1) Continuous emission monitoring as described in §60.4335(b) and §60.4345.”

§60.4345 - What are the requirements for the continuous emission monitoring system equipment, if I choose to use this option?

“If the option to use a NO\textsubscript{X} CEMS is chosen:
(a) Each NO\textsubscript{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\textsubscript{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/MMBtu basis.
(b) As specified in §60.13(e)(2), during each full unit operating hour, both the NO\textsubscript{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\textsubscript{X} emission rate for the hour.
(c) Each fuel flow meter shall be installed, calibrated, maintained, and operated according to the manufacturer's instructions. Alternatively, with state approval, fuel flow meters 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.”

D. Control of SO\textsubscript{X} Emissions

§60.4360 - How do I determine the total sulfur content of the turbine's combustion fuel?
You must monitor the total sulfur content of the fuel being fired in the turbine, except as provided in §60.4365. The sulfur content of the fuel must be determined using total sulfur methods described in §60.4415. Alternatively, if the total sulfur content of the gaseous fuel during the most recent performance test was less than half the applicable limit, ASTM D4084, D4810, D5504, or D6228, or Gas Processors Association Standard 2377 (all of which are incorporated by reference, see §60.17), which measure the major sulfur compounds, may be used.

§60.4365 - How can I be exempted from monitoring the total sulfur content of the fuel?
“You may elect not to monitor the total sulfur content of the fuel combusted in the turbine, if the fuel is demonstrated not to exceed potential sulfur emissions of 26 ng SO\textsubscript{2}/J (0.060 lb SO\textsubscript{2}/MMBtu) heat input for units located in continental areas and 180 ng SO\textsubscript{2}/J (0.42 lb SO\textsubscript{2}/MMBtu) heat input for units located in noncontinental areas or a continental area that the Administrator determines does not have access to natural gas and that the removal of sulfur compounds would cause more environmental harm than benefit. You must use one of the following sources of information to make the required demonstration:

(a) The fuel quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the fuel, specifying that the maximum total sulfur content for oil use in continental areas is 0.05 weight percent (500 ppmw) or less and 0.4 weight percent (4,000 ppmw) or less for noncontinental areas, the total sulfur content for natural gas use in
Table IV – 5

| continental areas is 20 grains of sulfur or less per 100 standard cubic feet and 140 grains of sulfur or less per 100 standard cubic feet for noncontinental areas, has potential sulfur emissions of less than less than 26 ng SO\(_2\)/J (0.060 lb SO\(_2\)/MMBtu) heat input for continental areas and has potential sulfur emissions of less than less than 180 ng SO\(_2\)/J (0.42 lb SO\(_2\)/MMBtu) heat input for noncontinental areas."

§60.4370 - How often must I determine the sulfur content of the fuel?
“The frequency of determining the sulfur content of the fuel must be as follows:
(b) Gaseous fuel. If you elect not to demonstrate sulfur content using options in §60.4365, and the fuel is supplied without intermediate bulk storage, the sulfur content value of the gaseous fuel must be determined and recorded once per unit operating day.”

Note: The FERC Gas Tariff for Dominion Cove Point LNG requires gas delivered to Cove Point to have less than 25 grains of total sulfur per 100 ft\(^3\) of natural gas. Dominion Cove Point maintains records of the FERC Gas Tariff for gas delivered to Cove Point to comply with this requirement. Monitoring is fulfilled by the tariff.

E. Control of VOC Emissions
The Permittee shall calculate monthly VOC emissions from each combustion turbine based on the monthly fuel usage and VOC emission rate, lbs/MMBtu of heat input, collected from the stack emission testing or any other method approved by the Department. [Reference: NSR Approval #NSR-2005-01 issued 6/26/06 & COMAR 26.11.03.06C].

F. Control of Carbon Monoxide (CO) Emissions
See Table 16 for additional Monitoring Requirements (CAM).

5.4 Record Keeping Requirements:
Note: All records must be maintained for a period of at least 5 years. [Reference: COMAR 26.11.03.06C(5)(g)].

A. Control of Visible Emissions
The Permittee shall record any incidences of visible emissions and the corrective actions. [Reference: COMAR 26.11.03.06C].

B. Control of Particulate Matter Emissions
The Permittee shall maintain the following on site for at least 5 years: records of stack testing results; record of the date, time and description of maintenance performed on the combustion turbines and shall submit records to the Department upon request. [Reference: COMAR
26.11.03.06C].

C. Control of Nitrogen Oxides
The following records shall be kept on the premises for at least 5 years and shall be made available to the Department upon request:
(a) The amount of natural gas burned in each combustion turbine, million BTU per month;
(b) The amount of chemical reagent usage for NO\textsubscript{X} emission control, pounds per month;
(c) All CEM system monitoring data, which are used to demonstrate compliance with the emission limits;
(d) All stack emissions test report;
(e) NO\textsubscript{X} emission rates, pounds per million BTU of heat input, for each combustion turbine;
(f) Monthly NO\textsubscript{X} emissions from each combustion turbine.
(g) All CEM certifications and calibration results; and
(h) The repairs and maintenance made to the SCR or oxidation catalyst emission control devices or the NO\textsubscript{X} CEM system.

[Reference: MDE Permit to Construct #009-5-0049 & 5-0050 N issued on 8/6/02 (modified on 4/1/05) and NSR Approval #NSR-2005-01 issued 8/6/02]

D. Control of SO\textsubscript{X} Emissions
The Permittee shall keep records of the sulfur content value of the gaseous fuel determined and recorded once per unit operating day. [Reference: §60.4370 & COMAR 26.11.03.06C].

Note: Dominion Cove Point maintains records of the FERC Gas Tariff for gas delivered to Cove Point to comply with this requirement. Daily monitoring is not required due to the tariff.

E. Control of VOC Emissions
The Permittee shall keep records of monthly VOC emissions from each combustion turbine on the premises for at least 5 years and shall be made available to the Department upon request. [Reference: NSR Approval #NSR-2005-01 issued 6/26/06]

F. Control of Carbon Monoxide (CO) Emissions
The Permittee shall maintain records of the stack testing results on site for a period of at least 5 years and make available to the Department upon request. [Reference: COMAR 26.11.03.06C]
5.5 Reporting Requirements:

A. Control of Visible Emissions
The Permittee shall report incidences of excess emissions and related corrective actions taken in accordance with excess emissions reporting requirements. [Reference: COMAR 26.11.01.07C]

B. Control of Particulate Matter Emissions
The Permittee shall submit a test protocol to the Department, for approval, at least 30 days prior to the scheduled test date. The Permittee shall report the results of the stack tests to the Department within 60 days of completion of the tests. [Reference: COMAR 26.11.03.06C]

C. Control of Nitrogen Oxides
The Permittee shall submit a quarterly summary report to the Department not later than 30 days following each calendar quarter. The report shall be in a format approved by the Department, and shall include the following:
(i) The cause, time periods, and magnitude of all emissions which exceed the applicable emission standards;
(ii) The source downtime including the time and date of the beginning and end of each downtime period and whether the source downtime was planned or unplanned;
(iii) The time periods and cause of all CEM downtime including records of any repairs, adjustments, or maintenance that may affect the validity of emission data;
(iv) Quarterly totals of excess emissions, installation downtime, and CEM downtime during the calendar quarter;
(v) Quarterly quality assurance activities; and
(vi) Daily calibration activities that include reference values, actual values, absolute or percent of span differences, and drift status; and
(vii) Other information required by the Department that is determined to be necessary to evaluate the data, to ensure that compliance is achieved, or to determine the applicability of this regulation.” [Reference: COMAR 26.11.03.06C]

CEM System Downtime Reporting Requirement: The Permittee shall report all system downtime that lasts or is expected to last more than 24 hours to the Department by telephone before 10 a.m. of the first regular business day following the breakdown. The system breakdown report shall include the reason, if known, for the breakdown and the estimated period of time that the CEM will be down. The owner or operator of the CEM shall notify the Department by telephone when an out-of-service CEM is back in operation and producing valid data. [Reference: COMAR 26.11.03.06C]
D. Control of SO\textsubscript{X} Emissions
The Permittee shall maintain records based on the FERC Gas Tariff to comply with this requirement. The Permittee shall report records the Department upon request. \[Reference: COMAR 26.11.03.06C\]

E. Control of VOC Emissions
The Permittee shall submit to the Department no later than 30 days following each calendar quarter a quarterly report. The report shall be in a format approved by the Department and shall include monthly VOC emission calculation from each combustion turbine. \[Reference: NSR Approval #NSR-2005-01 issued 6/26/06\]

F. Control of Carbon Monoxide (CO) Emissions
The Permittee shall submit a test protocol to the Department, for approval, at least 30 days prior to the scheduled test date. The Permittee shall report the results of the stack tests to the Department within 60 days of completion of the tests. The Permittee shall report incidences of excess emissions and related corrective actions taken in accordance with excess emissions reporting requirements. \[Reference: COMAR 26.11.03.06C & COMAR 26.11.01.07C\]

A permit shield shall cover the applicable requirements of the Clean Air Act that are listed in the table above.

<table>
<thead>
<tr>
<th>Table IV – 6</th>
</tr>
</thead>
</table>

6.0 **Emissions Unit Number(s):** S011 through S017 - WEG Heaters

**S011 through S017** – (009-5-0051 through 009-5-0057).
Seven (7) Johnston water-ethylene glycol (WEG) heaters, each with a rating of 82.3 MMBtu/hr, each equipped with ultra low NO\textsubscript{X} burners (ULNB)

**Controls:** None

6.1 **Applicable Standards/Limits:**

A. Control of Visible Emissions

**COMAR 26.11.09.05 - Visible Emissions.**

“A. Fuel Burning Equipment.
(1) Areas I, II, V, and VI. In Areas I, II, V, and VI, 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 greater than 20 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 Particulate Matter Emissions
The WEG heaters are subject to PM BACT requirements listed in PSD-
2005-1: PM emission limit is 0.001 lbs/MMBtu (filterable) of heat input,
which shall be assessed by PM stack emission tests. Each vaporization
heater shall only use natural gas for fuel to meet PM BACT requirements.
[Reference: PSD Approval #PSD-2005-1].

C. Control of Nitrogen Oxides
COMAR 26.11.09.08E. - Requirements for Fuel-Burning Equipment with a
Rated Heat Input Capacity of 100 Million Btu Per Hour or Less.
“A person who owns or operates fuel-burning equipment with a rated heat
input capacity of 100 Million Btu per hour or less shall:
(1) Submit to the Department an identification of each affected installation,
the rated heat input capacity of each installation, and the type of fuel burned
in each; (Already Completed)
(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. “

The WEG heaters are subject to the NOX LAER requirements listed in NSR
Approval #NSR-2005-01 and the NOX BACT requirements listed in the PSD
Approval #PSD-2005-01: NOX emission limit is 0.012 lbs/MMBtu of heat
input which shall be assessed by NOX stack emission tests. Each of the
seven vaporization heater shall only use natural gas for fuel and shall be
equipped with ultra low NOX burners to comply with the NOX emission limits.
[Reference: NSR Approval #NSR-2005-01 & PSD Approval #PSD-2005-
01 issued 6/26/06].

<table>
<thead>
<tr>
<th>Table IV – 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>occasional cleaning of control equipment if:</td>
</tr>
<tr>
<td>(a) The visible emissions are not greater than 40 percent opacity; and</td>
</tr>
<tr>
<td>(b) The visible emissions do not occur for more than 6 consecutive minutes</td>
</tr>
<tr>
<td>in any sixty minute period. “</td>
</tr>
<tr>
<td>B. Control of Particulate Matter Emissions</td>
</tr>
<tr>
<td>The WEG heaters are subject to PM BACT requirements listed in PSD-</td>
</tr>
<tr>
<td>2005-1: PM emission limit is 0.001 lbs/MMBtu (filterable) of heat input,</td>
</tr>
<tr>
<td>which shall be assessed by PM stack emission tests. Each vaporization</td>
</tr>
<tr>
<td>heater shall only use natural gas for fuel to meet PM BACT requirements.</td>
</tr>
<tr>
<td>[Reference: PSD Approval #PSD-2005-1].</td>
</tr>
<tr>
<td>C. Control of Nitrogen Oxides</td>
</tr>
<tr>
<td>COMAR 26.11.09.08E. - Requirements for Fuel-Burning Equipment with a</td>
</tr>
<tr>
<td>Rated Heat Input Capacity of 100 Million Btu Per Hour or Less.</td>
</tr>
<tr>
<td>“A person who owns or operates fuel-burning equipment with a rated heat</td>
</tr>
<tr>
<td>input capacity of 100 Million Btu per hour or less shall:</td>
</tr>
<tr>
<td>(1) Submit to the Department an identification of each affected installation,</td>
</tr>
<tr>
<td>the rated heat input capacity of each installation, and the type of fuel burned</td>
</tr>
<tr>
<td>in each; (Already Completed)</td>
</tr>
<tr>
<td>(2) Perform a combustion analysis for each installation at least once each</td>
</tr>
<tr>
<td>year and optimize combustion based on the analysis;</td>
</tr>
<tr>
<td>(3) Maintain the results of the combustion analysis at the site for at least 2</td>
</tr>
<tr>
<td>years and make this data available to the Department and the EPA upon</td>
</tr>
<tr>
<td>request;</td>
</tr>
<tr>
<td>(4) Once every 3 years, require each operator of the installation to attend</td>
</tr>
<tr>
<td>operator training programs on combustion optimization that are sponsored</td>
</tr>
<tr>
<td>by the Department, the EPA, or equipment vendors; and</td>
</tr>
<tr>
<td>(5) Prepare and maintain a record of training program attendance for each</td>
</tr>
<tr>
<td>operator at the site, and make these records available to the Department</td>
</tr>
<tr>
<td>upon request. “</td>
</tr>
<tr>
<td>The WEG heaters are subject to the NOX LAER requirements listed in NSR</td>
</tr>
<tr>
<td>Approval #NSR-2005-01 and the NOX BACT requirements listed in the PSD</td>
</tr>
<tr>
<td>Approval #PSD-2005-01: NOX emission limit is 0.012 lbs/MMBtu of heat</td>
</tr>
<tr>
<td>input which shall be assessed by NOX stack emission tests. Each of the</td>
</tr>
<tr>
<td>seven vaporization heater shall only use natural gas for fuel and shall be</td>
</tr>
<tr>
<td>equipped with ultra low NOX burners to comply with the NOX emission limits.</td>
</tr>
<tr>
<td>[Reference: NSR Approval #NSR-2005-01 &amp; PSD Approval #PSD-2005-01 issued 6/26/06].</td>
</tr>
</tbody>
</table>
### D. Control of VOC Emissions
The WEG heaters are subject to the VOC LAER emissions limitations as listed in NSR-2005-01: VOC emission limit is 0.002 lbs/MBtu of heat input. Compliance with this emission limit shall be assessed by VOC stack emission tests. [Reference: NSR Approval #NSR-2005-01 issued 6/26/06].

### E. Control of Carbon Monoxide (CO) Emissions
The WEG heaters are subject to the CO BACT requirements listed in the PSD Approval #PSD-2005-01: CO emission limit is 0.03 lbs/MBtu of heat input, assessed by CO stack emission tests. Each vaporization heater shall only use natural gas for fuel and shall operate within the appropriate ranges of good operating parameters established during performance tests to meet the CO BACT requirements. [Reference: PSD Approval #PSD-2005-01 issued 6/26/06]

### F. NSPS for PM and SOx Emissions
40 CFR Part 60 Subpart Dc—Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

**§60.40c - Applicability and delegation of authority.**
(a) Except as provided in paragraphs (d), (e), (f), and (g) of this section, the affected facility to which this subpart applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/h)) or less, but greater than or equal to 2.9 MW (10 MMBtu/h). Since the heaters are fired on natural gas only, the record keeping and reporting requirements §60.48c apply.

<table>
<thead>
<tr>
<th>Table IV – 6</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>D. Control of VOC Emissions</strong></td>
</tr>
<tr>
<td>The WEG heaters are subject to the VOC LAER emissions limitations as listed in NSR-2005-01: VOC emission limit is 0.002 lbs/MBtu of heat input. Compliance with this emission limit shall be assessed by VOC stack emission tests. [Reference: NSR Approval #NSR-2005-01 issued 6/26/06].</td>
</tr>
</tbody>
</table>

| **E. Control of Carbon Monoxide (CO) Emissions** |
| The WEG heaters are subject to the CO BACT requirements listed in the PSD Approval #PSD-2005-01: CO emission limit is 0.03 lbs/MBtu of heat input, assessed by CO stack emission tests. Each vaporization heater shall only use natural gas for fuel and shall operate within the appropriate ranges of good operating parameters established during performance tests to meet the CO BACT requirements. [Reference: PSD Approval #PSD-2005-01 issued 6/26/06] |

| **F. NSPS for PM and SOx Emissions** |
| 40 CFR Part 60 Subpart Dc—Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units |

**§60.40c - Applicability and delegation of authority.**
(a) Except as provided in paragraphs (d), (e), (f), and (g) of this section, the affected facility to which this subpart applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/h)) or less, but greater than or equal to 2.9 MW (10 MMBtu/h). Since the heaters are fired on natural gas only, the record keeping and reporting requirements §60.48c apply.

| **Testing Requirements:** |
| A. Control of Visible Emissions |
| See Record Keeping Requirements. |

| B. Control of Particulate Matter Emissions |
| See Monitoring Requirements. |

| C. Control of Nitrogen Oxides |
| See Monitoring Requirements. |

| D. Control of VOC Emissions |
| See Monitoring Requirements. |

---

Page 64 of 123
### Table IV – 6

<table>
<thead>
<tr>
<th></th>
<th>Monitoring Requirements:</th>
</tr>
</thead>
<tbody>
<tr>
<td>E.</td>
<td>Control of Carbon Monoxide (CO) Emissions</td>
</tr>
<tr>
<td></td>
<td>See Monitoring Requirements.</td>
</tr>
<tr>
<td>F.</td>
<td>NSPS for PM and SO(_x) Emissions</td>
</tr>
<tr>
<td></td>
<td>See Record Keeping Requirements.</td>
</tr>
</tbody>
</table>

#### 6.3 Monitoring Requirements:

A. **Control of Visible Emissions**
   See Record Keeping Requirements.

B. **Control of Particulate Matter Emissions**
   The Permittee shall perform routine and preventative maintenance in accordance with manufacturer’s specifications. *Reference: COMAR 26.11.03.06C*

C. **Control of Nitrogen Oxides**
   The Permittee shall perform combustion analysis on the WEG heaters at least once per year and optimize combustion based on the analysis. *Reference: COMAR 26.11.09.08E(2)*

D. **Control of VOC Emissions**
   The Permittee shall perform routine and preventative maintenance in accordance with manufacturer’s specifications. *Reference: COMAR 26.11.03.06C*

E. **Control of Carbon Monoxide (CO) Emissions**
   The Permittee shall perform routine and preventative maintenance in accordance with manufacturer’s specifications. *Reference: COMAR 26.11.03.06C*

F. **NSPS for PM and SO\(_x\) Emissions**
   See Record keeping Requirements

#### 6.4 Record Keeping Requirements:

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

A. **Control of Visible Emissions**
   The Permittee shall record any incidences of visible emissions and the corrective actions. *Reference: COMAR 26.11.03.06C*.
### Table IV – 6

<table>
<thead>
<tr>
<th>B. Control of Particulate Matter Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Permittee shall maintain a record of the date, time and description of maintenance performed on the WEG heaters and shall submit records to the Department upon request. [Reference: COMAR 26.11.03.06C]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>C. Control of Nitrogen Oxides</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Permittee shall maintain the following records on-site for a period of at least five years and make available to the Department upon request:</td>
</tr>
<tr>
<td>(1) Monthly natural gas usage in millions BTU per month for each WEG heater.</td>
</tr>
<tr>
<td>(2) NO\textsubscript{X} emission rates, lbs/MBBtu of heat input for each WEG heater.</td>
</tr>
<tr>
<td>(3) Monthly NO\textsubscript{X} emissions from each WEG heater.</td>
</tr>
<tr>
<td>(4) Training program attendance for each operator at the site and make these records available to the Department upon request.</td>
</tr>
<tr>
<td>(5) Results of combustion analysis.</td>
</tr>
<tr>
<td>(6) Record of the date, time and description of maintenance performed on the vaporizers and shall submit records to the Department upon request [Reference: MDE Permit to Construct No. 009-5-0051 to 0057N issued 6/26/06; COMAR 26.11.03.06C]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>D. Control of VOC Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Permittee shall maintain for at least 5 years the following: records of lb/MBBtu VOC emission rates from each WEG heater; and record of the date, time and description of maintenance performed on the WEG heaters and shall submit records to the Department upon request. [Reference: COMAR 26.11.03.06C &amp; NSR Approval #NSR-2005-01 issued 6/26/06]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>E. Control of Carbon Monoxide (CO) Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Permittee shall maintain a record of the date, time and description of maintenance performed on the WEG heaters and shall submit records to the Department upon request. [Reference: COMAR 26.11.03.06C]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>F. NSPS for PM and SO\textsubscript{X} Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>§60.48c - Reporting and recordkeeping requirements.</td>
</tr>
<tr>
<td>“(g)(1) Except as provided under paragraphs (g)(2) and (g)(3) of this section, the owner or operator of each affected facility shall record and maintain records of the amount of each fuel combusted during each operating day.”</td>
</tr>
</tbody>
</table>

---

Page 66 of 123
### 6.5 Reporting Requirements:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Control of Visible Emissions</td>
<td>The Permittee shall report incidences of excess emissions and related corrective actions taken in accordance with excess emissions reporting requirements. [Reference: COMAR 26.11.01.07C]</td>
</tr>
<tr>
<td>B. Control of Particulate Matter Emissions</td>
<td>The Permittee shall submit records of maintenance performed on the WEG heaters upon request. [Reference: COMAR 26.11.03.06C]</td>
</tr>
<tr>
<td>C. Control of Nitrogen Oxides</td>
<td>The Permittee shall submit:</td>
</tr>
<tr>
<td></td>
<td>(1) The results of combustion analysis to the department and the EPA upon request. [Reference: COMAR 26.11.09.08E(3)]</td>
</tr>
<tr>
<td></td>
<td>(2) A record of training program attendance for each operator to the Department upon request. [Reference: COMAR 26.11.09.08E(5)].</td>
</tr>
<tr>
<td>D. Control of VOC Emissions</td>
<td>See Record Keeping Requirements.</td>
</tr>
<tr>
<td>E. Control of Carbon Monoxide (CO) Emissions</td>
<td>See Record Keeping Requirements.</td>
</tr>
<tr>
<td>F. NSPS for PM and SO(_x) Emissions</td>
<td>§60.48c - Reporting and recordkeeping requirements. Not Applicable.</td>
</tr>
</tbody>
</table>

A permit shield shall cover the applicable requirements of the Clean Air Act that are listed in the table above.
### Table IV – 7

<table>
<thead>
<tr>
<th>7.0</th>
<th><strong>Emissions Unit Number(s): S018 – Heaters</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>S018</strong> – (009-5-0058). One (1) emergency vent heater rated at 1.3 MMBtu/hr equipped with low-(\text{NO}_x) burners (LNB). <strong>Controls:</strong> None</td>
</tr>
</tbody>
</table>

#### 7.1 **Applicable Standards/Limits:**

A. Control of Visible Emissions

**COMAR 26.11.09.05 - Visible Emissions.**

“A. Fuel Burning Equipment.

(1) Areas I, II, V, and VI. In Areas I, II, V, and VI, 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 greater than 20 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 Particulate Matter Emissions

The emergency vent heater is subject to the PM BACT requirements listed in the PSD Approval #PSD-2005-01: PM emission limit of 0.008 lbs/MMBtu (filterable) of heat input. Compliance to be achieved by use of natural gas as fuel and good combustion practices. [Reference: PSD Approval #PSD-2005-01 issued 6/26/06]]

C. Control of Nitrogen Oxides

The emergency vent heater must also meet the BACT and LAER requirements as set forth in PSD-2005-01 and NSR-2005-01; NO\(x\) emission limit of 0.036 lbs/MMBtu of heat input on a 3-hour average basis. Compliance to be achieved by use of natural gas as fuel, low NO\(x\) burner and good combustion practices [Reference: NSR Approval #NSR-2005-01 & PSD Approval #PSD-2005-01 issued 6/26/06]]

D. Control of VOC Emissions

The emergency vent heater is subject to the VOC LAER emissions limit listed in the NSR Approval #NSR-2005-01: VOC emissions limit of 0.0054 lbs/MMBtu on a 3-hour average basis. [Reference: NSR Approval #NSR-
### Table IV – 7

**2005-01 issued 6/26/06].**

E. **Control of Carbon Monoxide Emissions**  
The emergency vent heater is subject to the CO BACT requirements listed in the PSD Approval #PSD-2005-01: CO emissions limit of 0.082 lbs/MMBtu. Compliance to be achieved by use of natural gas as fuel and good combustion practices. [Reference: PSD Approval #PSD-2005-01 issued 6/26/06]

---

**7.2 Testing Requirements:**

- **A. Control of Visible Emissions**  
  See Record Keeping Requirements.

- **B. Control of Particulate Matter Emissions**  
  See Reporting Requirements.

- **C. Control of Nitrogen Oxides**  
  See Record Keeping Requirements.

- **D. Control of VOC Emissions**  
  See Record Keeping Requirements.

- **E. Control of Carbon Monoxide Emissions**  
  See Reporting Requirements.

---

**7.3 Monitoring Requirements:**

- **A. Control of Visible Emissions**  
  See Record Keeping Requirements.

- **B. Control of Particulate Matter Emissions**  
  See Reporting Requirements.

- **C. Control of Nitrogen Oxides**  
  See Record Keeping Requirements.

- **D. Control of VOC Emissions**  
  See Record Keeping Requirements.

- **E. Control of Carbon Monoxide Emissions**  
  See Reporting Requirements.
7.4 Record Keeping Requirements:

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

A. Control of Visible Emissions
The Permittee shall keep record of incidences of visible emissions and the corrective actions. **[Reference: COMAR 26.11.03.06C]**

B. Control of Particulate Matter Emissions
See Reporting Requirements.

C. Control of Nitrogen Oxides
The Permittee shall maintain the following records on-site for a period of at least five years and make available to the Department upon request:
(7) Monthly natural gas usage in millions BTU per month for the emergency vent heater.
(8) NO\textsubscript{X} emission rates, lbs/MMBtu of heat input for the emergency vent heater. **[Reference: MDE Permit to Construct No. 009-5-0058N issued 6/26/06]**

D. Control of VOC Emissions
The Permittee shall maintain the following records on-site for a period of at least five years and make available to the Department upon request:
(1) Monthly VOC emissions from the emergency vent heater based on the monthly natural gas usage.
(2) VOC emission rates, lbs/MMBtu of heat input for the emergency vent heater based on vendor data or any other method approved by the Department. **[Reference: MDE Permit to Construct #009-5-0058N issued 06/26/06 and NSR Approval #NSR-2005-01 issued 06/26/06]**

E. Control of Carbon Monoxide Emissions
See Reporting Requirements.

7.5 Reporting Requirements:

A. Control of Visible Emissions
The Permittee shall report incidences of excess emissions and related corrective actions taken in accordance with excess emissions reporting requirements. **[Reference: COMAR 26.11.01.07C]**

B. Control of Particulate Matter Emissions
The Permittee shall report incidences of excess emissions and related
Table IV – 7

Corrective actions taken in accordance with excess emissions reporting requirements. **[Reference: COMAR 26.11.01.07C]**

C. **Control of Nitrogen Oxides**
   See Record Keeping Requirements.

D. **Control of VOC Emissions**
   See Record Keeping Requirements.

E. **Control of Carbon Monoxide Emissions**
   The Permittee shall report incidences of excess emissions and related corrective actions taken in accordance with excess emissions reporting requirements. **[Reference: COMAR 26.11.01.07C]**

A permit shield shall cover the applicable requirements of the Clean Air Act that are listed in the table above.

Table IV – 8

8.0 **Emissions Unit Number(s): S019 & S020 – Emergency Generators**

   **S019 & S020** – (009-9-0071 & 009-9-0072).
   Two (2) natural gas-fired emergency generators, each with a rating of 1175 hp (825 kW).
   **Controls:** None

8.1 **Applicable Standards/Limits:**

   A. **Control of Visible Emissions**
      COMAR 26.11.09.05 - Visible Emissions.
   
   E. Stationary Internal Combustion Engine Powered Equipment.

   “(2) **Emissions During Idle Mode**. A person may not cause or permit the discharge of emissions from any engine, operating at idle, greater than 10 percent opacity.

   (3) **Emissions During Operating Mode**. A person may not cause or permit the discharge of emissions from any engine, operating at other than idle conditions, greater than 40 percent opacity.

   (4) **Exceptions**.
      (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...
Table IV – 8

<table>
<thead>
<tr>
<th>periods:</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) Engines that are idled continuously when not in service: 30 minutes;</td>
</tr>
<tr>
<td>(ii) All other engines: 15 minutes.</td>
</tr>
<tr>
<td>(c) Section E(2) and (3) of this regulation do not apply while maintenance, repair, or testing is being performed by qualified mechanics. “</td>
</tr>
</tbody>
</table>

B. Control of Particulate Matter Emissions
The emergency generators are subject to PM BACT emission standards as listed in PSD-2005-01: PM emissions limit of 0.12 lb/MW-hr (filterable) to be achieved by natural gas as only and a limit on operations to no more than 200 hours during any consecutive 12-month period. [Reference: PSD Approval #PSD-2005-1 issued on 6/26/06].

C. Control of Nitrogen Oxides
The Permittee is subject to the NO\textsubscript{X} BACT and LAER emission standards listed in the PSD-2005-01 and NSR-2005-01: NO\textsubscript{X} emission limit of 2.0 g/bhp-hr (6.3 lbs/MW-hr) on a 3-hour average basis. Compliance achieved by good combustion practices; proper operation and maintenance plan; and a limit on operations of no more than 200 hours during any consecutive 12-month period. [Reference: PSD Approval #PSD-2005-1 & NSR Approval #NSR-2005-01 issued on 6/26/06]].

D. Control of VOC Emissions
The emergency generators are subject to VOC LAER limit as listed in NSR Approval #NSR-2005-01: VOC emissions limit of 2.35 lbs/MW-hr on a 3-hour average basis. Each generator shall not operate more than 200 hours for any 12-month period, rolling monthly. [Reference: NSR Approval #NSR-2005-01 issued on 6/26/06]].

E. Control of Carbon Monoxide Emissions
The emergency generators are subject to the CO BACT requirements listed in the PSD Approval #PSD-2005-01: CO emissions limit of 5.45 lbs/MW-hr to be achieved by natural gas as only and a limit on operations to no more than 200 hours during any consecutive 12-month period. [Reference: PSD Approval #PSD-2005-01 issued on 6/26/06]].

8.2 Testing Requirements:

A. Control of Visible Emissions
See Record Keeping Requirements.

B. Control of Particulate Matter Emissions
See Record Keeping Requirements.
Table IV – 8

C. Control of Nitrogen Oxides
   See Record Keeping Requirements.

D. Control of VOC Emissions
   See Record Keeping Requirements.

E. Control of Carbon Monoxide Emissions
   See Record Keeping Requirements.

8.3 Monitoring Requirements:

   A. Control of Visible Emissions
      See Record Keeping Requirements.

   B. Control of Particulate Matter Emissions
      See Record Keeping Requirements.

   C. Control of Nitrogen Oxides
      The Permittee shall calculate monthly NO\textsubscript{X} emissions from the natural gas
      fired emergency generators based on the monthly natural gas usage (or
      monthly operating hours) and the NO\textsubscript{X} emission rate, pounds per hour,
      based upon vendor guarantees. [Reference: NSR Approval NSR-2005-01
      issued 6/26/2006]

   D. Control of VOC Emissions
      The Permittee shall calculate monthly VOC emissions from the natural gas
      fired emergency generators based on the monthly natural gas usage (or
      monthly operating hours) and the VOC emission rate, pounds per hour,
      based upon vendor guarantees. [Reference: NSR Approval NSR-2005-01
      issued 6/26/2006]

   E. Control of Carbon Monoxide Emissions
      See Record Keeping Requirements.

8.4 Record Keeping Requirements:

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

   A. Control of Visible Emissions
      The Permittee shall keep records of incidences of visible emissions and
      corrective actions. [Reference: COMAR 26.11.03.06C]
### B. Control of Particulate Matter Emissions
The Permittee shall maintain records of the hours of operation for the generators on site and make available to the Department upon request.  
[Reference: COMAR 26.11.03.06C & PSD Approval #PSD-2005-01 issued 6/26/06]

### C. Control of Nitrogen Oxides
The Permittee shall maintain records of the following for each emergency generator: monthly natural gas usage, million Btu per hour; NOX emission rates, pounds per million Btu of heat input; and annual operating hours.  
[Reference: NSR Approval #NSR-2005-01 & PSD Approval #PSD-2005-01 issued 6/26/06]

### D. Control of VOC Emissions
The Permit shall maintain records of monthly natural gas usage in million Btu per month for each natural gas fired emergency generator on site and make available to the Department upon request.  
[Reference: NSR Approval #NSR-2005-01 issued 6/26/06]

### E. Control of Carbon Monoxide Emissions
The Permittee shall maintain records of the hours of operation for the generators on site and make available to the Department upon request.  
[Reference: COMAR 26.11.03.06C & PSD Approval #PSD-2005-01 issued 6/26/06]

<table>
<thead>
<tr>
<th>8.5 Reporting Requirements:</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Control of Visible Emissions</td>
</tr>
<tr>
<td>The Permittee shall report incidences of excess emissions and related corrective actions taken in accordance with excess emissions reporting requirements.</td>
</tr>
<tr>
<td>[Reference: COMAR 26.11.01.07C]</td>
</tr>
<tr>
<td>B. Control of Particulate Matter Emissions</td>
</tr>
<tr>
<td>The Permittee shall report incidences of excess emissions and related corrective actions taken in accordance with excess emissions reporting requirements.</td>
</tr>
<tr>
<td>[Reference: COMAR 26.11.01.07C]</td>
</tr>
<tr>
<td>C. Control of Nitrogen Oxides</td>
</tr>
<tr>
<td>See Record Keeping Requirements.</td>
</tr>
<tr>
<td>D. Control of VOC Emissions</td>
</tr>
<tr>
<td>See Record Keeping Requirements.</td>
</tr>
</tbody>
</table>
Table IV – 8

E. Control of Carbon Monoxide Emissions
The Permittee shall report incidences of excess emissions and related corrective actions taken in accordance with excess emissions reporting requirements. [Reference: COMAR 26.11.01.07C]

A permit shield shall cover the applicable requirements of the Clean Air Act that are listed in the table above.

Table IV – 9

9.0 Emissions Unit Number(s): S001 through S020, FL1-FL6: Premise-wide Reactivation

S001, S002, & S003 – (009-5-0012, 009-5-0013, & 009-5-0014 formerly 009-9-0032 to 9-0034).
Three (3) natural gas-fired, simple-cycle General Electric Frame 3 combustion turbines (model MS3142), each with a maximum rating of 135.6 MMBTU/hr – used to generate electricity.

S004 – (009-5-0016 through 009-5-0025).
Ten (10) T-Thermal (model HV-12049) natural gas-fired submerged combustion vaporizers (SCV), each with a rating of 72 MMBtu/hr, equipped with a water injection system.: – Used to vaporize LNG

S005 – (009-5-0015).
One (1) Black, Sivalls & Bryson (model 2500 SGIH) natural gas-fired LNG emergency vent heater rated at 2.32 MM BTU/hr.: – Used, under emergency conditions, to heat cold natural gas vapor for venting to the atmosphere

S006 – (009-9-0022).
One (1) HEATEC (model HCI-6010-50G) natural gas-fired Liquefaction heater rated at 8.9 MM BTU/hr – Used to supply heat for regenerating zeolite molecular sieve used for cleaning pipeline gas

S007 & S008 – (009-5-0032 & 009-5-0033).
Two (2) Johnston Boiler Co. (PFTA-300-4-G) natural gas-fired packaged fire tube hot water boilers, each with a rating of 12.3 MMBTU/hr and equipped with low-NOx burner: – Used to heat water-glycol mixture to enable heat exchangers to heat natural gas for use at the facility.

FL1-FL6 – (009-0021-9-0022)
Liquefaction equipment components (LEC)
**Table IV – 9**

<table>
<thead>
<tr>
<th>Cove Point Expansion (CPX)</th>
</tr>
</thead>
<tbody>
<tr>
<td>S009 &amp; S010 – (009-5-0049 &amp; 009-5-0050).</td>
</tr>
<tr>
<td>Two (2) General Electric Frame 5 Turbine natural gas-fired simple-cycle with a maximum rating of 302 MMBtu/hr equipped with dry-low NOₓ combustion (DLN), SCR and oxidation catalyst (OC)</td>
</tr>
</tbody>
</table>

| S011 through S017 – (009-5-0051 through 009-5-0057). |
| Seven (7) Johnston water-ethylene glycol (WEG) heaters, each with a rating of 82.3 MMBtu/hr, each equipped with ultra low NOₓ burners (ULNB) |

| S018 – (009-5-0058). |
| One (1) emergency vent heater rated at 1.3 MMBtu/hr equipped with low-NOₓ burners (LNB) |

| Two (2) natural gas-fired emergency generators, each with a rating of 1175 hp (825 kW). |

### 9.1 Applicable Standards/Limits:

**A. Control of VOC Emissions**

The VOC emissions are limited to **33.8 tons** for any 12-month period rolling monthly for emission units associated with the 2002 re-activation project and the CPX expansion. The VOC emissions are limited to **48.7 tons** for any 12-month period, rolling monthly, for the re-activation sources only.

[Reference: NSR Approval #NSR-2005-01 issued 6/26/06 & MDE Permit to Construct Number 009-9-0032 to 9-0034 issued on 8/6/02 (modified on 4/1/05) & MDE Permit to Construct Number 009-0021-5-0032 & 009-0021-5-0033 issued on 6/21/12)].

**B. Control of Nitrogen Oxides**

The NOₓ emissions are limited to **337.6 tons** for any 12-month period rolling monthly for emission units associated with 2002 re-activation project and the CPX expansion.  

[Reference: NSR Approval #NSR-2005-01 issued on 6/26/06)].

**For EU-S001 through S008, FL1-FFL6 only**

The NSR premises-wide NOₓ emissions are limited to **278.8 tons** for any 12-month period rolling monthly for emission units associated with 2002 re-activation project.  

[Reference: NSR Approval #NSR-2002-01 issued on 8/6/02)].
<table>
<thead>
<tr>
<th>Section</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>9.2 Testing Requirements:</strong></td>
<td></td>
</tr>
<tr>
<td>A. Control of VOC Emissions</td>
<td>See Record Keeping Requirements.</td>
</tr>
<tr>
<td>B. Control of Nitrogen Oxides</td>
<td>See Record Keeping Requirements.</td>
</tr>
<tr>
<td><strong>8.3 Monitoring Requirements:</strong></td>
<td></td>
</tr>
<tr>
<td>A. Control of VOC Emissions</td>
<td>See Record Keeping Requirements.</td>
</tr>
<tr>
<td>B. Control of Nitrogen Oxides</td>
<td>See Record Keeping Requirements.</td>
</tr>
<tr>
<td><strong>9.4 Record Keeping Requirements:</strong></td>
<td><strong>Note</strong>: All records must be maintained for a period of at least 5 years.</td>
</tr>
<tr>
<td>A. Control of VOC Emissions</td>
<td>The Permit shall maintain records of premise-wide VOC emissions (from combustion turbines, vaporizers) for any 12-month period, rolling monthly on site for at least 5 years and make available to the Department upon request. [Reference: NSR Approval #NSR-2005-01 issued 6/26/06]</td>
</tr>
<tr>
<td>B. Control of Nitrogen Oxides</td>
<td>The Permittee shall maintain records for the Expansion project premise-wide NO\textsubscript{X} emissions for any 12-month period, rolling monthly on site and make available to the Department upon request. [Reference: COMAR 26.11.03.06C]</td>
</tr>
<tr>
<td><strong>For EU-S001 through S008, FL1-FFL6 only</strong></td>
<td>The Permittee shall maintain records of premise-wide NO\textsubscript{X} emissions for any 12-month period, rolling monthly on site and make available to the Department upon request. [Reference: COMAR 26.11.03.06C]</td>
</tr>
<tr>
<td></td>
<td>The Permittee shall maintain monthly natural gas usage, million BTU per month, and monthly NO\textsubscript{X} emissions from the liquefaction heater and each boiler on site for at least 5 years and shall make it available to the Department upon request. [PSD Approval #PSD-2002-1 and NSR Approval #NSR-2002-01 issued on 8/6/02]</td>
</tr>
</tbody>
</table>
9.5 **Reporting Requirements:**

A. **Control of VOC Emissions**
   The Permittee shall submit to the Department no later than 30 days following each calendar quarter a quarterly report. The report shall be in a format approved by the Department and shall include monthly and rolling 12-month VOC emission calculated from each combustion turbine, each vaporizer, each emergency vent heater and each emergency generator.

[Reference: COMAR 26.11.03.06C & NSR Approval #NSR-2005-01 issued 6/26/06]

B. **Control of Nitrogen Oxides**
   The Permittee shall submit to the Department no later than 30 days following each calendar quarter a quarterly summary report. The report shall be in a format approved by the Department and shall include the following:
   (a) Expansion project NO\textsubscript{X} emissions for each calendar month and each rolling 12-month period for the previous calendar quarter.
   (b) The cause, time periods, except start-up and shut-down phases, and magnitude of all emissions which exceed the applicable standards.
   (c) The source downtime including the time and date of the beginning and end of each downtime period and whether the source downtime was planned or unplanned for the following emission units: S001 thru S004, S009 & S010, and S011 thru S017.
   (d) Other information required by the Department that is determined to be necessary to evaluate the data, to ensure that compliance is achieved, or to determine the applicability of this requirement.

[Reference: COMAR 26.11.03.06C & NSR Approval #NSR-2005-01 issued 6/26/06]

A permit shield shall cover the applicable requirements of the Clean Air Act that are listed in the table above.
<table>
<thead>
<tr>
<th>10.0</th>
<th>Emissions Unit Number(s): S021 – Combustion Turbine</th>
</tr>
</thead>
</table>
|      | **S021** – (009-5-0065)  
One (1) natural gas-fired, Solar Titan turbine with maximum rating of 137 MMBtu/hr equipped with DLN combustors, SCR, and oxidation catalyst.  
**Controls:** DLN, SCR and OC |

<table>
<thead>
<tr>
<th>10.1</th>
<th>Applicable Standards/Limits:</th>
</tr>
</thead>
</table>
|      | A. Control of Visible Emissions  
**COMAR 26.11.09.05 - Visible Emissions.**  
“A. Fuel Burning Equipment.  
(1) Areas I, II, V, and VI. In Areas I, II, V, and VI, 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 greater than 20 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 Particulate Matter Emissions  
The Solar combustion turbine is subject to PM\(_{10}\) BACT requirements listed in the CPCN Case No. 9055 Licensing Conditions: PM\(_{10}\) emission limit of 0.0066 lbs/MMBtu on a 3-hour average to be achieved by exclusive use of pipeline quality, low sulfur natural gas.  
[Reference: CPCN Case No. 9055, issued 8/15/06]. |
|      | C. Control of Nitrogen Oxides  
**COMAR 26.11.09.08G. - Requirements for Fuel-Burning Equipment with a Capacity Factor of 15 Percent or Less, and Combustion Turbines with a Capacity Factor Greater than 15 Percent.**  
“(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. “ |
Table IV – 10


Emission Limits
§60.4315 - What pollutants are regulated by this subpart?
The pollutants regulated by this subpart are nitrogen oxide (NO\textsubscript{X}) and sulfur dioxide (SO\textsubscript{2}).

§60.4320 - What emission limits must I meet for nitrogen oxides (NO\textsubscript{X})?
You must meet the emission limits for NO\textsubscript{X} specified in Table 1 to this subpart.

<table>
<thead>
<tr>
<th>Combustion turbine type</th>
<th>Combustion turbine heat input at peak load (HHV)</th>
<th>NO\textsubscript{X} emission standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>New turbine firing natural gas</td>
<td>&gt; 50 MM Btu/h and ≤ 850 MM Btu/h</td>
<td>25 ppm at 15 percent O\textsubscript{2} or 150 ng/J of useful output (1.2 lb/MWh).</td>
</tr>
</tbody>
</table>

The Solar combustion turbine is subject to the NO\textsubscript{X} LAER requirements and the NO\textsubscript{X} BACT requirements listed in the CPCN Case No. 9055: NO\textsubscript{X} emission limit of 5.0 ppmvd corrected to 15% oxygen on a 1-hour average basis during base-load operating conditions to be achieved by exclusive use of pipeline quality, low sulfur natural gas; low-NO\textsubscript{X} combustion design and operation of selective catalytic reduction system.

Emissions are subject to startup and shutdown conditions as listed in the same permit: NO\textsubscript{X} emissions are limited to 12.8 tons for any 12-month period rolling monthly for emission units associated with the ASU project [Reference: CPCN Case No. 9055 issued 8/15/06].

“Baseload operating conditions” is defined as the turbine operating condition where the dry low-NO\textsubscript{X} combustors functions effectively at or above 50% load.

D. Control of SO\textsubscript{2} Emissions
§60.4330 - What emission limits must I meet for sulfur dioxide (SO\textsubscript{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. If your turbine is located in Alaska, you do not have to comply with the requirements in paragraph (a) of this section until January 1, 2008.

(1) You must not cause to be discharged into the atmosphere from the subject stationary combustion turbine any gases which contain SO\textsubscript{2} in excess of 110 nanograms per Joule (ng/J) (0.90 pounds per megawatt-hour (lb/MWh)) gross output.
Table IV – 10

(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.

E. Control of VOC Emissions
The Solar combustion turbine is subject to the VOC LAER requirements listed in the CPCN Case No. 9055: VOC emission limit of 0.7 lb/hr on a 3-hour average basis at loads of 75% or greater and 0.6 lbs/hr on a 3-hour average basis at loads less than 75%.
Emissions are subject to startup and shutdown conditions as listed in the same permit: VOC emissions are limited to 3.7 tons for any 12-month period rolling monthly for emission units associated with the ASU project. [Reference: CPCN Case No. 9055 issued 8/15/06].

F. Control of Carbon Monoxide (CO) Emissions
The Solar combustion turbine is subject to the CO BACT requirements listed in the CPCN Case No. 9055 Licensing Conditions: CO emission limit of 6.0 ppmvd corrected to 15% oxygen on a 3-hour average basis to be achieved by use of good combustion practices and operation of oxidation catalyst system. [Reference: CPCN Case No. 9055 issued 8/15/06]

10.2 Testing Requirements:

A. Control of Visible Emissions
See Record Keeping Requirements.

B. Control of Particulate Matter Emissions
The Permittee shall perform stack testing to demonstrate compliance with PM emission limit in the exhaust gases of the stack of at least one of the combustion turbines at the facility once during the term of this permit. During the stack emission testing, the combustion turbine shall be operating at 90% or higher of its rated capacity. [Reference: CPCN Case No. 9055 issued 8/15/06 & COMAR 26.11.03.06C]

C. Control of Nitrogen Oxides
The Permittee shall conduct performance test for NO$_x$ in accordance with the methodologies specified in 40 CFR §60.4340 & §60.4400. §60.4340 - How do I demonstrate continuous compliance for NO$_x$ if I do not use water or steam injection?
“(b) As an alternative, you may install, calibrate, maintain and operate one of the following continuous monitoring systems:
Table IV – 10

(1) Continuous emission monitoring as described in §60.4335(b) and §60.4345 ……”

D. Control of SO\textsubscript{X} Emissions
The Permittee shall conduct performance test for SO\textsubscript{X} in accordance with the methodologies specified in 40 CFR §60.4415. Note: Dominion Cove Point LNG maintains records of the FERC Gas Tariff for gas delivered to Cove Point to comply with this requirement. Performance tests are satisfied by the tariff.

E. Control of VOC Emissions
The Permittee shall perform stack testing to demonstrate compliance with VOC emission limit in the exhaust gases of the stack of the combustion turbine once during the term of this permit. During the stack emission testing, the combustion turbine shall be operating at 90% or higher of its rated capacity. [Reference: CPCN Case No. 9055 issued 8/15/06 & COMAR 26.11.03.06C]

F. Control of Carbon Monoxide (CO) Emissions
The Permittee shall perform stack testing to demonstrate compliance with CO BACT emission limit in the exhaust gases of the stack of the combustion turbine once during the term of this permit. During the stack emission testing, the combustion turbine shall be operating at 90% or higher of its rated capacity. [Reference: CPCN Case No. 9055 issued 8/15/06 & COMAR 26.11.05.06C]

10.3 Monitoring Requirements:

A. Control of Visible Emissions
See Record Keeping Requirements.

B. Control of Particulate Matter Emissions
The Permittee shall perform routine and preventative maintenance in accordance with manufacturer’s specifications. [Reference: COMAR 26.11.03.06C]

C. Control of Nitrogen Oxides
The Permittee shall continuously monitor the NO\textsubscript{X} emission of the stack gases using a NO\textsubscript{X} Continuous Emission Monitor (CEM) that is certified in accordance 40 CFR Part 60, Appendix B, or Part 75, Appendix A and meet the quality assurance criteria in 40 CFR Part 60, Appendix F. [Reference: COMAR 26.11.09.08(B)(2)(b&c)]
Table IV – 10

The Permittee shall demonstrate continuous compliance with NO\textsubscript{x} in accordance with 40 CFR §60.4340 as follows:

“(b) As an alternative, you may install, calibrate, maintain and operate one of the following continuous monitoring systems:
(1) Continuous emission monitoring as described in §60.4335(b) and §60.4345......”

D. Control of SO\textsubscript{x} Emissions

\textbf{§60.4360 - How do I determine the total sulfur content of the turbine’s combustion fuel?}

You must monitor the total sulfur content of the fuel being fired in the turbine, except as provided in §60.4365. The sulfur content of the fuel must be determined using total sulfur methods described in §60.4415. Alternatively, if the total sulfur content of the gaseous fuel during the most recent performance test was less than half the applicable limit, ASTM D4084, D4810, D5504, or D6228, or Gas Processors Association Standard 2377 (all of which are incorporated by reference, see §60.17), which measure the major sulfur compounds, may be used.

\textbf{§60.4365 - How can I be exempted from monitoring the total sulfur content of the fuel?}

“You may elect not to monitor the total sulfur content of the fuel combusted in the turbine, if the fuel is demonstrated not to exceed potential sulfur emissions of 26 ng SO\textsubscript{2}/J (0.060 lb SO\textsubscript{2}/MMBtu) heat input for units located in continental areas and 180 ng SO\textsubscript{2}/J (0.42 lb SO\textsubscript{2}/MMBtu) heat input for units located in noncontinental areas or a continental area that the Administrator determines does not have access to natural gas and that the removal of sulfur compounds would cause more environmental harm than benefit. You must use one of the following sources of information to make the required demonstration:
(a) The fuel quality characteristics in a current, valid purchase contract, \textbf{tariff sheet} or transportation contract for the fuel, specifying that the maximum total sulfur content for oil use in continental areas is 0.05 weight percent (500 ppmw) or less and 0.4 weight percent (4,000 ppmw) or less for noncontinental areas, the total sulfur content for natural gas use in continental areas is 20 grains of sulfur or less per 100 standard cubic feet and 140 grains of sulfur or less per 100 standard cubic feet for noncontinental areas, has potential sulfur emissions of less than less than 26 ng SO\textsubscript{2}/J (0.060 lb SO\textsubscript{2}/MMBtu) heat input for continental areas and has potential sulfur emissions of less than less than 180 ng SO\textsubscript{2}/J (0.42 lb SO\textsubscript{2}/MMBtu) heat input for noncontinental areas.”
Table IV – 10

§60.4370 - How often must I determine the sulfur content of the fuel?

“The frequency of determining the sulfur content of the fuel must be as follows:

(b) Gaseous fuel. If you elect not to demonstrate sulfur content using options in §60.4365, and the fuel is supplied without intermediate bulk storage, the sulfur content value of the gaseous fuel must be determined and recorded once per unit operating day.”

Note: The FERC Gas Tariff for Dominion Cove Point LNG requires gas delivered to Cove Point to have less than 25 grains of total sulfur per 100 ft³ of natural gas. Dominion Cove Point maintains records of the FERC Gas Tariff for gas delivered to Cove Point to comply with this requirement. Monitoring is fulfilled by the tariff.

E. Control of VOC Emissions

The Permittee shall calculate monthly VOC emissions from each combustion turbine based on the monthly fuel usage and VOC emission rate, lbs/MMBtu of heat input, collected from the stack emission testing or any other method approved by the Department. [Reference: COMAR 26.11.03.06C]

F. Control of Carbon Monoxide (CO) Emissions

See Table 16 for additional Monitoring Requirements (CAM).

10.4 Record Keeping Requirements:

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

A. Control of Visible Emissions

The Permittee shall record any incidences of visible emissions and the corrective actions. [Reference: COMAR 26.11.03.06C].

B. Control of Particulate Matter Emissions

The Permittee shall maintain the following on site for at least 5 years: records of stack testing results; record of the date, time and description of maintenance performed on the combustion turbines and shall submit records to the Department upon request. [Reference: COMAR 26.11.03.06C].

C. Control of Nitrogen Oxides

The Permittee shall maintain the following records on site for at least 5 years and make available to the Department upon request:

(a) Total NOx emissions (tons) for each calendar month and each rolling
Table IV – 10

12-month period.
(b) Monthly natural gas usage in MMBtu per month and power output in kW/hour.
(c) NO\textsubscript{X} emission rates, lb/MMBtu of heat input.
(d) Monthly chemical reagent usage for the SCR system, lbs/month.
(e) All CEM system monitoring data, which are used to demonstrate compliance with the emission limits;
(f) All CEM certifications and calibration results; and
(g) The repairs and maintenance made to the SCR or oxidation catalyst emission control devices or the NO\textsubscript{X} CEM system.

[Reference: CPCN Case No. 9055 issued 8/15/06]

D. Control of SO\textsubscript{X} Emissions
The Permittee shall keep records of the sulfur content value of the gaseous fuel determined and recorded once per unit operating day.
[Reference: §60.4370 & COMAR 26.11.03.06C].

Note: Dominion Cove Point maintains records of the FERC Gas Tariff for gas delivered to Cove Point to comply with this requirement. Daily monitoring is not required due to the tariff.

E. Control of VOC Emissions
The Permittee shall maintain the following records on site for at least 5 years and make available to the Department upon request: monthly VOC emissions from the combustion turbine and stack testing results.
[Reference: COMAR 26.11.03.06C]

F. Control of Carbon Monoxide (CO) Emissions
The Permittee shall maintain records of stack testing results on site for at least 5 years and make available to the Department upon request.
[Reference: COMAR 26.11.03.06C].

10.5 Reporting Requirements:

A. Control of Visible Emissions
The Permittee shall report incidences of excess emissions and related corrective actions taken in accordance with excess emissions reporting requirements. [Reference: COMAR 26.11.01.07C]

B. Control of Particulate Matter Emissions
The Permittee shall submit a test protocol to the Department, for approval, at least 30 days prior to the scheduled test date. The Permittee shall report the results of the stack tests to the Department within 60 days of completion of the tests. [Reference: COMAR 26.11.03.06C]
### Table IV – 10

<table>
<thead>
<tr>
<th>C. Control of Nitrogen Oxides</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Permittee shall submit a quarterly summary report to the Department not later than 30 days following each calendar quarter. The report shall be in a format approved by the Department, and shall include the following:</td>
</tr>
<tr>
<td>(i) The cause, time periods, and magnitude of all emissions which exceed the applicable emission standards;</td>
</tr>
<tr>
<td>(ii) The source downtime including the time and date of the beginning and end of each downtime period and whether the source downtime was planned or unplanned;</td>
</tr>
<tr>
<td>(iii) The time periods and cause of all CEM downtime including records of any repairs, adjustments, or maintenance that may affect the validity of emission data;</td>
</tr>
<tr>
<td>(iv) Quarterly totals of excess emissions, installation downtime, and CEM downtime during the calendar quarter;</td>
</tr>
<tr>
<td>(v) Quarterly quality assurance activities; and</td>
</tr>
<tr>
<td>(vi) Daily calibration activities that include reference values, actual values, absolute or percent of span differences, and drift status; and</td>
</tr>
<tr>
<td>(vii) Other information required by the Department that is determined to be necessary to evaluate the data, to ensure that compliance is achieved, or to determine the applicability of this regulation.”</td>
</tr>
</tbody>
</table>

[Reference: COMAR 26.11.03.06C]

### CEM System Downtime Reporting Requirement

The Permittee shall report all system downtime that lasts or is expected to last more than 24 hours to the Department by telephone before 10 a.m. of the first regular business day following the breakdown. The system breakdown report shall include the reason, if known, for the breakdown and the estimated period of time that the CEM will be down. The owner or operator of the CEM shall notify the Department by telephone when an out-of-service CEM is back in operation and producing valid data. [Reference: COMAR 26.11.03.06C]

### D. Control of SOx Emissions

The Permittee shall report incidences of excess emissions and related corrective actions taken in accordance with excess emissions reporting requirements. [Reference: COMAR 26.11.01.07C]

### E. Control of VOC Emissions

The Permittee shall submit a test protocol to the Department, for approval, at least 30 days prior to the scheduled test date. The Permittee shall report the results of the stack tests to the Department within 60 days of completion of the tests. [Reference: COMAR 26.11.03.06C].
Table IV – 10

F. Control of Carbon Monoxide (CO) Emissions
The Permittee shall submit a test protocol to the Department, for approval, at least 30 days prior to the scheduled test date. The Permittee shall report the results of the stack tests to the Department within 60 days of completion of the tests. [Reference: COMAR 26.11.03.06C].

A permit shield shall cover the applicable requirements of the Clean Air Act that are listed in the table above.

Table IV – 11

<table>
<thead>
<tr>
<th>11.0</th>
<th>Emissions Unit Number(s): S022 – Heater</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>S022</strong> – (N/A).</td>
</tr>
<tr>
<td></td>
<td>One (1) natural gas-fired process heater equipped with LNB rated at 0.93 MMBtu/hr.</td>
</tr>
<tr>
<td></td>
<td><strong>Controls:</strong> None</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>11.1</th>
<th>Applicable Standards/Limits:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A. Control of Visible Emissions</td>
</tr>
<tr>
<td></td>
<td>COMAR 26.11.09.05 - Visible Emissions.</td>
</tr>
<tr>
<td></td>
<td>“A. Fuel Burning Equipment.</td>
</tr>
<tr>
<td></td>
<td>(1) Areas I, II, V, and VI. In Areas I, II, V, and VI, 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 greater than 20 percent opacity.</td>
</tr>
<tr>
<td></td>
<td>(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:</td>
</tr>
<tr>
<td></td>
<td>(a) The visible emissions are not greater than 40 percent opacity; and</td>
</tr>
<tr>
<td></td>
<td>(b) The visible emissions do not occur for more than 6 consecutive minutes in any sixty minute period. “</td>
</tr>
</tbody>
</table>

|      | B. Control of Particulate Matter Emissions |
|      | The process heater is subject to the PM_{10} BACT requirements listed in CPCN Case No. 9055 Licensing Conditions: PM_{10} emission limit of 0.0074 lb/MBtu on a 3-hour average basis (filterable and condensable) to be achieved by exclusive use of pipeline quality and low sulfur natural gas. |
|      | [Reference: CPCN Case No. 9055 issued 8/15/06] |
### Table IV – 11

<table>
<thead>
<tr>
<th>C. Control of Nitrogen Oxides</th>
</tr>
</thead>
<tbody>
<tr>
<td>The process heater is subject to the NO(_X) BACT requirement and the NO(_X) LAER requirements listed in the CPCN Case No. 9055 Licensing Conditions: NO(_X) emission limit of 17 ppmvd corrected to 3% oxygen on a 3-hour average basis to be achieved by the exclusive use of natural gas, good combustion practices and dry low-NO(_X) burners. <strong>[Reference: CPCN Case No. 9055 issued 8/15/06]</strong></td>
</tr>
</tbody>
</table>

D. Control of VOC Emissions

The process heater is subject to the VOC LAER requirements listed in the CPCN Case No. 9055 Licensing Conditions: VOC emission limit of 143 ppmvd corrected to 3% oxygen on a 3-hour average basis. **[Reference: CPCN Case No. 9055 issued 8/15/06]**

E. Control of Carbon Monoxide Emissions

The process heater is subject to the CO BACT requirements listed in the CPCN Case No. 9055 Licensing Conditions: CO emission limit of 143 ppmvd corrected to 3% oxygen on a 3-hour average basis to be achieved by good combustion practices. **[Reference: CPCN Case No. 9055 issued 8/15/06]**

### 11.2 Testing Requirements:

A. Control of Visible Emissions

See Record Keeping Requirements.

B. Control of Particulate Matter Emissions

See Reporting Requirements.

C. Control of Nitrogen Oxides

See Record Keeping Requirements.

D. Control of VOC Emissions

See Record Keeping Requirements.

E. Control of Carbon Monoxide Emissions

See Reporting Requirements.
### Table IV – 11

<table>
<thead>
<tr>
<th>A.</th>
<th>Monitoring Requirements:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>11.3</strong></td>
<td><strong>Control of Visible Emissions</strong>&lt;br&gt;See Record Keeping Requirements.</td>
</tr>
<tr>
<td></td>
<td><strong>Control of Particulate Matter Emissions</strong>&lt;br&gt;See Reporting Requirements.</td>
</tr>
<tr>
<td></td>
<td><strong>Control of Nitrogen Oxides</strong>&lt;br&gt;See Record Keeping Requirements.</td>
</tr>
<tr>
<td></td>
<td><strong>Control of VOC Emissions</strong>&lt;br&gt;See Recording Keeping Requirements.</td>
</tr>
<tr>
<td></td>
<td><strong>Control of Carbon Monoxide Emissions</strong>&lt;br&gt;See Reporting Requirements</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B.</th>
<th>Record Keeping Requirements:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>11.4</strong></td>
<td><strong>Note:</strong> All records must be maintained for a period of at least 5 years. [Reference: COMAR 26.11.03.06C(5)(g)].</td>
</tr>
<tr>
<td></td>
<td><strong>Control of Visible Emissions</strong>&lt;br&gt;The Permittee shall maintain records of any incidences of visible emissions and related corrective actions taken. [Reference: COMAR 26.11.03.06C].</td>
</tr>
<tr>
<td></td>
<td><strong>Control of Particulate Matter Emissions</strong>&lt;br&gt;See Reporting Requirements.</td>
</tr>
<tr>
<td></td>
<td><strong>Control of Nitrogen Oxides</strong>&lt;br&gt;The Permittee shall maintain records of the following on site for at least 5 years and make available to the Department upon request: monthly natural gas usage, million BTU per month, and NO\textsubscript{X} emission rates, lbs/MMBtu of heat input. [Reference: CPCN Case No. 9055 issued 8/15/06]</td>
</tr>
<tr>
<td></td>
<td><strong>Control of VOC Emissions</strong>&lt;br&gt;The Permit shall maintain records of the following on site for at least 5 years and make available to the Department upon request: monthly natural gas usage, million BTU per month, and VOC emission rates, lbs/MMBtu of heat input. [Reference: CPCN Case No. 9055 issued 8/15/06]</td>
</tr>
<tr>
<td></td>
<td><strong>Control of Carbon Monoxide Emissions</strong>&lt;br&gt;See Reporting Requirements</td>
</tr>
</tbody>
</table>
11.5 Reporting Requirements:

A. Control of Visible Emissions
The Permittee shall report incidences of excess emissions and related corrective actions taken in accordance with excess emissions reporting requirements. [Reference: COMAR 26.11.01.07C]

B. Control of Particulate Matter Emissions
The Permittee shall report incidences of excess emissions and related corrective actions taken in accordance with excess emissions reporting requirements. [Reference: COMAR 26.11.01.07C]

C. Control of Nitrogen Oxides
See Record Keeping Requirements.

D. Control of VOC Emissions
The Permittee shall report incidences of excess emissions and related corrective actions taken in accordance with excess emissions reporting requirements. [Reference: COMAR 26.11.01.07C]

E. Control of Carbon Monoxide Emissions
The Permittee shall report incidences of excess emissions and related corrective actions taken in accordance with excess emissions reporting requirements. [Reference: COMAR 26.11.01.07C]

A permit shield shall cover the applicable requirements of the Clean Air Act that are listed in the table above.

12.0 Emissions Unit Number(s): S023 – Emergency Generator

S023 – (009-9-0082)
One (1) natural gas-fired Caterpillar black-start emergency generator rated at 1032 horsepower (770 kW).

Controls: None

12.1 Applicable Standards/Limits:

A. Control of Visible Emissions
COMAR 26.11.09.05 - Visible Emissions.
E. Stationary Internal Combustion Engine Powered Equipment.
“(2) Emissions During Idle Mode. A person may not cause or permit the discharge of emissions from any engine, operating at idle, greater than 10 percent opacity.

(3) Emissions During Operating Mode. A person may not cause or permit the discharge of emissions from any engine, operating at other than idle conditions, greater than 40 percent opacity.

(4) Exceptions.
(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 Particulate Matter Emissions
The engine is subject to PM$_{10}$ BACT emission standards listed in the CPCN Case No. 9055: PM$_{10}$ emissions limit of 0.0099 lbs/MMBtu on a 3-hour average basis to be achieved by exclusive use of pipeline quality, low sulfur natural gas and a limit on operations of no more than 200 hours during any consecutive 12-month period. [Reference: CPCN Case No. 9055, issued 8/15/06].

C. Control of Nitrogen Oxides
The engine is subject to NO$_X$ BACT and LAER emission standards listed in the CPCN Case No. 9055: NO$_X$ emission limit of 2.0 g/bhp-hr on a 3-hour average basis to be achieved by good combustion practices, proper operation and maintenance plan and a limit on operations of no more than 200 hours during any consecutive 12-month period. [Reference: CPCN Case No. 9055, issued 8/15/06].

D. Control of VOC Emissions
The engine is subject to VOC LAER emission standards listed in the CPCN Case No. 9055; Licensing Conditions: VOC emission limit of 0.6 g/bhp-hr on a 3-hour average basis. [Reference: CPCN Case No. 9055, issued 8/15/06].

E. Control of Carbon Monoxide Emissions
The engine is subject to CO BACT emission standards listed in the CPCN Case No. 9055; Licensing Conditions: CO emission limit of 1.5 g/bhp-hr on
Table IV – 12

| a 3-hour average basis to be achieved by good combustion practices, proper operation and maintenance plan and a limit on operations of no more than 200 hours during any consecutive 12-month period. [Reference: CPCN Case No. 9055, issued 8/15/06]. |

12.2 Testing Requirements:

A. Control of Visible Emissions
   See Record Keeping Requirements.

B. Control of Particulate Matter Emissions
   See Record Keeping Requirements.

C. Control of Nitrogen Oxides
   See Record Keeping Requirements.

D. Control of VOC Emissions
   See Record Keeping Requirements.

E. Control of Carbon Monoxide Emissions
   See Record Keeping Requirements.

12.3 Monitoring Requirements:

A. Control of Visible Emissions
   See Record Keeping Requirements.

B. Control of Particulate Matter Emissions
   See Record Keeping Requirements.

C. Control of Nitrogen Oxides
   See Record Keeping Requirements.

D. Control of VOC Emissions
   See Record Keeping Requirements.

E. Control of Carbon Monoxide Emissions
   See Record Keeping Requirements.
12.4 Record Keeping Requirements:

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

A. Control of Visible Emissions
The Permittee shall keep records of incidences of visible emissions and corrective actions. **[Reference: COMAR 26.11.03.06C]**

B. Control of Particulate Matter Emissions
The Permittee shall maintain the following records on site and make available to the Department upon request: monthly fuel usage rates in MMBtu per month and hours of operation for the generator. **[Reference: CPCN Case No. 9055 issued 8/15/06]**

C. Control of Nitrogen Oxides
The Permittee shall maintain records of the following: monthly fuel usage rates, million BTU per month, and number of hours each generator operates per month. **[Reference: CPCN Case No. 9055 issued 8/15/06 & COMAR 26.11.09.08G(1)(c&e)]**

D. Control of VOC Emissions
The Permittee shall maintain the following records on site and make available to the Department upon request: monthly fuel usage rates in MMBtu per month and hours of operation for the generator. **[Reference: CPCN Case No. 9055 issued 8/15/06]**

E. Control of Carbon Monoxide Emissions
The Permittee shall maintain the following records on site and make available to the Department upon request: monthly fuel usage rates in MMBtu per month and hours of operation for the generator. **[Reference: CPCN Case No. 9055 issued 8/15/06]**

12.5 Reporting Requirements:

A. Control of Visible Emissions
The Permittee shall report incidences of excess emissions and related corrective actions taken in accordance with excess emissions reporting requirements. **[Reference: COMAR 26.11.01.07C]**

B. Control of Particulate Matter Emissions
The Permittee shall report incidences of excess emissions and related corrective actions taken in accordance with excess emissions reporting requirements. **[Reference: COMAR 26.11.01.07C]**
C. Control of Nitrogen Oxides  
See Record Keeping Requirements.

D. Control of VOC Emissions  
The Permittee shall report incidences of excess emissions and related corrective actions taken in accordance with excess emissions reporting requirements. [Reference: COMAR 26.11.01.07C]

E. Control of Carbon Monoxide Emissions  
The Permittee shall report incidences of excess emissions and related corrective actions taken in accordance with excess emissions reporting requirements. [Reference: COMAR 26.11.01.07C]

A permit shield shall cover the applicable requirements of the Clean Air Act that are listed in the table above.

### Table IV – 13

<table>
<thead>
<tr>
<th>13.0</th>
<th>Emissions Unit Number(s): S021 through S023: Associated with the ASU Project</th>
</tr>
</thead>
</table>
| **S021** | (009-5-0065)  
One (1) natural gas-fired, Solar Titan turbine with maximum rating of 137 MMBtu/hr equipped with DLN combustors, SCR, and oxidation catalyst. |
| **S022** | (N/A).  
One (1) natural gas-fired process heater equipped with LNB rated at 0.93 MMBtu/hr. |
| **S023** | (009-9-0082)  
One (1) natural gas-fired Caterpillar black-start emergency generator rated at 1032 horsepower (770 kW). |

<table>
<thead>
<tr>
<th>13.1</th>
<th>Applicable Standards/Limits:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Control of VOC Emissions</strong></td>
<td>The VOC emissions are limited to 3.7 tons for any 12-month period rolling monthly for emissions unit associated with the ASU project. [Reference: CPCN Case No. 9055 issued 8/15/06]</td>
</tr>
<tr>
<td><strong>B. Control of Nitrogen Oxides</strong></td>
<td>The NO\textsubscript{x} emissions are limited to 12.8 tons for any 12-month period rolling</td>
</tr>
</tbody>
</table>
### Table IV – 13

| Monthly for emission units associated with ASU project. | Reference: CPCN Case No. 9055 issued 8/15/06. |

#### 13.2 Testing Requirements:

- **A. Control of VOC Emissions**
  See Record Keeping Requirements.

- **B. Control of Nitrogen Oxides**
  See Record Keeping Requirements.

#### 13.3 Monitoring Requirements:

- **A. Control of VOC Emissions**
  See Record Keeping Requirements.

- **B. Control of Nitrogen Oxides**
  See Record Keeping Requirements.

#### 13.4 Record Keeping Requirements:

- **Note**: All records must be maintained for a period of at least 5 years. **Reference: COMAR 26.11.03.06C(5)(g)).**

  - **A. Control of VOC Emissions**
    The Permit shall maintain records of VOC emissions for any 12-month period, rolling monthly on site for at least 5 years and make available to the Department upon request. **Reference: COMAR 26.11.03.06C**

  - **B. Control of Nitrogen Oxides**
    The Permittee shall maintain records of NO\textsubscript{X} emissions for any 12-month period, rolling monthly on site for at least 5 years and make available to the Department upon request. **Reference: COMAR 26.11.03.06C**

#### 13.5 Reporting Requirements:

- **A. Control of VOC Emissions**
  The Permittee shall submit to the Department no later than 30 days following each calendar quarter a quarterly report. The report shall be in a format approved by the Department and shall include monthly and rolling 12-month VOC emission calculations. **Reference: COMAR 26.11.03.06C**
Table IV – 13

<table>
<thead>
<tr>
<th>B. Control of Nitrogen Oxides</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Permittee shall submit to the Department not later than 30 days following each calendar quarter a quarterly summary report. The report shall be in a format approved by the Department and shall include monthly and rolling 12-month NO\textsubscript{X} emission calculations. [Reference: COMAR 26.11.03.06C]</td>
</tr>
</tbody>
</table>

A permit shield shall cover the applicable requirements of the Clean Air Act that are listed in the table above.

---

Table IV – 14

<table>
<thead>
<tr>
<th>14.0</th>
<th>Emissions Unit Number(s): S024 &amp; S025 - WEG Heaters</th>
</tr>
</thead>
<tbody>
<tr>
<td>S024 &amp; S025 – (009-5-0060 and 009-5-0062).</td>
<td></td>
</tr>
<tr>
<td>Two (2) Johnston water-ethylene glycol (WEG) heaters, each with a rating of 82.3 MMBtu/hr, each equipped with ultra low NO\textsubscript{X} burners (ULNB)</td>
<td></td>
</tr>
<tr>
<td><strong>Controls:</strong> None</td>
<td></td>
</tr>
</tbody>
</table>

14.1 **Applicable Standards/Limits:**

A. **Control of Visible Emissions**

COMAR 26.11.09.05 - Visible Emissions.

“A. Fuel Burning Equipment.

(1) Areas I, II, V, and VI. In Areas I, II, V, and VI, 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 greater than 20 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 Nitrogen Oxides**

COMAR 26.11.09.08B. - General Requirements and Conditions.

(1) Emission Standards and Requirements.

(a) A person who owns or operates an installation that causes NO\textsubscript{X} emissions subject to this regulation is in compliance with this regulation if the person establishes compliance with the emissions standards in §B(1)(c) of this regulation. (c) Emission Standards in Pounds of NO\textsubscript{X} per Million Btu of heat input. – Gas only: 0.2. “
### Table IV – 14

<table>
<thead>
<tr>
<th>C. NSPS for PM and SOₓ Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>40 CFR Part 60</strong> Subpart Dc—Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units</td>
</tr>
<tr>
<td><strong>§60.40c - Applicability and delegation of authority.</strong></td>
</tr>
<tr>
<td>(a) Except as provided in paragraphs (d), (e), (f), and (g) of this section, the affected facility to which this subpart applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/h)) or less, but greater than or equal to 2.9 MW (10 MMBtu/h). Since the heaters are fired on natural gas only, the record keeping and reporting requirements §60.48c apply.</td>
</tr>
</tbody>
</table>

#### 14.2 Testing Requirements:

| A. Control of Visible Emissions |
| See Record Keeping Requirements. |

| B. Control of Nitrogen Oxides |
| The Permittee shall test emissions from WEG heaters using portable analyzers semiannually for the first 2 years after startup. After the first 2 years of operation, the Permittee may request that the testing be stopped if the Permittee consistently demonstrates compliance with the permit. [Reference: MDE Permit to Construct No. 009-0021-5-0060 and 5-0062 issued 2/12/09] |

| C. NSPS for PM and SOₓ Emissions |
| See Record Keeping Requirements. |

#### 14.3 Monitoring Requirements:

| A. Control of Visible Emissions |
| See Record Keeping Requirements. |

| B. Control of Nitrogen Oxides |
| See Record Keeping Requirements. |

| C. NSPS for PM and SOₓ Emissions |
| See Record keeping Requirements |
### 14.4 Record Keeping Requirements:

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

<table>
<thead>
<tr>
<th>A. Control of Visible Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Permittee shall record any incidences of visible emissions and the corrective actions.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B. Control of Nitrogen Oxides</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Permittee shall maintain the following records on-site for a period of at least five years and make available to the Department upon request:</td>
</tr>
<tr>
<td>(1) Monthly natural gas usage in millions BTU per month for each WEG heater.</td>
</tr>
<tr>
<td>(2) NOX emission rates, lbs/MBtu of heat input for each WEG heater.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>C. NSPS for PM and SOX Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>§60.48c - Reporting and recordkeeping requirements.</td>
</tr>
<tr>
<td>“(g)(1) Except as provided under paragraphs (g)(2) and (g)(3) of this section, the owner or operator of each affected facility shall record and maintain records of the amount of each fuel combusted during each operating day.”</td>
</tr>
</tbody>
</table>

### 14.5 Reporting Requirements:

<table>
<thead>
<tr>
<th>A. Control of Visible Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Permittee shall report incidences of excess emissions and related corrective actions taken in accordance with excess emissions reporting requirements.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B. Control of Nitrogen Oxides</th>
</tr>
</thead>
<tbody>
<tr>
<td>See Record Keeping Requirements.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>C. NSPS for PM and SOX Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>§60.48c - Reporting and recordkeeping requirements.</td>
</tr>
<tr>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

A permit shield shall cover the applicable requirements of the Clean Air Act that are listed in the table above.
15.0 **Emissions Unit Number(s): Emergency Generators**

- One (1) Onan 605 hp diesel-fired engine intended for emergency purposes. (009-0021-9-0091)
- Three (3) 465 hp emergency generators
- Three (3) fire pumps (two (2) onshore and one (1) offshore)

Generators installed prior to July 11, 2005), except one (1) onshore fire pump manufactured in July 2008.

15.1 **Applicable Standards/Limits:**

**A. Control of Visible Emissions**

**COMAR 26.11.09.05 - Visible Emissions.**

**E. Stationary Internal Combustion Engine Powered Equipment.**

"(2) **Emissions During Idle Mode.** A person may not cause or permit the discharge of emissions from any engine, operating at idle, greater than 10 percent opacity.

(3) **Emissions During Operating Mode.** A person may not cause or permit the discharge of emissions from any engine, operating at other than idle conditions, greater than 40 percent opacity.

(4) **Exceptions.**

(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.**

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:

(1) In Areas I, II, V, and VI: (c) Distillate fuel oils, 0.3 percent.
C. Control of Nitrogen Oxides

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

“(1) A person who owns or operates fuel-burning equipment with a capacity factor (as defined in 40 CFR Part 72.2) of 15 percent or less shall:

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

15.2 **Testing Requirements:**

A. Control of Visible Emissions
See Record Keeping Requirements.

B. Control of Sulfur Oxides
See Monitoring Requirements.

C. Control of Nitrogen Oxides
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)].

15.3 **Monitoring Requirements:**

A. Control of Visible Emissions
See Record Keeping Requirements.
B. Control of Sulfur Oxides
The Permittee shall obtain a certification from the fuel supplier that the fuel oil is in compliance with the sulfur in fuel limitation. [Reference: COMAR 26.11.03.06C]

C. Control of Nitrogen Oxides
For engines that operate more than 500 hours during a calendar year, the Permittee shall perform a combustion analysis and optimize combustion. [Reference: COMAR 26.11.03.06C]

15.4 Record Keeping Requirements:
Note: All records must be maintained for a period of at least 5 years. [Reference: COMAR 26.11.03.06C(5)(g)].

A. Control of Visible Emissions
The Permittee shall maintain records of any visible emissions and the corrective actions. [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 this regulation for at least 5 years. [Reference: COMAR 26.11.03.06C].

C. Control of Nitrogen Oxides
The Permittee shall:
1. Maintain the results of the combustion analysis at the site for at least 5 years and make these results available to the Department and the EPA upon request. [Reference: COMAR 26.11.09.08G(1)(c) & COMAR 26.11.03.06C].
2. Retain records of training program attendance for each operator at the site for at least 5 years and make these records available to the Department upon request. [Reference: COMAR 26.11.09.08G(1)(e) and COMAR 26.11.03.06C].
3. Retain records of hours of operation on a monthly basis for all generators. At the end of each month, the Permittee shall calculate the total hours for the prior rolling 12-month period. [Reference: COMAR 26.11.03.06C].

15.5 Reporting Requirements:

A. Control of Visible Emissions
The Permittee shall report incidences of excess emissions and related corrective actions taken in accordance with excess emissions reporting
Table IV – 15 requirements. [Reference: COMAR 26.11.01.07C]

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

C. Control of Nitrogen Oxides
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. [Reference: COMAR 26.11.09.08G(1)(a) & COMAR 26.11.03.06C]

A permit shield shall cover the applicable requirements of the Clean Air Act that are listed in the table above.

Table IV – 15a

<table>
<thead>
<tr>
<th>15a.0</th>
<th><strong>Emissions Unit Number(s): Emergency Generators Cont’d</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>One (1) Onan 605 hp diesel-fired engine intended for emergency purposes. <strong>(009-0021-9-0091)</strong></td>
</tr>
<tr>
<td></td>
<td>Three (3) 465 hp emergency generators</td>
</tr>
<tr>
<td></td>
<td>Two (2) fire pumps (one (1) onshore and one(1) offshore)</td>
</tr>
<tr>
<td></td>
<td>Generators Installed prior to July 11, 2005)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>15a.1</th>
<th><strong>Applicable Standards/Limits:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>§63.6595 - When do I have to comply with this subpart?</td>
</tr>
<tr>
<td></td>
<td>(a) Affected sources. (1)” ..... If you have an existing non-emergency CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, an existing stationary CI 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 stationary CI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations and operating limitations no later than May 3, 2013. .....”.</td>
</tr>
</tbody>
</table>

§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 2b to this subpart that apply to you.”

Table 2d to Subpart ZZZZ of Part 63—Requirements for Existing Stationary RICE Located at Area Sources of HAP Emissions

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:

<table>
<thead>
<tr>
<th>For each . . .</th>
<th>You must meet the following requirement, except during periods of startup . . .</th>
<th>During periods of startup you must . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Emergency stationary CI RICE and black start stationary CI RICE.¹</td>
<td>a. Change oil and filter every 500 hours of operation or annually, whichever comes first;¹</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.</td>
<td></td>
</tr>
</tbody>
</table>

¹Sources have the option to utilize an oil analysis program as described in §63.6625(i) in order to extend the specified oil change requirement in Table 2d of this subpart.

²If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of this subpart, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.

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

“(a) You must be in compliance with the emission limitations and operating limitations 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
Table IV – 15a

| 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.” |

15a.2 **Testing Requirements:**

No Requirements

15a.3 **Monitoring Requirements:**

§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.”

“(h) If you operate a new, reconstructed, or **existing stationary engine**, you must minimize the engine’s time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to this subpart apply.”

“(i) If you own or operate a stationary CI engine that is subject to the work, operation or management practices in items 1 or 2 of Table 2c to
this subpart or in items 1 or 4 of Table 2d to this subpart, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.”

§63.6640 - How do I demonstrate continuous compliance with the emission limitations and operating limitations?
“(a) You must demonstrate continuous compliance with each emission limitation and operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you according to methods specified in Table 6 to this subpart.
(b) You must report each instance in which you did not meet each emission limitation or operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you. These instances are deviations from the emission and operating limitations in this subpart. These deviations must be reported according to the requirements in §63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE.”
“(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 (4) of this section. In order for the engine to be considered an emergency stationary RICE under this subpart, any
<table>
<thead>
<tr>
<th>Table IV – 15a</th>
</tr>
</thead>
<tbody>
<tr>
<td>operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (4) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (4) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.</td>
</tr>
<tr>
<td>(1) There is no time limit on the use of emergency stationary RICE in emergency situations.</td>
</tr>
<tr>
<td>(2) You may operate your emergency stationary RICE 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 paragraphs (f)(3) and (4) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).</td>
</tr>
<tr>
<td>(i) Emergency stationary RICE 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 RICE beyond 100 hours per calendar year.</td>
</tr>
<tr>
<td>(ii) Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.</td>
</tr>
<tr>
<td>(iii) Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.</td>
</tr>
<tr>
<td>(3) Not Applicable</td>
</tr>
</tbody>
</table>
Table IV – 15a

| (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 and emergency demand response provided in paragraph (f)(2) of this section. Except as provided in paragraphs (f)(4)(i) and (ii) of this section, the 50 hours per year for non-emergency 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. |

(i) Prior to May 3, 2014, the 50 hours per year for non-emergency situations can be used for peak shaving or non-emergency demand response to generate income for a facility, or to otherwise supply power as part of a financial arrangement with another entity if the engine is operated as part of a peak shaving (load management program) with the local distribution system operator and the power is provided only to the facility itself or to support the local distribution system.

(ii) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

(A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator.

(B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

(C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

(D) The power is provided only to the facility itself or to support the local transmission and distribution system.

(E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing
### Table IV – 15a

<table>
<thead>
<tr>
<th>15a.4 Record Keeping Requirements:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Note:</strong> All records must be maintained for a period of at least 5 years. [Reference: COMAR 26.11.03.06C(5)(g)]</td>
</tr>
</tbody>
</table>

§63.6655 - What records must I keep?

“(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.

(3) An existing stationary RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to this subpart.”

“(f) If you own or operate any of the stationary RICE in paragraphs (f)(1) through (2) of this section, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation; including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in §63.6640(f)(2)(ii) or (iii) or §63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.

(2) An existing emergency stationary RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines.”

<table>
<thead>
<tr>
<th>15a.5 Reporting Requirements:</th>
</tr>
</thead>
</table>

§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.
Table IV – 15a

(1) The report must contain the following information:
   (i) Company name and address where the engine is located.
   (ii) Date of the report and beginning and ending dates of the reporting period.
   (iii) Engine site rating and model year.
   (iv) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.
   (v) Hours operated for the purposes specified in §63.6640(f)(2)(ii) and (iii), including the date, start time, and end time for engine operation for the purposes specified in §63.6640(f)(2)(ii) and (iii).
   (vi) Number of hours the engine is contractually obligated to be available for the purposes specified in §63.6640(f)(2)(ii) and (iii).
   (vii) Hours spent for operation for the purpose specified in §63.6640(f)(4)(ii), including the date, start time, and end time for engine operation for the purposes specified in §63.6640(f)(4)(ii). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.
   (viii) If there were no deviations from the fuel requirements in §63.6604 that apply to the engine (if any), a statement that there were no deviations from the fuel requirements during the reporting period.
   (ix) If there were deviations from the fuel requirements in §63.6604 that apply to the engine (if any), information on the number, duration, and cause of deviations, and the corrective action taken.

(2) The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.

(3) The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA’s Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in §63.13.

“A permit shield shall cover the applicable requirements of the Clean Air Act that are listed in the table above.” [Footnote 2 of Table 2d]
### Table IV – 15b

<table>
<thead>
<tr>
<th>15b.0</th>
<th><strong>Emissions Unit Number(s): Emergency Generators Cont’d</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>One (1) 360 bhp onshore fire pump manufactured in July 2008</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>15b.1</th>
<th><strong>Applicable Standards/Limits:</strong></th>
</tr>
</thead>
</table>
Note: Beginning October 1, 2010, installations subject to 40 CFR Part 60, Subpart III must comply with the diesel fuel standards of §60.4207 which limit the maximum sulfur content of the fuel to 15 ppm.  
(1) This permit is valid only for the installation of an emergency diesel generator with piston displacement less than 10 liters per cylinder.  
(2) The provisions of 40 CFR Part 60, Subpart III apply if the emergency diesel generator uses a diesel engine manufactured after April 1, 2006 [Reference: §60.4200].  
(3) An emergency diesel generator or diesel engine subject to the requirements of 40 CFR 60, Subpart III (“NSPS emergency diesel generator” or “NSPS emergency diesel engine”) shall be equipped with a non-resettable hour meter [Reference: §60.4209(a)].  
(4) For pre-2007 model year NSPS emergency diesel engines, the Permittee must demonstrate compliance with the emission standards specified in Table 1 to 40 CFR Part 60, Subpart III, by either [Reference: §60.4205(a)]:  
(a) Purchasing and installing an engine certified according to 40 CFR Part 89 as meeting the Tier 1 emission standards of 40 CFR §89.112. The engine must be installed and configured according to the manufacturer’s specifications [Reference: §60.4211(b)(1)] or  
(b) Keeping records of engine manufacturer test data indicating compliance with the standard [Reference: §60.4211(b)(3)].  
(5) For 2007 model year and later model year NSPS emergency diesel engines, the Permittee must purchase and install an engine certified to the emission standards of §60.4205(b) for the same model year and
Table IV – 15b

<table>
<thead>
<tr>
<th>maximum engine horsepower [Reference: §60.4211(c)]:</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) For engines with a maximum engine power less than or equal to 2,237 KW (3,000 HP), the certification emission standards for new nonroad diesel engines in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants [Reference: §62.4202(a)];</td>
</tr>
<tr>
<td>(b) For engines with a maximum engine power greater than 2,237 KW (3,000 HP), and for 2007 through 2010 model years, the emission standards in Table 1 to 40 CFR Part 60, Subpart III (which are the same as the Tier 1 emission standards of 40 CFR §89.112) [Reference: §62.4202(b)(1)].</td>
</tr>
<tr>
<td>(c) For 2011 model year and later, the certification emission standards for new nonroad diesel engines in 40 CFR 89.112 and 40 CFR 89.113 [Reference: §62.4202(b)(2)].</td>
</tr>
</tbody>
</table>

(6) After December 31, 2008, owners and operators may not install an emergency diesel generator that does not meet the applicable requirements for 2007 model year engines [Reference: §60.4208].

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


“§63.6590 - What parts of my plant does this subpart cover?
This subpart applies to each affected source.
(c) Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart III, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part.
(1) A new or reconstructed stationary RICE located at an area source.”

C. Operational Limits
(1) The Permittee must operate and maintain an NSPS emergency diesel generator and control devices according to the manufacturer’s written instructions or according to procedures developed by the owner or operator that are approved by the manufacturer. Additionally the Permittee may change only those settings that are permitted by the manufacturer. The Permittee must also meet the requirements of 40
Table IV – 15b

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CFR parts 89, 94 and/or 1068, as they may apply to an owner or operator. [Reference: §60.4211].</td>
<td></td>
</tr>
<tr>
<td>(2) Beginning October 1, 2007, an NSPS emergency diesel generator must combus diesel fuel meeting the requirements of 40 CFR §80.510(a), unless a waiver is obtained from the Department and/or the EPA Administrator. [Reference: §60.4207]</td>
<td></td>
</tr>
<tr>
<td>(3) Beginning October 1, 2010, an NSPS emergency diesel generator must combus diesel fuel meeting the requirements of 40 CFR §80.510(b), unless a waiver is obtained from the Department and/or the EPA Administrator. [Reference: §60.4207].</td>
<td></td>
</tr>
<tr>
<td>(4) In accordance with 40 CFR §60.4211(f), If you own or operate an emergency stationary ICE, you must operate the emergency stationary ICE according to the requirements in paragraphs (f)(1) through (3) of this section. In order for the engine to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, 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.</td>
<td></td>
</tr>
<tr>
<td>(1) There is no time limit on the use of emergency stationary ICE in emergency situations.</td>
<td></td>
</tr>
<tr>
<td>(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).</td>
<td></td>
</tr>
<tr>
<td>(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 year.</td>
<td></td>
</tr>
</tbody>
</table>
Table IV – 15b

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>calendar year.</strong>&lt;br&gt;(ii) Emergency stationary ICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see § 60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.&lt;br&gt;(iii) Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.&lt;br&gt;(3) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. Except as provided in paragraph (f)(3)(i) of this section, the 50 hours per calendar year for non-emergency 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.&lt;br&gt;(i) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:&lt;br&gt;(A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;&lt;br&gt;(B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.&lt;br&gt;(C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.&lt;br&gt;(D) The power is provided only to the facility itself or to support the local transmission and distribution system.&lt;br&gt;(E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator. [Reference: §60.4211(f)]</td>
<td></td>
</tr>
</tbody>
</table>
## 15b.2 Testing Requirements:

A. **NSPS**
   See Record keeping Requirements.

B. **NESHAP**
   See NSPS Requirements.

C. **Operational Limits**
   See NSPS Requirements.

## 15b.3 Monitoring Requirements:

A. **NSPS**
   See Record keeping Requirements.

B. **NESHAP**
   See NSPS Requirements.

C. **Operational Limits**
   See NSPS Requirements.

## 15b.4 Record Keeping Requirements:

**Note:** All records must be maintained for a period of at least 5 years. 

**[Reference: COMAR 26.11.03.06C(5)(g)]**

A. **NSPS**
   1. 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.).

   2. 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).

   3. Beginning October 1, 2007, 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. The Permittee shall maintain the required records on site for at least five (5) years.

(4) **§60.4214(d)** "If you own or operate an emergency stationary CI ICE with a maximum engine power more than 100 HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §60.4211(f)(2)(ii) and (iii) or that operates for the purposes specified in §60.4211(f)(3)(i), you must submit an annual report according to the requirements in paragraphs (d)(1) through (3) of this section.

1. The report must contain the following information:
   i. Company name and address where the engine is located.
   ii. Date of the report and beginning and ending dates of the reporting period.
   iii. Engine site rating and model year.
   iv. Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.
   v. Hours operated for the purposes specified in §60.4211(f)(2)(ii) and (iii), including the date, start time, and end time for engine operation for the purposes specified in §60.4211(f)(2)(ii) and (iii).
   vi. Number of hours the engine is contractually obligated to be available for the purposes specified in §60.4211(f)(2)(ii) and (iii).
   vii. Hours spent for operation for the purposes specified in §60.4211(f)(3)(i), including the date, start time, and end time for engine operation for the purposes specified in §60.4211(f)(3)(i). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.

2. The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.

3. The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA’s Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in §60.4.”

B. NESHAP
### Table IV – 15b

<table>
<thead>
<tr>
<th>Reporting Requirements:</th>
</tr>
</thead>
<tbody>
<tr>
<td>C. Operational Limits</td>
</tr>
<tr>
<td>See NSPS Requirements.</td>
</tr>
</tbody>
</table>

A permit shield shall cover the applicable requirements of the Clean Air Act that are listed in the table above.

### Table IV-16

<table>
<thead>
<tr>
<th>COMPLIANCE ASSURANCE MONITORING REQUIREMENTS – PART 64</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emission Unit: GE Frame 5 and Solar Turbines with oxidation catalyst (S009, S010 &amp; S021)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Applicable Requirement</th>
<th>40 CFR 52.21 (PSD-2005-01 &amp; CPCN 9055): CO Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emission Limits</td>
<td>6 ppmvd @ 15% O₂</td>
</tr>
<tr>
<td>Monitoring Requirements</td>
<td>Periodic Visual Inspections</td>
</tr>
</tbody>
</table>

**I. Indicator**

**Visual Inspection of Catalyst and Exhaust Duct**

**II. Measurement Approach**

Monitor the oxidation catalyst effectiveness through visual inspections. Visual inspections will be performed once per year and documented in SAP. Inspections will occur while source is not in operation.

**III. Indicator Value**

Darkening or fouling of the catalyst observed during an inspection will provide an indication to the operator that the oxidation catalyst system should be further evaluated and/or corrective actions be initiated.

**IV Performance Criteria**

<table>
<thead>
<tr>
<th>A. Data Representativeness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fouling/darkening of the catalyst is indicative of the performance of the catalyst</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B. Verification of</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
</tr>
</tbody>
</table>
### Operational Status

<table>
<thead>
<tr>
<th>C. QA/QC Practices and Criteria</th>
<th>Follow manufacturer’s recommendation and Dominion-specific procedures for quality assurance and control of the inspection program.</th>
</tr>
</thead>
<tbody>
<tr>
<td>D. Monitoring Frequency</td>
<td>The visual inspections will be performed on an annual basis.</td>
</tr>
<tr>
<td>E. Data Collection Procedures</td>
<td>The results of each annual visual inspection will be documented in the SAP.</td>
</tr>
<tr>
<td>F. Averaging Period</td>
<td>N/A</td>
</tr>
</tbody>
</table>
SECTION V  INsignificant ACtivities

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

(1) No. 6  Stationary internal combustion engines with an output less than 500 brake horsepower (373 kilowatts) and which are not used to generate electricity for sale or for peak or load shaving;

The affected units are subject to the following requirements:

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

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

(C) Exceptions:

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

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

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

(iii) COMAR 26.11.09.05E(2) & (3) do not apply while maintenance, repair or testing is being performed by qualified mechanics.
(D) COMAR 26.11.36.03A(1), which establishes that the Permittee may not operate an emergency generator except for emergencies, testing and maintenance purposes.

(E) COMAR 26.11.36.03A(5), which establishes that the Permittee may not operate an emergency generator for testing and engine maintenance purposes between 12:01 a.m. and 2:00 p.m. on any day on which the Department forecasts that the air quality will be a code orange, code red, or code purple unless the engine fails a test and engine maintenance and a re-test are necessary.

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

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

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

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

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

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

The Permittee shall maintain on site for at least five (5) years, and shall make available to the Department upon request, the following records of operating data:
(a) Monthly records of the total VOC degreasing materials used; and

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

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

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

(b) No. 9 Storage of lubricating oils;

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

(d) No. 1 Storage of motor vehicle gasoline and having individual tank capacities of 2,000 gallons (7.6 cubic meters) or less;

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

For the following, attach additional pages as necessary:

(6) any other emissions unit at the facility which is not subject to an applicable requirement of the Clean Air Act (list and describe):

No. 1 12,000 gallon aqueous ammonia (<20%Conc) storage tank 214F

No. 1 18,000 gallon aqueous ammonia (<20%Conc) storage tank 127F
SECTION VI  STATE-ONLY ENFORCEABLE CONDITIONS

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

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 constructed 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.”

**COMAR 26.11.15.05 – Control Technology Requirements**
“A person who complies with the ambient impact requirement in Regulation .06 of this chapter may not be affected by the amount of the installation’s stack height that exceeds good engineering practice (GEP), or by any other dispersion technique.
(3) Unless an existing installation is controlled using T-BACT, the degree of emission limitation required in order to demonstrate compliance with Regulation .06 of this chapter may not be affected by the amount of the installation’s stack height that exceeds good engineering practice (GEP), or by any other dispersion technique.”

**COMAR 26.11.15.06 – Ambient Impact Requirement**
(A) “Except as provided in §B(3) of this regulation, a person may not cause or permit the discharge of a toxic air pollutant listed in COMAR 26.11.16.07 from an existing installation or source if total allowable emissions of that TAP from the premises will unreasonably endanger human health.
(B) A person shall demonstrate compliance with §B(1) of this regulation using the procedures established in Regulation .07 of this chapter and COMAR 26.11.16.
(C) A person who owns or operates an existing premises shall meet the requirements of §B(1) and (2) of this regulation for each TAP listed in COMAR 26.11.16.07 by the applicable compliance dates listed in COMAR 26.11.16.07, or not later than 2 years after becoming subject to this chapter, whichever is later.”
For Emergency Generators only
COMAR 26.11.36.03 – Emergency Generators and Load Shaving Units

NOx Requirements.

“A. Applicability and General Requirements for Emergency Generators and Load Shaving Units.

(1) The owner or operator of an emergency generator may not operate the generator except for emergencies, testing, and maintenance purposes.

(2) Except as provided in §A(5) of this regulation, this regulation does not apply to any engine that is fueled with natural gas or propane.

(3) This regulation does not apply to any engine that operates as a redundant system for power without direct or indirect compensation that is:
   (a) Located at a nuclear power plant; or
   (b) Located at a facility where operation of the engine is necessary to support critical national activities relating to security, aerospace research, or communications.

(4) The owner or operator of an emergency generator or load shaving unit may be subject to the federal standards for stationary internal combustion engines under 40 CFR Parts 60 and 63.

(5) The owner or operator of an emergency generator or load shaving unit may not operate the engine for testing and engine maintenance purposes between 12:01 a.m. and 2:00 p.m. on any day on which the Department forecasts that the air quality will be a code orange, code red, or code purple unless the engine fails a test and engine maintenance and a re-test are necessary.

(6) The owner or operator of an engine that is used for any purpose other than for emergency purposes shall install and operate a non-resettable hourly time meter on the engine for the purpose of maintaining the operating log required in §E of this regulation.

Record Keeping and Reporting:

The Permittee shall submit to the Department, by April 1 of each year during the term of this permit, a written certification of the results of an analysis of emissions of toxic air pollutants from the Permittee’s facility during the previous calendar year. The analysis shall include either:
(a) a statement that previously submitted compliance demonstrations for emissions of toxic air pollutants remain valid; or

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

Dominion Cove Point LNG, L.P. (Dominion) owns and operates a liquefied natural gas (LNG) storage and terminal facility on the western shore of the Chesapeake Bay near Cove Point in Lusby (Calvert County) Maryland (the Cove Point terminal). The Cove Point terminal receives, stores, and vaporizes imported LNG from sea-going tankers and transports vaporized LNG as pipeline-quality natural gas to an interconnection point with transmission and distribution points in the mid-Atlantic region. The primary SIC code for the Cove Point terminal is 4922.

The Cove Point terminal currently operates several types of emissions units, including combustion turbines, submerged vaporizers, water-ethylene glycol (WEG) heaters, boilers, emergency generators, fire pumps and vent heaters.

Since the last Title V permit was issued, Dominion has expanded their operations through three projects known as the Cove Point Expansion Project (CPX), Air Separation Unit Project (ASU), and Piggy-Back Heaters Project at the facility.

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

**Table 1: Actual Emissions**

<table>
<thead>
<tr>
<th>Year</th>
<th>NO$_X$ (TPY)</th>
<th>SO$_X$ (TPY)</th>
<th>PM$<em>{10}$/PM$</em>{2.5}$ (TPY)</th>
<th>CO (TPY)</th>
<th>VOC (TPY)</th>
<th>Total HAP (TPY)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>34.34</td>
<td>0.05</td>
<td>1.91/1.81</td>
<td>5.31</td>
<td>2.96</td>
<td>0.75</td>
</tr>
<tr>
<td>2010</td>
<td>35.68</td>
<td>0.05</td>
<td>4.23/4.26</td>
<td>14.68</td>
<td>2.56</td>
<td>0.0</td>
</tr>
<tr>
<td>2009</td>
<td>41.24</td>
<td>0.03</td>
<td>4.48/4.48</td>
<td>23.89</td>
<td>2.36</td>
<td>0.0</td>
</tr>
<tr>
<td>2008</td>
<td>36.45</td>
<td>0.04</td>
<td>2.51/2.41</td>
<td>37.14</td>
<td>7.40</td>
<td>0.0</td>
</tr>
<tr>
<td>2007</td>
<td>58.24</td>
<td>0.15</td>
<td>3.26/3.25</td>
<td>66.23</td>
<td>4.92</td>
<td>0.0</td>
</tr>
</tbody>
</table>

The major source threshold for triggering Title V permitting requirements in Calvert County is 25 tons per year for VOC, 25 tons for NO$_X$, and 100 tons per year for any other criteria pollutants and 10 tons for a single HAP or 25 tons per year for total HAPs. Since the actual NO$_X$ emissions from the facility are greater than the major source threshold, Dominion is required to obtain a Title V – Part 70 Operating Permit under COMAR 26.11.03.01.

On July 30, 2012, the Department received Dominion’s renewal Part 70 permit application for the Cove Point terminal. An administrative completeness review was conducted and the application was deemed to be administratively complete. A completeness determination letter was sent to Dominion on August 15, 2012 granting the Cove Point terminal an application shield.
CHANGES AND MODIFICATIONS TO THE PART 70 OPERATING PERMIT
The following changes and/or modifications have been incorporated into the renewal Title V – Part 70 Operating Permit for the Cove Point terminal:

**Additions to the facility**
PSD and NSR Approvals 2005-01 and permits to construct issued June 26, 2006 for the CPX Project permits allowed for the installation of the following emission units:

**S009 & S010:** Two (2) natural gas-fired, simple-cycle General Electric Frame 5 Turbines, each with a maximum rating of 302 MMBtu/hr equipped with dry-low NOX combustion (DLN), SCR and oxidation catalyst (OC).

**S011-S017:** Seven (7) water-ethylene glycol (WEG) heaters, each with a rating of 82.3 MMBtu/hr equipped with ultra low-NOX burners (ULNB).

**S018:** One (1) vent heater rated at 1.3 MMBtu/hr equipped with LNB.

**S019 & S020:** Two (2) natural gas-fired emergency generators, each with a rating of 1175 hp.

CPCN Case No. 9055 issued August 15, 2006 for the ASU Project permits allowed for the installation of the following emission units:

**S021:** One (1) natural gas-fired, simple-cycle Solar Titan Turbine with a maximum rating of 137 MMBtu/hr equipped with DLN combustors, SCR and OC.

**S022:** One (1) natural gas-fired process heater equipped with LNB rated at 0.93 MMBtu/hr.

**S023:** One (1) natural gas-fired Caterpillar black-start emergency generator rated at 1032 hp.

Permit to construct issued on February 12, 2009 for the Piggy-Back Heaters Project allowed for the installation of the following emission units:

**S024 & S025:** Two (2) natural gas-fired WEG heaters, each with a rating of 82.3 MMBtu/hr equipped with ULNB.

Permit to construct issued August 8, 2011 for the reactivation of the liquefaction unit. (009-0021-9-0022)

Permit to construct issued on June 21, 2012 for modification to the two (2) Johnston natural gas-fired hot water boilers, each rated at 12.3 MMBtu/hr equipped with LNB and flue gas recirculation (FGR). (009-0021-5-0032 and 5-0033)

Permit to construct issued on January 18, 2013 for the one (1) Onan 605 hp diesel-fired emergency engine intended for emergency purposes. (009-0021-9-0091)
New Source Performance Standards (NSPS) – 40 CFR Part 60
Several emission units at the Cove Point terminal are subject to the following NSPS:

**Subpart Dc** for Small Industrial-Commercial-Institutional Steam Generating Units: Nine (9) WEG heaters and two (2) hot water boilers.

**Subpart Kb** for Volatile Organic Liquid Storage Vessels (including Petroleum Liquid Storage Vessels) for which construction, reconstruction, or modification commenced after July 23, 1984: Three (3) LNG storage tanks, including two (2) LNG storage tanks constructed as part of the CPX project and one (1) LNG storage tank constructed as part of the re-activation project.

**Subpart IIII** for Stationary Compression Ignition Internal Combustion Engines: One (1) onshore fire pump rated at 360 bhp.

**Subpart KKKK** for Combustion Turbines: Frame 5 and Solar Titan Combustion Turbines.

The Cove Point terminal is not a major HAP Emissions Source. Instead it is an area HAP emission source and is subject to the following MACTs:

**Subpart ZZZZ** — Requirements for Existing Stationary RICE Located at Area Sources of HAP Emissions: Three (3) emergency generators.

**Subpart CCCCCC** – Gasoline Dispensing Facilities at Area Sources.

**Subpart JJJJJJ** – Area Source Boiler MACT- Industrial, Commercial and Institutional boilers and process heaters located at area sources of HAPs. The WEG heaters, LNG vaporizer units, the auxiliary boilers, the liquefaction heater, the fuel gas heater, and the LNG vent heater are exempt from the requirements of this MACT because they are all natural gas fired units.

COMPLIANCE ASSURANCE MONITORING (CAM)
Dominion conducted a Compliance Assurance Monitoring (CAM) analysis for the Cove Point terminal and determined that the facility is subject to the (CAM) Rule 40 CFR Subpart 64. Emission sources that are subject to NESHAP or NSPS emission limits or standards promulgated after November 15, 1990 are exempt from CAM requirements per 40 CFR 64.2(b)(i).

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.

CAM Applicability Summary for the Cove Point Terminal is listed in the table below:

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Add-On Control</th>
<th>Pollutant</th>
<th>Pre-Control</th>
<th>Federally Enforceable Standard</th>
<th>CEM/CPMS</th>
<th>Exemption</th>
<th>Subject to CAM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frame 3 Turbines</td>
<td>SCR</td>
<td>NO&lt;sub&gt;x&lt;/sub&gt;</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>40 CFR 64.2(b)(1)(vi)</td>
<td>No</td>
</tr>
<tr>
<td>Frame 5 Turbines</td>
<td>SCR</td>
<td>NO&lt;sub&gt;x&lt;/sub&gt;</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>40 CFR 64.2(b)(1)(i)</td>
<td>No</td>
</tr>
<tr>
<td>Oxidation Catalyst</td>
<td>SCR</td>
<td>CO</td>
<td>Yes</td>
<td>No</td>
<td>N/A</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Solar Turbine</td>
<td>SCR</td>
<td>NO&lt;sub&gt;x&lt;/sub&gt;</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>40 CFR 64.2(b)(1)(i)</td>
<td>No</td>
</tr>
<tr>
<td>Submerged Gas vaporizers</td>
<td>Water injection</td>
<td>NO&lt;sub&gt;x&lt;/sub&gt;</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>40 CFR 64.2(b)(1)(vi)</td>
<td>No</td>
</tr>
</tbody>
</table>

**GREENHOUSE GAS (GHG) EMISSIONS**

The Cove Point terminal emits the following greenhouse gases (GHGs) related to Clean Air Act requirements: carbon dioxide, methane, and nitrous oxide. These GHGs originate from various processes (i.e., waste decomposition and landfill gas fugitives, gas flaring, internal combustion engines, and garage boilers) contained within the facility premises applicable to the Cove Point terminal. The facility has not triggered Prevention of Significant Deterioration (PSD) requirements for GHG emissions; therefore, there are no applicable GHG Clean Air Act requirements. While there may be no applicable requirements as a result of PSD, emission certifications reports for the years 2009, 2010 and 2011, showed that the Cove Point terminal is a major source (threshold: 100,000tpy CO<sub>2</sub>e) for GHG's (see Table 3 shown below). The Permittee shall quantify facility wide GHGs emissions and report them in accordance with Section 3 of the Part 70 permit.

The following table summarizes the actual emissions from the Cove Point terminal based on its Annual Emission Certification Reports:
Table 3: Greenhouse Gases Emissions Summary

<table>
<thead>
<tr>
<th>GHG</th>
<th>Conversion factor</th>
<th>2009 tpy CO₂e</th>
<th>2010 tpy CO₂e</th>
<th>2011 tpy CO₂e</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon dioxide CO₂</td>
<td>1</td>
<td>160,544.096</td>
<td>195,253.479</td>
<td>120,734.278</td>
</tr>
<tr>
<td>Methane CH₄</td>
<td>21</td>
<td>4.659</td>
<td>3.875</td>
<td>6.187</td>
</tr>
<tr>
<td>Nitrous Oxide N₂O</td>
<td>310</td>
<td>0.376</td>
<td>0.301</td>
<td>0.165</td>
</tr>
<tr>
<td>Total GHG CO₂eq</td>
<td></td>
<td>160,549.131</td>
<td>195,257.656</td>
<td>120,740.630</td>
</tr>
</tbody>
</table>

EMISSION UNIT IDENTIFICATION

Dominion Cove Point terminal has identified the following emission units as being subject to Title V permitting requirements and having applicable requirements.

Table 2: Emission Unit Identification

<table>
<thead>
<tr>
<th>Emissions Unit Number</th>
<th>MDE Registration Number</th>
<th>Emissions Unit Name and Description</th>
<th>Date of Installation</th>
</tr>
</thead>
<tbody>
<tr>
<td>S001</td>
<td>009-5-0012 (formerly 9-0032)</td>
<td>One (1) natural gas-fired, simple-cycle General Electric Frame 3 combustion turbine (model MS3142) with a maximum rating of 135.6 MMBTU/hr – used to generate electricity. <strong>Controls:</strong> Selective catalytic reduction (SCR) unit</td>
<td>Turbine – Jan. 1978 SCR – April 2003 SCR-modified 2005</td>
</tr>
<tr>
<td>S002</td>
<td>009-5-0013 (formerly 9-0033)</td>
<td>One (1) natural gas-fired, simple-cycle General Electric Frame 3 combustion turbine (model MS3142) with a maximum rating of 135.6 MMBTU/hr – used to generate electricity. <strong>Controls:</strong> Selective catalytic reduction (SCR) unit</td>
<td>Turbine – Jan. 1978 SCR – April 2003 SCR-modified 2005</td>
</tr>
<tr>
<td>S003</td>
<td>009-5-0014 (formerly 9-0034)</td>
<td>One (1) natural gas-fired, simple-cycle General Electric Frame 3 combustion turbine (model MS3142) with a maximum rating of 135.6 MMBTU/hr – used to generate electricity.</td>
<td>Turbine – Jan. 1978 SCR – April 2003 SCR-</td>
</tr>
<tr>
<td>Control Number</td>
<td>Serial Number</td>
<td>Description</td>
<td>Details</td>
</tr>
<tr>
<td>----------------</td>
<td>---------------</td>
<td>-------------</td>
<td>---------</td>
</tr>
<tr>
<td>S004</td>
<td>009-5-0016 through 009-5-0025</td>
<td>Ten (10) natural gas-fired submerged gas vaporizers, each with a rating of 72 MMBtu/hr – Used to vaporize LNG</td>
<td>Controls: Selective catalytic reduction (SCR) unit. Burners Replaced March 2003.</td>
</tr>
<tr>
<td>S005</td>
<td>009-5-0015</td>
<td>One (1) LNG emergency vent heater rated at 2.32 MM BTU/hr – Used, under emergency conditions, to heat cold natural gas vapor for venting to the atmosphere</td>
<td>Controls: None. March 1978.</td>
</tr>
<tr>
<td>S007</td>
<td>009-5-0032</td>
<td>One (1) hot water boiler with a rating of 12.3 MMBTU/hr equipped with low-NO&lt;sub&gt;x&lt;/sub&gt; burner – Used to heat water-glycol mixture to enable heat exchangers to heat natural gas for use at the facility.</td>
<td>Controls: None. Jan. 2003 Modified 6/21/2012.</td>
</tr>
<tr>
<td>S008</td>
<td>009-5-0033</td>
<td>One (1) hot water boiler with a rating of 12.3 MMBTU/hr equipped with low-NO&lt;sub&gt;x&lt;/sub&gt; burner – Used to heat water-glycol mixture to enable heat exchangers to heat natural gas for use at the facility.</td>
<td>Controls: None. Jan. 2003 Modified 6/21/2012.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td><strong>CPX Project</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S009</td>
<td>009-5-0049</td>
<td>One (1) natural gas-fired simple-cycle General Electric Frame 5 Turbine with a maximum rating of 302 MMBtu/hr equipped with dry-low NO_X combustion (DLN), SCR and oxidation catalyst (OC) <strong>Controls:</strong> DLN, SCR and OC</td>
<td>2009</td>
</tr>
<tr>
<td>S010</td>
<td>009-5-0050</td>
<td>One (1) natural gas-fired simple-cycle General Electric Frame 5 Turbine with a maximum rating of 302 MMBtu/hr equipped with dry-low NO_X combustion (DLN), SCR and oxidation catalyst (OC) <strong>Controls:</strong> DLN, SCR and OC</td>
<td>2009</td>
</tr>
<tr>
<td>S011– S017</td>
<td>009-5-0051 through 009-5-0057</td>
<td>Seven (7) Johnston water-ethylene glycol (WEG) heaters, each with a rating of 82.3 MMBtu/hr, each equipped with ultra low NO_X burners (ULNB) <strong>Controls:</strong> None</td>
<td>2009</td>
</tr>
<tr>
<td>S018</td>
<td>009-5-0058</td>
<td>One (1) emergency vent heater rated at 1.3 MMBtu/hr equipped with low-NO_X burners (LNB). <strong>Controls:</strong> None</td>
<td>2009</td>
</tr>
<tr>
<td>S019</td>
<td>009-9-0071</td>
<td>One (1) natural gas-fired emergency generator with a rating of 1175 hp (825 kW). <strong>Controls:</strong> None</td>
<td>2009</td>
</tr>
<tr>
<td>S020</td>
<td>009-9-0072</td>
<td>One (1) natural gas-fired emergency generator with a rating of 1175 hp (825 kW). <strong>Controls:</strong> None</td>
<td>2009</td>
</tr>
<tr>
<td><strong>ASU Project</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S021</td>
<td>009-0021-5-0065</td>
<td>One (1) natural gas-fired, Solar Titan turbine with maximum rating of 137 MMBtu/hr equipped with DLN combustors, SCR, and oxidation catalyst. <strong>Controls:</strong> DLN, SCR and OC</td>
<td>2007</td>
</tr>
<tr>
<td>S022</td>
<td>N/A</td>
<td>One (1) natural gas-fired process heater equipped with Low NO_X Burner (LNB) rated at 0.93 MMBtu/hr. <strong>Controls:</strong> None</td>
<td>2007</td>
</tr>
</tbody>
</table>
S023  009-0021-9-0082  One (1) Caterpillar natural gas-fired lean burn 4 stroke (black-start) emergency generator rated at 1032 horsepower.  
**Controls:** None  2007

S024  009-0021-5-0060  One (1) Johnston Water-Ethylene Glycol (WEG) natural gas-fired vaporization heater with a rating of 82.3 MMBtu/hr equipped with ULNB.  
**Controls:** None  2009

S025  009-0021-5-0062  One (1) Johnston Water-Ethylene Glycol (WEG) natural gas-fired vaporization heater with a rating of 82.3 MMBtu/hr equipped with ULNB.  
**Controls:** None  2009

009-0021-9-0091  One (1) Onan 605 hp (400 kW) diesel-fired engine intended for emergency purposes.  
(MDE PTC Issued 1/18/2013)  Spring 2002

---

**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: S001, S002 & S003 – Combustion Turbines

S001, S002, & S003 – (009-5-0012, 009-5-0013, & 009-5-0014 formerly 009-9-0032 to 9-0034).
Three (3) natural gas-fired, simple-cycle General Electric Frame 3 combustion turbines (model MS3142), each with a maximum rating of 135.6 MMBTU/hr – used to generate electricity.

Controls: Selective catalytic reduction (SCR) unit

The three (3) GE Frame 3 combustion turbines are not subject New Source Performance Standards (NSPS) for stationary turbines (40 CFR Part 60, Subpart GG).

§60.330 - Applicability and designation of affected facility.
(a) The provisions of this subpart are applicable to the following affected facilities: All stationary gas turbines with a heat input at peak load equal to or greater than 10.7 gigajoules (10 million Btu) per hour, based on the lower heating value of the fuel fired.
(b) Any facility under paragraph (a) of this section which commences construction, modification, or reconstruction after October 3, 1977, is subject to the requirements of this part except as provided in paragraphs (e) and (j) of §60.332.
The combustion turbines were installed 7 years prior to the applicability date.

The three (3) GE Frame 3 combustion turbines are not subject to NSPS for Combustion Turbines Subpart KKKK:

§60.4305 - Does this subpart apply to my stationary combustion turbine?
“(a) If you are the owner or operator of a stationary combustion turbine with a heat input at peak load equal to or greater than 10.7 gigajoules (10 MMBtu) per hour, based on the higher heating value of the fuel, which commenced construction, modification, or reconstruction after February 18, 2005, your turbine is subject to this subpart.”

The combustion turbines were installed 7 years prior to the applicability date.

The GE Frame 3 combustion turbines are not subject to the NESHAP for Combustion Turbines Subpart YYYY:

§63.6090 - What parts of my plant does this subpart cover?
“This subpart applies to each affected source.
(a) Affected source. An affected source is any existing, new, or reconstructed stationary combustion turbine located at a major source of HAP emissions.”

The Cove Point terminal is not a major source of HAP emissions.

A Prevention of Significant Deterioration (PSD) Approval and a non-attainment New Source Review (NSR) Approval were issued August 6, 2002 for the reactivation of LNG import service.

A Permit to Construct #009-9-0032 to 9-0034 was issued April 1, 2005, for the modification of the three combustion turbines by replacing the SCR control systems with three Peerless Manufacturing Company SCR control systems using 19% aqua-ammonia supply system and Engelhard Corporation NO\textsubscript{X} Cat ETZ (zeolite) catalyst.

**Compliance Status**
On February 25, 2009 thru March 4, 2009, the Permittee conducted stack test on the combustion turbines for CO, NO\textsubscript{X}, and PM10. The test results are as follows:

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Pollutant</th>
<th>Test Results</th>
<th>Allowable Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>S001</td>
<td>CO</td>
<td>0.00486 lb/mmBtu</td>
<td>0.045 lb/mmBtu</td>
</tr>
<tr>
<td>S001</td>
<td>NO\textsubscript{X}</td>
<td>7.22 ppm @ 15% O\textsubscript{2}</td>
<td>12 ppm</td>
</tr>
<tr>
<td>S001</td>
<td>PM\textsubscript{10}</td>
<td>0.00378 lb/mmBtu</td>
<td>0.0066 lb/mmBtu</td>
</tr>
<tr>
<td>S002</td>
<td>CO</td>
<td>0.045 lb/mmBtu</td>
<td>0.04566 lb/mmBtu</td>
</tr>
<tr>
<td>S002</td>
<td>NO\textsubscript{X}</td>
<td>9.714 ppm @ 15% O\textsubscript{2}</td>
<td>12 ppm</td>
</tr>
<tr>
<td>S002</td>
<td>PM\textsubscript{10}</td>
<td>0.00396 lb/mmBtu</td>
<td>0.0066 lb/mmBtu</td>
</tr>
</tbody>
</table>
Applicable Standards and limits:
A. Control of Visible Emissions

**COMAR 26.11.09.05 - Visible Emissions.**

“A. Fuel Burning Equipment.
(1) Areas I, II, V, and VI. In Areas I, II, V, and VI, 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 greater than 20 percent opacity.
(3) Exceptions. Section A(1) and (2) of this regulation do not apply to emissions during load changing, soot blowing, startup, or adjustments or occasional cleaning of control equipment if:
(a) The visible emissions are not greater than 40 percent opacity; and
(b) The visible emissions do not occur for more than 6 consecutive minutes in any sixty minute period. “

**Compliance Demonstration:**
The Permittee shall record any incidences of visible emissions and the corrective actions. [Reference: COMAR 26.11.03.06C] The Permittee shall report incidences of excess emissions and related corrective actions taken in accordance with excess emissions reporting requirements. [Reference: COMAR 26.11.01.07C]

**Rationale:** The turbines burn only pipeline quality natural gas, a very clean burning fuel. The turbines are designed to operate with no visible emissions, and would have to have a very serious malfunction in order for visible emissions to occur. If the Permittee performs preventative maintenance as recommended by the turbine manufacturer and supplemented with the facility’s maintenance experiences, the turbines will continue to operate with no visible emissions and minimize the possibility of malfunctions. The Permittee has the general requirement to record and report any excess emissions and corrective measures.

B. Control of Particulate Matter Emissions
The GE Frame 3 natural gas-fired combustion turbines are subject to PM limit of 0.0066 lbs/MBtu of heat input. Each combustion turbine shall use natural gas as only fuel to meet the PM BACT requirements. [Reference: PSD Approval #PSD-2002-1 issued 8/6/02].
Compliance Demonstration:
The Permittee shall perform an EPA Reference Test Method 5, 40 CFR Part 60 Appendix A, of the exhaust gases in the stacks of at least one of the combustion turbines at the facility once during the term of the permit. The combustion turbine shall be operating at no less than 90% of its rated capacity during stack emissions testing. The Permittee shall perform routine and preventative maintenance in accordance with manufacturer’s specifications. The Permittee shall maintain the following on site for at least 5 years: records of stack testing results; record of the date, time and description of maintenance performed on the combustion turbines and shall submit records to the Department upon request. The Permittee shall submit a test protocol to the Department, for approval, at least 30 days prior to the scheduled test date. The Permittee shall report the results of the stack tests to the Department within 60 days of completion of the tests. [Reference: COMAR 26.11.03.06C]

Rationale: Dominion completed a stack test on the combustion turbines at the terminal in December 2011 (based on the Solar combustion turbine). The PM limit for the Frame 3 combustion turbines is 0.0066 lb/MMBtu and the test result was 0.000203 lb/MMBtu (filterable only) which is 3% of the permit limit. Dominion monitors other parameters that are indicative of proper operation and maintenance of the turbines and SCRs including chemical reagent use. In addition, the Frame 3 combustion turbines burn only natural gas as a fuel. When equipment is properly maintained, emissions from natural gas are stable and relatively low.

Control of Nitrogen Oxides

COMAR 26.11.09.08G. - Requirements for Fuel-Burning Equipment with a Capacity Factor of 15 Percent or Less, and Combustion Turbines with a Capacity Factor Greater than 15 Percent.
“(2) A person who owns or operates a combustion turbine with a capacity factor greater than 15 percent shall meet an hourly average NO\textsubscript{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. “

The GE Frame 3 natural gas-fired combustion turbines are subject to the NO\textsubscript{X} emission limit of 12 ppm of dry gas corrected to 15% O\textsubscript{2}. Compliance with this emission limit shall be assessed on a 30-day rolling average. [Reference: PSD Approval #PSD-2002-1 & NSR Approval #NSR-2002-01 issued 8/6/02].

Compliance Demonstration:
The Permittee shall continuously monitor the NO\textsubscript{X} emission of the stack gases using a NO\textsubscript{X} Continuous Emission Monitor (CEM) that is certified in accordance 40 CFR Part 60, Appendix B, or Part 75, Appendix A and meet the quality
assurance criteria in 40 CFR Part 60, Appendix F. [Reference: COMAR 26.11.09.08(B)(2)(b&c)]
The following records shall be kept on the premises for at least 5 years and shall be made available to the Department upon request:
(a) The amount of natural gas burned in each combustion turbine, million BTU per month;
(b) The amount of chemical reagent usage for NO\textsubscript{X} emission control, pounds per month;
(c) All CEM system monitoring data, which are used to demonstrate compliance with the emission limits;
(d) All stack emissions test report;
(e) NO\textsubscript{X} emission rates, pounds per million BTU of heat input, for each combustion turbine;
(f) Monthly NO\textsubscript{X} emissions from each combustion turbine.
(g) All CEM certifications and calibration results; and
(h) The repairs and maintenance made to the SCR or oxidation catalyst emission control devices or the NO\textsubscript{X} CEM system.

[Reference: MDE Permit to Construct #009-9-0032 to 9-0034 issued on 8/6/02 (modified on 4/1/05) and NSR Approval #NSR-2002-01 issued 8/6/02]
The Permittee shall submit a quarterly summary report to the Department not later than 30 days following each calendar quarter. The report shall be in a format approved by the Department, and shall include the following:
(i) The cause, time periods, and magnitude of all emissions which exceed the applicable emission standards;
(ii) The source downtime including the time and date of the beginning and end of each downtime period and whether the source downtime was planned or unplanned;
(iii) The time periods and cause of all CEM downtime including records of any repairs, adjustments, or maintenance that may affect the validity of emission data;
(iv) Quarterly totals of excess emissions, installation downtime, and CEM downtime during the calendar quarter;
(v) Quarterly quality assurance activities; and
(vi) Daily calibration activities that include reference values, actual values, absolute or percent of span differences, and drift status; and
(vii) Other information required by the Department that is determined to be necessary to evaluate the data, to ensure that compliance is achieved, or to determine the applicability of this regulation.” [Reference: COMAR 26.11.03.06C]

CEM System Downtime Reporting Requirement: The Permittee shall report all system downtime that lasts or is expected to last more than 24 hours to the Department by telephone before 10 a.m. of the first regular business day following the breakdown. The system breakdown report shall include the reason, if known, for the breakdown and the estimated period of time that the CEM will be
down. The owner or operator of the CEM shall notify the Department by telephone when an out-of-service CEM is back in operation and producing valid data. [Reference: COMAR 26.11.03.06C]

COMAR 26.11.09.08K(1) - Reporting Requirements.

(1) When demonstration of compliance with the NO\textsubscript{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. The summaries shall include:

(i) NO\textsubscript{X} emission rates in pounds of NO\textsubscript{X} per hour and pounds of NO\textsubscript{X} per million BTU reported as a daily 24-hour average and as a thirty (30) day rolling average;
(ii) Boiler downtime, including the beginning time and date and ending time and date of each downtime period;
(iii) The time periods and cause of all CEM downtime including records of any repairs, adjustments, or maintenance that may affect the validity of emission data;
(iv) Quarterly totals of boiler downtime and CEM downtime during the calendar quarter; and
(v) Quarterly quality assurance activities.

C. Control of VOC Emissions

The VOC emissions are limited to 33.8 tons for any 12-month period rolling monthly for emission units associated with the 2002 re-activation project and the CPX expansion. The VOC emissions are limited to 48.7 tons for any 12-month period, rolling monthly, for the re-activation sources only. [Reference: NSR Approval #NSR-2005-01 issued 6/26/06 & MDE Permit to Construct Number 009-9-0032 to 9-0034 issued on 8/6/02 (modified on 4/1/05)].

**Compliance Demonstration:**
The Permittee shall keep records of monthly VOC emissions from each combustion turbine on the premises for at least 5 years and shall be made available to the Department upon request. The Permittee shall submit to the Department no later than 30 days following each calendar quarter a quarterly report. The report shall be in a format approved by the Department and shall include monthly VOC emission calculation from each combustion turbine. [Reference: MDE Permit to Construct #009-9-0032 to 9-0034 issued on 8/6/02 (modified on 4/1/05) & NSR Approval #NSR-2005-01 issued 6/26/06]

D. Control of Carbon Monoxide (CO) Emissions

The GE Frame 3 natural gas-fired combustion turbines are subject to the CO BACT emissions limit of 0.045 lbs/MBtu of heat input assessed by CO stack emission tests. Each combustion turbine shall use natural gas as only fuel and operate within the appropriate ranges of good combustion operating parameters.
established during performance tests to meet the CO BACT requirements.  
[Reference: PSD Approval #PSD-2002-1 issued 8/6/02]

**Compliance Demonstration:**
The Permittee shall perform stack testing to demonstrate compliance with CO BACT emission limit in the exhaust gases of the stack of at least one of the combustion turbines once during the term of this permit. The combustion turbine shall be operating at no less than 90% of its rated capacity during stack emission testing.  
[Permit to Construct #009-9-0032 to 9-0034 issued on 8/6/02 (modified on 4/1/05)]
The Permittee shall perform routine and preventative maintenance in accordance with manufacturer’s specifications.  
[Reference: COMAR 26.11.03.06C]
The Permittee shall maintain the following records on site for a period of at least 5 years:

1. Plans with the appropriate ranges established for good combustion operating parameters to reduce CO emissions from the combustion turbines;
2. The cause and time periods, except during start-up and shut-down phases, which the combustion turbines did not operate within the appropriate ranges of the good combustion operating parameters established for air emission reduction; and
3. Stack testing results and record of the date, time and description of maintenance performed on the combustion turbines.

[Reference: PSD Approval #PSD-2002-1 issued 8/6/02; COMAR 26.11.03.06C]
The Permittee shall submit a test protocol to the Department, for approval, at least 30 days prior to the scheduled test date. The Permittee shall report the results of the stack tests to the Department within 60 days of completion of the tests. The stack test reports shall include the following information:

1. Emissions data including the pollutant concentration, gas volume, temperature, and oxygen content of the combustion exhaust gases leaving the exhaust stack;
2. Hourly fuel usage rate of fuel consumed by the emission source during the testing period, million Btu/hr; and
3. The operation procedures of good combustion practices.

[Reference: MDE Permit to Construct #009-9-0032 to 9-0034 issued on 8/6/02 (modified on 4/1/05)]

**Rationale:** Dominion completed a stack test on the combustion turbines at the facility in February/March 2009. The CO limit for the Frame 3 combustion turbines is 0.045 lb/MMBtu and the test results ranged from 0.0049 lb/MMBtu, 11% of the permit limit to 0.0119 lb/MMBtu, 26% of the permit limit. In addition the Frame 3 combustion turbines burn only natural gas as a fuel. When equipment is properly maintained, emissions from natural gas are stable and relatively low.
Emission Unit: S004 - Vaporizers

S004 – (009-5-0016 through 009-5-0025).
Ten (10) T-Thermal (model HV-12049) natural gas-fired submerged combustion vaporizers (SCV), each with a rating of 72 MMBtu/hr, equipped with a water injection system. – Used to vaporize LNG
- S004-16 vaporizer (72 MM BTU/hr)
- S004-17 vaporizer (72 MM BTU/hr)
- S004-18 vaporizer (72 MM BTU/hr)
- S004-19 vaporizer (72 MM BTU/hr)
- S004-20 vaporizer (72 MM BTU/hr)
- S004-21 vaporizer (72 MM BTU/hr)
- S004-22 vaporizer (72 MM BTU/hr)
- S004-23 vaporizer (72 MM BTU/hr)
- S004-24 vaporizer (72 MM BTU/hr)
- S004-25 vaporizer (72 MM BTU/hr)

Controls: Water injection system and air-to-fuel ratios

The vaporizers are not subject to the NSPS for small industrial-institutional-commercial steam generating units, Subpart Dc.

§60.40c - Applicability and delegation of authority.
(a) Except as provided in paragraph (d) of this section, the affected facility to which this subpart applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/hr)) or less, but greater than or equal to 2.9 MW (10 MMBtu/hr).

The vaporizers were installed 19 years prior to the applicability date.

Please Note: Dominion is requesting the testing requirements be modified to include a more realistic maximum operating scenario of 5 vaporizers operating at 90% or more of their maximum capacity. Due to the design of the Cove Point terminal’s operations, normal operating conditions would involve only 5 or 6 vaporizers in operation at one time. The Cove Point terminal may only rarely use all 10 vaporizers operating at maximum capacity all at one time.

Compliance Status
On March 3, 2010, three of the vaporizers (5-0018, 5-0019, 5-0020) from Emission Unit S004 were stack tested for NO\textsubscript{X} and CO emissions. The purpose of the testing was to demonstrate compliance with the operating limits for NO\textsubscript{X} and CO while operating the vaporizers at an air to fuel ratio at 10.75 or above and using water injection. The results showed that the CO emissions ranged from 0.089 – 0.014 lb/mmBtu, all below the 0.16 lb/mmBtu CO limit. The NO\textsubscript{X}
emission ranged from 0.035 – 0.047 lb/mmBtu, all below the 0.0605 lb/mmBtu NO\textsubscript{X} limit.

**Applicable Standards and limits:**

A. **Control of Visible Emissions**

**COMAR 26.11.09.05 - Visible Emissions.**

“A. Fuel Burning Equipment.

(1) Areas I, II, V, and VI. In Areas I, II, V, and VI, 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 greater than 20 percent opacity.

(3) Exceptions. Section A(1) and (2) of this regulation do not apply to emissions during load changing, soot blowing, startup, or adjustments or occasional cleaning of control equipment if:

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

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

**Compliance Demonstration:**

The Permittee shall record any incidences of visible emissions and the corrective actions. **[Reference: COMAR 26.11.03.06C]**. The Permittee shall report incidences of excess emissions and related corrective actions taken in accordance with excess emissions reporting requirements. **[Reference: COMAR 26.11.01.07C]**

**Rationale:** The vaporizers burn only pipeline quality natural gas, a very clean burning fuel. The vaporizers are designed to operate with no visible emissions, and would have to have a very serious malfunction in order for visible emissions to occur. If the Permittee performs preventative maintenance as recommended by the vaporizer manufacturer and supplemented with the facility’s maintenance experiences, the vaporizers will continue to operate with no visible emissions and minimize the possibility of malfunctions. The Permittee has the general requirement to record and report any excess emissions and corrective measures.

B. **Control of Particulate Matter Emissions**

The ten (10) natural gas-fired submerged combustion vaporizers (SCV) are subject to PM limitation from the ten vaporizers to 0.0076 lbs/MMBtu of heat input. **[Reference: PSD Approval #PSD-2002-1 issued 8/6/02]**.

**Compliance Demonstration:**

The Permittee shall perform routine and preventative maintenance in accordance with manufacturer’s specifications. The Permittee shall maintain a record of the date, time and description of maintenance performed on the vaporizers and shall submit records to the Department upon request. **[Reference: COMAR 26.11.03.06C]**
**Rationale:** Dominion completed an initial performance test on the submerged combustion vaporizers in December 2003. The PM limit for the vaporizers is 0.0076 lb/MMBtu and the test results were 0.0042 lb/MMBtu, which is 55% of the permit limit. The submerged combustion vaporizers burn only natural gas as a fuel. Dominion continuously monitors the water injection rate and the air-to-natural gas ratio on each of the submerged combustion vaporizer when operating to ensure optimal control of emissions for the units. When the equipment is properly maintained, emissions from natural gas are stable and relatively low.

C. **Control of Nitrogen Oxides**

**COMAR 26.11.09.08B. - General Requirements and Conditions.**

(1) **Emission Standards and Requirements.**

(a) A person who owns or operates an installation that causes NO\textsubscript{X} emissions subject to this regulation is in compliance with this regulation if the person establishes compliance with the emissions standards in §B(1)(c) of this regulation. (c) **Emission Standards in Pounds of NO\textsubscript{X} per Million Btu of heat input.**

- Gas only: 0.2.

The ten (10) natural gas-fired SCV are subject to the NO\textsubscript{X} emission limit from the ten vaporizers of 0.0605 lb/MMBtu of heat input. [Reference: PSD Approval #PSD-2002-1 issued 8/6/02].

**Compliance Demonstration:**

The Permittee shall perform routine and preventative maintenance in accordance with manufacturer’s specifications. [Reference: COMAR 26.11.03.06C] The Permittee shall operate each vaporizer, for normal operation, with the water injection system to reduce NO\textsubscript{X} emissions. The water injection rate shall range from 7 to 22 gallons per hour (gph) per burner on a 3-hour block average established during the NO\textsubscript{X} emission testing. The Permittee shall monitor and record the water injection rate (gph) on a 3-hour block average when the vaporizer is operating. [Reference: MDE Permit to Construct #009-5-0016 to 0025M issued 6/26/06, PSD Approval #PSD-2002-1, and NSR Approval #NSR-2002-01 issued on 8/6/02]

The Permittee shall maintain the following records on-site for a period of at least five years:

1. Monthly natural gas usage in millions BTU per month for each vaporizer;
2. Water injection rate (gph) on a 3-hour block average to each burner to reduce NO\textsubscript{X} emissions from the vaporizers; and
3. Monthly NO\textsubscript{X} emissions from each vaporizer.
4. Record of the date, time and description of maintenance performed on the vaporizers and shall submit records to the Department upon request. [Reference: COMAR 26.11.03.06C, PSD Approval #PSD-2002-1, and NSR Approval #NSR-2002-01 issued 8/6/02]
The Permittee shall submit to the Department not later than 30 days following each calendar quarter a quarterly summary report. The report shall be in a format approved by the Department and shall include the following information for the water injection rate to each burner:
(a) Total operating time for each vaporizer during the quarter;
(b) The cause, time periods, and dates, and the magnitude of water flow faults except start-up and shut-down phases;
(c) The source downtime including the time and date of the beginning and end of each downtime period and whether the source downtime was planned or unplanned;
(d) The time periods and cause of all Combustion Monitoring System downtime including records of any repair, adjustment, or maintenance that may affect the validity of the water injection rate;
(e) Quarterly totals of water flow faults;
(f) General maintenance and repair activities conducted; and
(g) Monthly NO\textsubscript{X} emissions from each vaporizer.

[Reference: COMAR 26.11.03.06C and MDE Permit to Construct #009-5-0016 through 5-0025M issued 6/26/06]

**Rationale**: The most recent stack test on the submerged combustion vaporizers for emission of NO\textsubscript{X} were completed between March 2008 and March 2010. The NO\textsubscript{X} limit for the submerged combustion vaporizers is 0.0605 lb/MMBtu and the test results ranged from 0.0336 lb/MMBtu to 0.478 lb/MMBtu, which is 56% to 79% of the permit limit. Dominion also continuously monitors the water injection rate on each submerged combustion vaporizer when operating and therefore can be easily monitor and optimize the control of NO\textsubscript{X} emissions when operating the units.

D. Control of VOC Emissions
The VOC emissions are limited to 33.8 tons for any 12-month period rolling monthly for emission units associated with the 2002 re-activation project and the CPX expansion. The VOC emissions are limited to 48.7 tons for any 12-month period, rolling monthly, for the re-activation sources only. [Reference: NSR Approval #NSR-2005-01 issued 6/26/06 & MDE Permit to Construct Number 009-5-0016 through 5-0025M issued on 4/1/05].

**Compliance Demonstration**: The Permittee shall keep records of monthly VOC emissions from each vaporizer on the premises for at least 5 years and shall be made available to the Department upon request. The Permittee shall submit to the Department no later than 30 days following each calendar quarter a quarterly report. The report shall be in a format approved by the Department and shall include monthly VOC emission calculation from each vaporizer. [Reference: MDE Permit to
E. Control of Carbon Monoxide (CO) Emissions
The ten (10) natural gas-fired submerged combustion vaporizers (SCV) are subject to the CO BACT emissions limit of 0.16 lbs/MMBtu of heat input. Each vaporizer shall use natural gas as only fuel and operate within the appropriate ranges of good combustion operating parameters established during performance tests to meet the CO BACT requirements. [Reference: PSD Approval #PSD-2002-1 issued 8/6/02]

Compliance Demonstration:
The Permittee shall perform routine and preventative maintenance in accordance with manufacturer’s specifications. [Reference: COMAR 26.11.03.06C]
Each vaporizer shall use natural gas only and shall be operated at an air-to-natural gas (A/G) ratio of 10.75 or greater on a 3-hour block average (Good Combustion Practice Parameters) unless the Permittee has demonstrated to the Department’s satisfaction that the vaporizers meet the CO limit of 0.16 lbs/MMBtu of heat input at a lower A/G value. [Reference: COMAR 26.11.03.06C and PSD Approval #PSD-2002-1 issued 8/6/06]
The Permittee shall maintain the following records on-site for a period of at least five years:
(1) Air-to-gas ratio on a 3-hour block average;
(2) The plans with the appropriate ranges established for good combustion operating parameters to reduce CO emissions from the vaporizers; and
(3) The cause and time periods, except during start-up and shut-down phases, which the vaporizers did not operate within the appropriate ranges of the good combustion operating parameters established for CO emission reduction.
(4) Record of the date, time and description of maintenance performed on the vaporizers and shall submit records to the Department upon request.
[Reference: COMAR 26.11.03.06C and PSD Approval #PSD-2002-1 issued 8/6/06]
The Permittee shall submit to the Department not later than 30 days following each calendar quarter a quarterly summary report. The report shall be in a format approved by the Department and shall include the following information of the A/G ratio for each vaporizer:
(a) Total operating time for each vaporizer during the quarter;
(b) The cause, time periods, and dates, and the magnitude of non-compliance of the A/G ratio except start-up and shut-down phases;
(c) The source downtime including the time and date of the beginning and end of each downtime period and whether the source downtime was planned or unplanned;
(d) The time periods and cause of all Combustion Monitoring System downtime including records of any repair, adjustment, or maintenance that may affect the validity of A/G ratio;
(e) Quarterly totals of non-compliance of A/G ratio; and
(f) General maintenance and repair activities conducted.

[Reference: COMAR 26.11.03.06C]

**Rationale:** The most recent stack test on the submerged combustion vaporizers for emission of CO were completed between March 2008 and March 2010. The CO limit for the submerged combustion vaporizers is 0.16 lb/MMBtu and the test results ranged from 0.026 lb/MMBtu to 0.125 lb/MMBtu, which is 16% to 78% of the permit limit. Dominion also continuously monitors the air-to-natural gas ratio on each submerged combustion vaporizer when operating and therefore can be easily monitor and optimize the control of CO emissions when operating the units.

---

**Emission Unit: S005, S006, S007 & S008 – Heaters & Boilers**

**S005** – (009-5-0015).
One (1) Black, Sivalls & Bryson (model 2500 SGIH) natural gas-fired LNG emergency vent heater rated at 2.32 MM BTU/hr.: – Used, under emergency conditions, to heat cold natural gas vapor for venting to the atmosphere.

**Controls:** None

**S006** – (009-9-0022).
One (1) HEATEC (model HCI-6010-50G) natural gas-fired Liquefaction heater rated at 8.9 MM BTU/hr – Used to supply heat for regenerating zeolite molecular sieve used for cleaning pipeline gas

**Controls:** None

**S007 & S008** – (009-5-0032 & 009-5-0033).
Two (2) Johnston Boiler Co. (PFTA-300-4-G) natural gas-fired packaged fire tube hot water boilers, each with a rating of 12.3 MMBTU/hr and equipped with low-NO\textsubscript{X} burner. – Used to heat water-glycol mixture to enable heat exchangers to heat natural gas for use at the facility.

**Controls:** None

**S007 & S008** (installed in 2003) are subject to NSPS for small industrial-institutional-commercial steam generating units, Subpart Dc.

**§60.40c - Applicability and delegation of authority.**

(a) Except as provided in paragraph (d) of this section, the affected facility to which this subpart applies is each steam generating unit for which construction,
modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/hr)) or less, but greater than or equal to 2.9 MW (10 MMBtu/hr).

The emergency vent heater (installed in 1978) and the liquefaction heater (installed in 1995) have a maximum heat input design capacity less than 10 MMBtu/hr and are exempt from Subpart Dc.

**Applicable Standards and limits:**

**A. Control of Visible Emissions**

**COMAR 26.11.09.05 - Visible Emissions.**

“A. Fuel Burning Equipment.

(1) Areas I, II, V, and VI. In Areas I, II, V, and VI, 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 greater than 20 percent opacity.

(3) Exceptions. Section A(1) and (2) of this regulation do not apply to emissions during load changing, soot blowing, startup, or adjustments or occasional cleaning of control equipment if:

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

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

**Compliance Demonstration:**

The Permittee shall report incidences of excess emissions and related corrective actions taken in accordance with excess emissions reporting requirements.

[Reference: COMAR 26.11.01.07C]

**B. Control of Nitrogen Oxides**

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

(a) “For purposes of this regulation, the equipment operator to be trained may be the person who maintains the equipment and makes the necessary adjustments for efficient operation.

(b) The operator training course sponsored by the Department shall include an in-house training course that is approved by the Department.”

**COMAR 26.11.09.08E. - Requirements for Fuel-Burning Equipment with a Rated Heat Input Capacity of 100 Million Btu Per Hour or Less.** “A person who owns or operates fuel-burning equipment with a rated heat input capacity of 100 Million Btu per hour or less shall:

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

(2) Perform a combustion analysis for each installation at least once each year and optimize combustion based on the analysis;
(3) Maintain the results of the combustion analysis at the site for at least 2 years and make this data available to the Department and the EPA upon request;
(4) Once every 3 years, require each operator of the installation to attend operator training programs on combustion optimization that are sponsored by the Department, the EPA, or equipment vendors; and
(5) Prepare and maintain a record of training program attendance for each operator at the site, and make these records available to the Department upon request.”

**Compliance Demonstration:**
The Permittee shall perform combustion analysis on the heaters and boilers at least once per year and optimize combustion based on the analysis.

**Reference:** COMAR 26.11.09.08E(2)

The Permittee shall maintain the following records on-site for a period of at least five years:
(1) Training program attendance for each operator at the site and make these records available to the Department upon request.
(2) Results of combustion analysis.

**Reference:** COMAR 26.11.09.09E(3)&(5)

The Permittee shall submit:
(1) The results of combustion analysis to the department and the EPA upon request. **[Reference: COMAR 26.11.09.08E(3)]**
(2) A record of training program attendance for each operator to the Department upon request. **[Reference: COMAR 26.11.09.08E(5)].**

C. Control of VOC Emissions
See Additional Requirements in Table 9.

D. Operational Limits
**CO/NOX/PM BACT Limitations:** The BACT requirements include use of natural gas, good combustion practices, and installation of low NOX burners with flue gas re-circulation. **[Reference: MDE Permit to Construct Number 009-0021-5-0032 & 009-0021-5-0033 issued on 6/21/12]**

**Compliance Demonstration:**
The Permittee shall maintain records on-site for a period of at least five years and make available to the Department upon request: fuel combusted in million Btu per month and applicable operating/maintenance actions. **[Reference: COMAR 26.11.03.06C]**
E. NSPS for PM and SO\textsubscript{x} Emissions

40 CFR Part 60 Subpart Dc—Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

§60.40c - Applicability and delegation of authority.
(a) Except as provided in paragraphs (d), (e), (f), and (g) of this section, the affected facility to which this subpart applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/h)) or less, but greater than or equal to 2.9 MW (10 MMBtu/h). Since the heaters are fired on natural gas only, the record keeping and reporting requirements §60.48c apply.

Compliance Demonstration:
§60.48c - Reporting and recordkeeping requirements.
“(g)(1) Except as provided under paragraphs (g)(2) and (g)(3) of this section, the owner or operator of each affected facility shall record and maintain records of the amount of each fuel combusted during each operating day.”
“(j) The reporting period for the reports required under this subpart is each six-month period. All reports shall be submitted to the Administrator and shall be postmarked by the 30th day following the end of the reporting period.”

Emission Unit: FL1-FL6

FL1-FL6 – (009-0021-9-0022)
Liquefaction equipment components (LEC)

Liquefaction equipment components were installed in 1995. Because it cannot liquefy and vaporize natural gas simultaneously, the liquefaction equipment components have been idled since 2001. A Permit to construct was issued on August 8, 2011 for the Reactivation of the liquefaction unit and the installation of a higher-capability variable speed drive to the liquefier compressor motor.

Applicable Standards and limits:
A. Control of Visible Emissions
COMAR 26.11.06.02C. - Visible Emission Standards.
“(1) In Areas I, II, V, and VI a person may not cause or permit the discharge of emissions from any installation or building, other than water in an uncombined form, which is greater than 20 percent opacity.
COMAR 26.11.06.02A. - General Exceptions
(2) The visible emissions standards in §C of this regulation do not apply to emissions during start-up and process modifications or adjustments, or occasional cleaning of control equipment, if:
(a) The visible emissions are not greater than 40 percent opacity; and
(b) The visible emissions do not occur for more than 6 consecutive minutes in any 60 minute period. "

**Compliance Demonstration:**
The Permittee shall record incidences of excess emissions and related corrective actions taken in accordance with excess emissions reporting requirements.  
[Reference: COMAR 26.11.03.06C]
The Permittee shall report incidences of excess emissions and related corrective actions taken in accordance with excess emissions reporting requirements.  
[Reference: COMAR 26.11.01.07C]

---

**B. Control of VOC Emissions**

**COMAR 26.11.06.06B. - Control of VOC from Installations.**

“(2) The following requirements apply in Calvert, Cecil, Charles, and Frederick counties:

(c) Installations Constructed On or After November 15, 1992. Except as provided in §E of this regulation, a person may not cause or permit the discharge of VOC from any installation constructed on or after November 15, 1992 in excess of 20 pounds (9.07 kilograms) per day unless the discharge is reduced by 85 percent or more overall. “

The VOC emissions are limited to 33.8 tons for any 12-month period rolling monthly for emission units associated with the 2002 re-activation project and the CPX expansion. The VOC emissions are limited to **48.7 tons** for any 12-month period, rolling monthly, for the re-activation sources only.  [Reference: NSR Approval #NSR-2005-01 issued 6/26/06 & MDE Permit to Construct Number 009-0021-9-0022 issued on 8/8/11].

**Compliance Demonstration:**
The Permittee shall continuously monitor the constituents of the refrigerant while the liquefaction unit is operating. The Permittee shall monitor the amount of isopentane added to the liquefier from the tanker storage. The Permittee shall monitor the leaks from flanges, connectors, valves, and seals associated with the liquefaction unit and shall repair each leak within 24 hours after it is detected. The Permittee shall utilize a flow meter to measure the amount of natural gas burned in the liquefaction heater.  [Reference: MDE Permit to Construct Number 009-0021-9-0022 issued 8/8/11 & COMAR 26.11.03.06C]
The Permit shall maintain on site for at least five years and make available to the Department upon request records of the following:
Amount of refrigerant added to the system and the date it was added.
For each VOC leak, the date of each leak being detected, the location of the leak, and the date of the leak was repaired.
For each shutdown venting of the refrigerant, the cause and date for each shutdown venting, and how much refrigerant and VOC emission was released to
the atmosphere. [Reference: MDE Permit to Construct #009-021-9-0022 issued 8/8/11]
The Permit shall maintain on site for at least five years and make available to the Department upon request records of the following: premise-wide VOC emissions for any 12-month period, rolling monthly. The Permittee shall submit to the Department no later than 30 days following each calendar quarter a quarterly report. The report shall be in a format approved by the Department and shall include monthly VOC emission calculations. [Reference: MDE Permit to Construct #009-021-9-0022 issued 8/8/11 and NSR Approval #NSR-2005-01 issued 6/26/06]
The Permittee shall report incidents of excess emissions and related corrective actions taken in accordance with excess emissions reporting requirements. [Reference: COMAR 26.11.01.07C]

C. Operational Limits
The shutdown venting of refrigerant shall be limited to four (4) occurrences during any 12-month period, rolling monthly. The Permittee shall take all necessary precautions to prevent any unnecessary shutdown venting of refrigerant. [Reference: MDE Permit to Construct Number 009-0021-9-0022 issued 8/8/11]

Compliance Demonstration:
The Permittee shall maintain records on-site for a period of at least five years and make available to the Department upon request: total number of shutdown venting occurrences for any 12-month period, rolling monthly. [Reference: MDE Permit to Construct #009-021-9-0022 issued 8/8/11 & COMAR 26.11.03.06C]

Emission Unit: S009 & S010 – Combustion Turbines

S009 & S010 – (009-5-0049 & 009-5-0050).
Two (2) General Electric Frame 5 Turbine natural gas-fired simple-cycle with a maximum rating of 302 MMBtu/hr equipped with dry-low NOX combustion (DLN), SCR and oxidation catalyst (OC)

Controls: DLN, SCR and OC.

The GE Frame 5 combustion turbines are subject to NSPS for Combustion Turbines Subpart KKKK:
§60.4305 - Does this subpart apply to my stationary combustion turbine?
“(a) If you are the owner or operator of a stationary combustion turbine with a heat input at peak load equal to or greater than 10.7 gigajoules (10 MMBtu) per hour, based on the higher heating value of the fuel, which commenced construction, modification, or reconstruction after February 18, 2005, your turbine is subject to this subpart.”
Stationary combustion turbines subject to Subpart KKKK are exempt from the requirements of Subpart GG.

The GE Frame 5 combustion turbines are not subject to the NESHAP for Combustion Turbines Subpart YYYY:

§63.6090 - What parts of my plant does this subpart cover?

“This subpart applies to each affected source.

(a) Affected source. An affected source is any existing, new, or reconstructed stationary combustion turbine located at a major source of HAP emissions.”

The Cove Point terminal is not a major source of HAP emissions.

Compliance Status

On December 21, 2008, the Permittee conducted stack test on the combustion turbines for CO, NO\textsubscript{X}, VOC and PM\textsubscript{10}. The test results are as follows:

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Pollutant</th>
<th>Test Results</th>
<th>Allowable Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>S009</td>
<td>CO</td>
<td>0.0000001 ppm</td>
<td>6.0 ppm @ 15% O\textsubscript{2}</td>
</tr>
<tr>
<td>S009</td>
<td>NO\textsubscript{X}</td>
<td>2.4 ppm @ 15% O\textsubscript{2}</td>
<td>2.5 ppm</td>
</tr>
<tr>
<td>S009</td>
<td>PM\textsubscript{10}</td>
<td>0.0185 lb/mmBtu</td>
<td>0.0066 lb/mmBtu</td>
</tr>
<tr>
<td>S009</td>
<td>VOC</td>
<td>0.357 ppm @ 15% O\textsubscript{2}</td>
<td>2 ppm @ 15% O\textsubscript{2}</td>
</tr>
<tr>
<td>S010</td>
<td>CO</td>
<td>1.01 ppm</td>
<td>6.0 ppm @ 15% O\textsubscript{2}</td>
</tr>
<tr>
<td>S010</td>
<td>NO\textsubscript{X}</td>
<td>2.17 ppm @ 15% O\textsubscript{2}</td>
<td>2.5 ppm</td>
</tr>
<tr>
<td>S010</td>
<td>PM\textsubscript{10}</td>
<td>0.021 lb/mmBtu</td>
<td>0.0066 lb/mmBtu</td>
</tr>
<tr>
<td>S010</td>
<td>VOC</td>
<td>0.494 ppm @ 15% O\textsubscript{2}</td>
<td>2 ppm @ 15% O\textsubscript{2}</td>
</tr>
</tbody>
</table>

PM\textsubscript{10} emissions are over the allowable PM\textsubscript{10} BACT limit of 0.0066 lb/mmBtu (filterable and condensable). A notice of violation was issued February 23, 2009. The Permittee was asked to submit new test protocol incorporating revised test method 202 & furnish a survey of PM BACT survey. The Permittee provided all items requested on April 29, 2009. In 2011, the Permittee was asked to use the new protocol on the Solar turbine (12 MW) to show compliance with the 0.0066 lb/mmBtu PM\textsubscript{10} (filterable and condensable) limit.
Applicable Standards and limits:
A. Control of Visible Emissions

**COMAR 26.11.09.05 - Visible Emissions.**

“A. Fuel Burning Equipment.
(1) Areas I, II, V, and VI. In Areas I, II, V, and VI, 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 greater than 20 percent opacity.
(3) Exceptions. Section A(1) and (2) of this regulation do not apply to emissions during load changing, soot blowing, startup, or adjustments or occasional cleaning of control equipment if:
(a) The visible emissions are not greater than 40 percent opacity; and
(b) The visible emissions do not occur for more than 6 consecutive minutes in any sixty minute period. “

**Compliance Demonstration:**
The Permittee shall record any incidences of visible emissions and the corrective actions. [Reference: COMAR 26.11.03.06C].
The Permittee shall report incidences of excess emissions and related corrective actions taken in accordance with excess emissions reporting requirements. [Reference: COMAR 26.11.01.07C]

B. Control of Particulate Matter Emissions
The GE Frame 5 natural gas-fired combustion turbines are subject to PM limit of **0.0066 lbs/MMBtu** of heat input. Each combustion turbine shall use natural gas as only fuel to meet the PM BACT requirements. [Reference: PSD Approval #PSD-2005-01 issued 6/26/06].

**Compliance Demonstration:**
The Permittee shall perform an EPA Reference Test Method 5, 40 CFR Part 60 Appendix A, of the exhaust gases in the stacks of the combustion turbines at the facility once during the term of the permit. During emission testing, each combustion turbine shall operate at 90% or higher of its rated capacity.
[Reference: COMAR 26.11.03.06C & PSD Approval #PSD-2005-01 issued 6/26/06]
The Permittee shall perform routine and preventative maintenance in accordance with manufacturer’s specifications. The Permittee shall maintain the following on site for at least 5 years: records of stack testing results; record of the date, time and description of maintenance performed on the combustion turbines and shall submit records to the Department upon request.. The Permittee shall submit a test protocol to the Department, for approval, at least 30 days prior to the scheduled test date. The Permittee shall report the results of the stack tests to the Department within 60 days of completion of the tests. [Reference: COMAR 26.11.03.06C]
Rationale: Dominion completed an initial performance test on the combustion turbines at the facility in December 2011 (based on the Solar combustion turbine). The PM limit for the Frame 5 combustion turbines is 0.0066 lb/MMBtu and the test result was 0.000203 lb/MMBtu (filterable only) which is 3% of the permit limit. The test results demonstrate a sufficient margin of compliance with the permit limit. In addition, Dominion continuously monitors the SCRs (i.e. chemical reagent use) and oxidation catalysts (i.e. visual inspections) as well as properly maintains the equipment and control devices. Finally, the Frame 5 combustion turbines burn only natural gas as a fuel. When equipment is properly maintained, emissions from natural gas are stable and relatively low.

C. Control of Nitrogen Oxides

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

“(2) A person who owns or operates a combustion turbine with a capacity factor greater than 15 percent shall meet an hourly average \( \text{NO}_X \) 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.”


Emission Limits

§60.4315 - What pollutants are regulated by this subpart?
The pollutants regulated by this subpart are nitrogen oxide \( (\text{NO}_X) \) and sulfur dioxide \( (\text{SO}_2) \).

§60.4320 - What emission limits must I meet for nitrogen oxides \( (\text{NO}_X) \)?
You must meet the emission limits for \( \text{NO}_X \) specified in Table 1 to this subpart.

<table>
<thead>
<tr>
<th>Combustion turbine type</th>
<th>Combustion turbine heat input at peak load (HHV)</th>
<th>( \text{NO}_X ) emission standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>New turbine firing natural gas</td>
<td>&gt; 50 MM Btu/h and ( \leq ) 850 MM Btu/h</td>
<td>25 ppm at 15 percent ( \text{O}_2 ) or 150 ng/J of useful output (1.2 lb/MWh).</td>
</tr>
</tbody>
</table>

The GE Frame 5 natural gas-fired combustion turbines are subject to the \( \text{NO}_X \) LAER requirements listed in the NSR-2005-01 and the \( \text{NO}_X \) BACT requirements listed in the PSD-2005-1: \( \text{NO}_X \) emission limit on a 1-hr average for each combustion turbine of 2.5 ppmvd corrected to 15% \( \text{O}_2 \) during baseload operating condition. [Reference: PSD Approval #PSD-2005-01 & NSR Approval #NSR-2005-01 issued 6/26/06].
Compliance Demonstration:
The Permittee shall conduct performance test for NOx in accordance with the methodologies specified in 40 CFR §60.4340 & §60.4400.

§60.4340 - How do I demonstrate continuous compliance for NOx if I do not use water or steam injection?
“(b) As an alternative, you may install, calibrate, maintain and operate one of the following continuous monitoring systems:
(1) Continuous emission monitoring as described in §60.4335(b) and §60.4345.”

§60.4335 - How do I demonstrate compliance for NOx if I use water or steam injection?
“(b) Alternatively, you may use continuous emission monitoring, as follows:
(1) Install, certify, maintain, and operate a continuous emission monitoring system (CEMS) consisting of a NOx monitor and a diluent gas (oxygen (O2) or carbon dioxide (CO2)) monitor, to determine the hourly NOx emission rate in parts per million (ppm) or pounds per million British thermal units (lb/MMBtu).”
The Permittee shall continuously monitor the NOx emission of the stack gases using a NOx Continuous Emission Monitor (CEM) that is certified in accordance 40 CFR Part 60, Appendix B, or Part 75, Appendix A and meet the quality assurance criteria in 40 CFR Part 60, Appendix F. [Reference: COMAR 26.11.09.08(B)(2)(b&c)]
The Permittee shall demonstrate continuous compliance with NOx in accordance with 40 CFR §60.4340 as follows:
“(b) As an alternative, you may install, calibrate, maintain and operate one of the following continuous monitoring systems:
(1) Continuous emission monitoring as described in §60.4335(b) and §60.4345.”
The following records shall be kept on the premises for at least 5 years and shall be made available to the Department upon request:
(a) The amount of natural gas burned in each combustion turbine, million BTU per month;
(b) The amount of chemical reagent usage for NOx emission control, pounds per month;
(c) All CEM system monitoring data, which are used to demonstrate compliance with the emission limits;
(d) All stack emissions test report;
(e) NOx emission rates, pounds per million BTU of heat input, for each combustion turbine;
(f) Monthly NOx emissions from each combustion turbine.
(g) All CEM certifications and calibration results; and
(h) The repairs and maintenance made to the SCR or oxidation catalyst emission control devices or the NOx CEM system.
[Reference: MDE Permit to Construct #009-9-0032 to 9-0034 issued on 8/6/02 (modified on 4/1/05) and NSR Approval #NSR-2002-01 issued 8/6/02]
The Permittee shall submit a quarterly summary report to the Department not later than 30 days following each calendar quarter. The report shall be in a format approved by the Department, and shall include the following:

(i) The cause, time periods, and magnitude of all emissions which exceed the applicable emission standards;
(ii) The source downtime including the time and date of the beginning and end of each downtime period and whether the source downtime was planned or unplanned;
(iii) The time periods and cause of all CEM downtime including records of any repairs, adjustments, or maintenance that may affect the validity of emission data;
(iv) Quarterly totals of excess emissions, installation downtime, and CEM downtime during the calendar quarter;
(v) Quarterly quality assurance activities; and
(vi) Daily calibration activities that include reference values, actual values, absolute or percent of span differences, and drift status; and
(vii) Other information required by the Department that is determined to be necessary to evaluate the data, to ensure that compliance is achieved, or to determine the applicability of this regulation.” [Reference: COMAR 26.11.03.06C]

CEM System Downtime Reporting Requirement: The Permittee shall report all system downtime that lasts or is expected to last more than 24 hours to the Department by telephone before 10 a.m. of the first regular business day following the breakdown. The system breakdown report shall include the reason, if known, for the breakdown and the estimated period of time that the CEM will be down. The owner or operator of the CEM shall notify the Department by telephone when an out-of-service CEM is back in operation and producing valid data. [Reference: COMAR 26.11.03.06C]

COMAR 26.11.09.08K(1). - Reporting Requirements.
(1) When demonstration of compliance with the NO\textsubscript{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. The summaries shall include:

(i) NO\textsubscript{X} emission rates in pounds of NO\textsubscript{X} per hour and pounds of NO\textsubscript{X} per million BTU reported as a daily 24-hour average and as a thirty (30) day rolling average;
(ii) Boiler downtime, including the beginning time and date and ending time and date of each downtime period;
(iii) The time periods and cause of all CEM downtime including records of any repairs, adjustments, or maintenance that may affect the validity of emission data;
(iv) Quarterly totals of boiler downtime and CEM downtime during the calendar quarter; and
(v) Quarterly quality assurance activities.
D. Control of SO\textsubscript{x} Emissions

\textbf{§60.4330 - What emission limits must I meet for sulfur dioxide (SO\textsubscript{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. If your turbine is located in Alaska, you do not have to comply with the requirements in paragraph (a) of this section until January 1, 2008.

(1) You must not cause to be discharged into the atmosphere from the subject stationary combustion turbine any gases which contain SO\textsubscript{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\textsubscript{2}/J (0.060 lb SO\textsubscript{2}/MMBtu) heat input. If your turbine simultaneously fires multiple fuels, each fuel must meet this requirement.

\textbf{Compliance Demonstration:}

The Permittee shall conduct performance test for SO\textsubscript{x} in accordance with the methodologies specified in 40 CFR §60.4415.

\textbf{§60.4360 - How do I determine the total sulfur content of the turbine's combustion fuel?}

You must monitor the total sulfur content of the fuel being fired in the turbine, except as provided in §60.4365. The sulfur content of the fuel must be determined using total sulfur methods described in §60.4415. Alternatively, if the total sulfur content of the gaseous fuel during the most recent performance test was less than half the applicable limit, ASTM D4084, D4810, D5504, or D6228, or Gas Processors Association Standard 2377 (all of which are incorporated by reference, see §60.17), which measure the major sulfur compounds, may be used.

The Permittee shall keep records of the sulfur content value of the gaseous fuel determined and recorded once per unit operating day. [Reference: §60.4370 & COMAR 26.11.03.06C].

The Permittee shall report to the Department records of sulfur content value of the gaseous fuel semi-annually. [Reference: COMAR 26.11.03.06C] The Permittee shall report incidences of excess emissions and related corrective actions taken in accordance with excess emissions reporting requirements. [Reference: COMAR 26.11.01.07C]
E. Control of VOC Emissions
The Frame 5 combustion turbines are subject to the VOC LAER requirements listed in the NSR Approval #NSR-2005-01: VOC limit of 0.003 lbs/MBtu of heat input which shall be assessed by VOC stack emission tests. Each combustion turbine shall only use natural gas for fuel and shall be equipped with a catalytic oxidation system to comply with the VOC emission limit. [Reference: NSR Approval #NSR-2005-01 issued 6/26/06].

Compliance Demonstration:
The Permittee shall perform stack testing to demonstrate compliance with VOC LAER emission limit in the exhaust gases of the stack of each of the combustion turbines once during the term of this permit. [Reference: NSR Approval #NSR-2005-01 issued 6/26/06 & COMAR 26.11.03.06C]
The Permittee shall calculate monthly VOC emissions from each combustion turbine based on the monthly fuel usage and VOC emission rate, lbs/MBtu of heat input, collected from the stack emission testing or any other method approved by the Department. [Reference: NSR Approval #NSR-2005-01 issued 6/26/06 & COMAR 26.11.03.06C].
The Permittee shall keep records of monthly VOC emissions from each combustion turbine on the premises for at least 5 years and shall be made available to the Department upon request. [Reference: NSR Approval #NSR-2005-01 issued 6/26/06]
The Permittee shall submit to the Department no later than 30 days following each calendar quarter a quarterly report. The report shall be in a format approved by the Department and shall include monthly VOC emission calculation from each combustion turbine. [Reference: NSR Approval #NSR-2005-01 issued 6/26/06]

Rationale: Dominion completed an initial performance test on the combustion turbines at the facility in December 2008. The VOC limit for the Frame 5 combustion turbines is 0.003 lb/MBtu and the test result were 0.00126 lb/MBtu for the 214JA which is 42% of the permit limit and 0.00175 lb/MBtu for the 214 JB which is 58% of the permit limit. The test results demonstrate a sufficient margin of compliance with the permit limit. Dominion also continuously monitors the oxidation catalysts as part of the CAM (i.e. visual inspections). Finally, the Frame 5 combustion turbines burn only natural gas as a fuel. When equipment is properly maintained, emissions from natural gas are stable and relatively low.
F. Control of Carbon Monoxide (CO) Emissions
The Frame 5 combustion turbines are subject to the CO BACT requirements listed in the PSD Approval #PSD-2005-1: CO emission limit is 6 ppmvd corrected to 15% O₂ assessed by CO stack emission tests. Each combustion turbine shall be equipped with a CO oxidation catalyst to comply with the CO BACT limit. [Reference: PSD Approval #PSD-2005-01 issued 6/26/06]

Compliance Demonstration:
The Permittee shall perform stack testing to demonstrate compliance with CO BACT emission limit in the exhaust gases of the stack of each of the combustion turbines once during the term of this permit. During emission testing, each combustion turbine shall operate at 90% or higher of its rated capacity. [Reference: COMAR 26.11.03.06C & PSD Approval #PSD-2005-01 issued 6/26/06]
The Permittee shall maintain records of the stack testing results on site for a period of at least 5 years and make available to the Department upon request. [Reference: COMAR 26.11.03.06C]
The Permittee shall submit a test protocol to the Department, for approval, at least 30 days prior to the scheduled test date. The Permittee shall report the results of the stack tests to the Department within 60 days of completion of the tests. The Permittee shall report incidences of excess emissions and related corrective actions taken in accordance with excess emissions reporting requirements. [Reference: COMAR 26.11.03.06C & COMAR 26.11.01.07C]

Rationale: Dominion completed an initial performance test on the combustion turbines at the facility in December 2008. The CO limit for the Frame 5 combustion turbines is 6 ppmvd and the test result were 0 ppmvd for the 214JA and 1.01 ppmvd for the 214 JB which is 17% of the permit limit. The test results demonstrate a sufficient margin of compliance with the permit limit. Dominion also continuously monitors the oxidation catalysts as part of the CAM (i.e. visual inspections). Finally, the Frame 5 combustion turbines burn only natural gas as a fuel. When equipment is properly maintained, emissions from natural gas are stable and relatively low.

Emission Unit: S011 through S017 - WEG Heaters

**S011 through S017** – (009-5-0051 through 009-5-0057).
Seven (7) Johnston water-ethylene glycol (WEG) heaters, each with a rating of 82.3 MMBtu/hr, each equipped with ultra low NOₓ burners (ULNB)

**Controls:** None
The WEG heaters are subject to the requirements of NSPS for small industrial-institutional-commercial steam generating units, Subpart Dc. §60.40c - Applicability and delegation of authority.
(a) Except as provided in paragraph (d) of this section, the affected facility to which this subpart applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/hr)) or less, but greater than or equal to 2.9 MW (10 MMBtu/hr).

Compliance Status
On September 21, 2009 thru September 26, 2009, the Permittee conducted stack test on three of the seven WEGs. The results of the stack test are listed below shows compliance with the allowable limits:

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Pollutant</th>
<th>Test Results</th>
<th>Allowable Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>S011</td>
<td>CO</td>
<td>0.00000000012 lb/mmBtu</td>
<td>0.03 lb/mmBtu</td>
</tr>
<tr>
<td>S011</td>
<td>NO(_X)</td>
<td>0.0099 lb/mmBtu</td>
<td>0.12 lb/mmBtu</td>
</tr>
<tr>
<td>S011</td>
<td>PM(_{10})</td>
<td>0.00032 lb/mmBtu</td>
<td>0.001 lb/mmBtu</td>
</tr>
<tr>
<td>S011</td>
<td>VOC</td>
<td>0.0000000001 lb/mmBtu</td>
<td>0.002 lb/mmBtu</td>
</tr>
<tr>
<td>S012</td>
<td>CO</td>
<td>0.0000001 lb/mmBtu</td>
<td>0.03 lb/mmBtu</td>
</tr>
<tr>
<td>S012</td>
<td>NO(_X)</td>
<td>0.0093 lb/mmBtu</td>
<td>0.12 lb/mmBtu</td>
</tr>
<tr>
<td>S012</td>
<td>PM(_{10})</td>
<td>0.00043 lb/mmBtu</td>
<td>0.001 lb/mmBtu</td>
</tr>
<tr>
<td>S012</td>
<td>VOC</td>
<td>0.0000001 lb/mmBtu</td>
<td>0.002 lb/mmBtu</td>
</tr>
<tr>
<td>S017</td>
<td>CO</td>
<td>0.0000001 lb/mmBtu</td>
<td>0.03 lb/mmBtu</td>
</tr>
<tr>
<td>S017</td>
<td>NO(_X)</td>
<td>0.0103 lb/mmBtu</td>
<td>0.12 lb/mmBtu</td>
</tr>
<tr>
<td>S017</td>
<td>PM(_{10})</td>
<td>0.0004 lb/mmBtu</td>
<td>0.001 lb/mmBtu</td>
</tr>
<tr>
<td>S012</td>
<td>VOC</td>
<td>0.0000001 lb/mmBtu</td>
<td>0.002 lb/mmBtu</td>
</tr>
</tbody>
</table>

**Applicable Standards and limits:**

A. Control of Visible Emissions

**COMAR 26.11.09.05 - Visible Emissions.**

"A. Fuel Burning Equipment,
(1) Areas I, II, V, and VI. In Areas I, II, V, and VI, 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 greater than 20 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. "

Page 35 of 84
Compliance Demonstration:
The Permittee shall record any incidences of visible emissions and the corrective actions. [Reference: COMAR 26.11.03.06C].
The Permittee shall report incidences of excess emissions and related corrective actions taken in accordance with excess emissions reporting requirements. [Reference: COMAR 26.11.01.07C]

B. Control of Particulate Matter Emissions
The WEG heaters are subject to PM BACT requirements listed in PSD-2005-1: PM emission limit is 0.001 lbs/MMBtu of heat input, which shall be assessed by PM stack emission tests. Each vaporization heater shall only use natural gas for fuel to meet PM BACT requirements. [Reference: PSD Approval #PSD-2005-1].

Compliance Demonstration:
The Permittee shall perform routine and preventative maintenance in accordance with manufacturer’s specifications. The Permittee shall maintain a record of the date, time and description of maintenance performed on the WEG heaters and shall submit records to the Department upon request. The Permittee shall submit records of maintenance performed on the WEG heaters upon request. [Reference: COMAR 26.11.03.06C]

Rationale: Dominion completed an initial performance test on the WEG heaters in September 2009. The PM limit for the heaters is 0.001 lb/MMBtu and the highest test result was 0.00043 lb/MMBtu, which is 43% of the permit limit. The stack test results demonstrate a sufficient margin of compliance with the permit limit. The WEG heaters burn only natural gas as fuel. When equipment is properly maintained, emissions from natural gas are stable and relatively low.

C. Control of Nitrogen Oxides
COMAR 26.11.09.08B. - General Requirements and Conditions.
(1) Emission Standards and Requirements.
(a) A person who owns or operates an installation that causes NOX emissions subject to this regulation is in compliance with this regulation if the person establishes compliance with the emissions standards in §B(1)(c) of this regulation. (c) Emission Standards in Pounds of NOX per Million Btu of heat input. – Gas only: 0.2. “

COMAR 26.11.09.08E. - Requirements for Fuel-Burning Equipment with a Rated Heat Input Capacity of 100 Million Btu Per Hour or Less.
“A person who owns or operates fuel-burning equipment with a rated heat input capacity of 100 Million Btu per hour or less shall:
(1) Submit to the Department an identification of each affected installation, the rated heat input capacity of each installation, and the type of fuel burned in each;
(2) Perform a combustion analysis for each installation at least once each year and optimize combustion based on the analysis;
(3) Maintain the results of the combustion analysis at the site for at least 2 years and make this data available to the Department and the EPA upon request;
(4) Once every 3 years, require each operator of the installation to attend operator training programs on combustion optimization that are sponsored by the Department, the EPA, or equipment vendors; and
(5) Prepare and maintain a record of training program attendance for each operator at the site, and make these records available to the Department upon request. “

The WEG heaters are subject to the NO\textsubscript{X} LAER requirements listed in NSR Approval #NSR-2005-01 and the NO\textsubscript{X} BACT requirements listed in the PSD Approval #PSD-2005-01: NO\textsubscript{X} emission limit is 0.012 lbs/MMBtu of heat input which shall be assessed by NO\textsubscript{X} stack emission tests. Each of the seven vaporization heater shall only use natural gas for fuel and shall be equipped with ultra low NO\textsubscript{X} burners to comply with the NO\textsubscript{X} emission limits. [Reference: NSR Approval #NSR-2005-01 & PSD Approval #PSD-2005-01 issued 6/26/06].

Compliance Demonstration:

The Permittee shall perform combustion analysis on the WEG heaters at least once per year and optimize combustion based on the analysis. [Reference: COMAR 26.11.09.08E(2)]
The Permittee shall maintain the following records on-site for a period of at least five years and make available to the Department upon request:
(1) Monthly natural gas usage in millions BTU per month for each WEG heater.
(2) NO\textsubscript{X} emission rates, lbs/MMBtu of heat input for each WEG heater.
(3) Monthly NO\textsubscript{X} emissions from each WEG heater.
(4) Training program attendance for each operator at the site and make these records available to the Department upon request.
(5) Results of combustion analysis.
(6) Record of the date, time and description of maintenance performed on the vaporizers and shall submit records to the Department upon request [Reference: MDE Permit to Construct No. 009-5-0051 to 0057N issued 6/26/06; COMAR 26.11.03.06C]
The Permittee shall submit:
(1) The results of combustion analysis to the department and the EPA upon request. [Reference: COMAR 26.11.09.08E(3)]
(2) A record of training program attendance for each operator to the Department upon request. [Reference: COMAR 26.11.09.08E(5)].
**Rationale:** Dominion completed an initial performance test on the WEG heaters in September 2009. The NO$_X$ limit for the heaters is 0.012 lb/MMBtu and the test ranged from 0.00906 lb/MMBtu to 0.0103 lb/MMBtu, which is 76% to 86% of the permit limit. Dominion has installed ultra low NO$_X$ burners (ULNB) on each WEG heater to minimize NO$_X$ emissions. In addition, the WEG heaters burn only natural gas as fuel. When equipment is properly maintained, emissions from natural gas are stable and relatively low.

---

**D. Control of VOC Emissions**

The WEG heaters are subject to the VOC LAER emissions limitations as listed in NSR-2005-01: VOC emission limit is 0.002 lbs/MMBtu of heat input. Compliance with this emission limit shall be assessed by VOC stack emission tests.  

**Compliance Demonstration:**

The Permittee shall perform routine and preventative maintenance in accordance with manufacturer’s specifications.  

**Reference:** COMAR 26.11.03.06C

The Permittee shall maintain for at least 5 years the following: records of lb/MMBtu VOC emission rates from each WEG heater; and record of the date, time and description of maintenance performed on the WEG heaters and shall submit records to the Department upon request.  

**Reference:** COMAR 26.11.03.06C & NSR Approval #NSR-2005-01 issued 6/26/06

**Rationale:** Dominion completed an initial performance test on the WEG heaters in September 2009. The VOC limit for the heaters is 0.002 lb/MMBtu and the test results were zero. The test results demonstrate a sufficient margin of compliance with the permit limit and the WEG heaters burn only natural gas as fuel. When equipment is properly maintained, emissions from natural gas are stable and relatively low.

---

**E. Control of Carbon Monoxide (CO) Emissions**

The WEG heaters are subject to the CO BACT requirements listed in the PSD Approval #PSD-2005-01: CO emission limit is 0.03 lbs/MMBtu of heat input, assessed by CO stack emission tests. Each vaporization heater shall only use natural gas for fuel and shall operate within the appropriate ranges of good operating parameters established during performance tests to meet the CO BACT requirements.  

**Reference:** PSD Approval #PSD-2005-01 issued 6/26/06
Compliance Demonstration:
The Permittee shall perform routine and preventative maintenance in accordance with manufacturer’s specifications. The Permittee shall maintain a record of the date, time and description of maintenance performed on the WEG heaters and shall submit records to the Department upon request. [Reference: COMAR 26.11.03.06C]

Rationale: Dominion completed an initial performance test on the WEG heaters in September 2009. The CO limit for the heaters is 0.03 lb/MMBtu and the test results were zero. The test results demonstrate a sufficient margin of compliance with the permit limit and the WEG heaters burn only natural gas as fuel. When equipment is properly maintained, emissions from natural gas are stable and relatively low.

F. NSPS for PM and SO\textsubscript{X} Emissions

40 CFR Part 60 Subpart Dc—Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

§60.40c - Applicability and delegation of authority.
(a) Except as provided in paragraphs (d), (e), (f), and (g) of this section, the affected facility to which this subpart applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/h)) or less, but greater than or equal to 2.9 MW (10 MMBtu/h). Since the heaters are fired on natural gas only, the record keeping and reporting requirements §60.48c apply.

Compliance Demonstration:
§60.48c - Reporting and recordkeeping requirements.
“(g)(1) Except as provided under paragraphs (g)(2) and (g)(3) of this section, the owner or operator of each affected facility shall record and maintain records of the amount of each fuel combusted during each operating day.”
“(j) The reporting period for the reports required under this subpart is each six-month period. All reports shall be submitted to the Administrator and shall be postmarked by the 30th day following the end of the reporting period.”

Emission Unit: S018 – Heaters

S018 – (009-5-0058).
One (1) emergency vent heater rated at 1.3 MMBtu/hr equipped with low-NO\textsubscript{X} burners (LNB).
Controls: None
Applicable Standards and limits:

A. Control of Visible Emissions

COMAR 26.11.09.05 - Visible Emissions.

“A. Fuel Burning Equipment.

(1) Areas I, II, V, and VI. In Areas I, II, V, and VI, 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 greater than 20 percent opacity.

(3) Exceptions. Section A(1) and (2) of this regulation do not apply to emissions during load changing, soot blowing, startup, or adjustments or occasional cleaning of control equipment if:

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

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

Compliance Demonstration:
The Permittee shall keep record of incidences of visible emissions and the corrective actions. [Reference: COMAR 26.11.03.06C]
The Permittee shall report incidences of excess emissions and related corrective actions taken in accordance with excess emissions reporting requirements. [Reference: COMAR 26.11.01.07C]

B. Control of Particulate Matter Emissions

The emergency vent heater is subject to the PM BACT requirements listed in the PSD Approval #PSD-2005-01: PM emission limit of 0.008 lbs/MMBtu of heat input. Compliance to be achieved by use of natural gas as fuel and good combustion practices. [Reference: PSD Approval #PSD-2005-01 issued 6/26/06]

Compliance Demonstration:
The Permittee shall report incidences of excess emissions and related corrective actions taken in accordance with excess emissions reporting requirements. [Reference: COMAR 26.11.01.07C]

C. Control of Nitrogen Oxides

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

“A person who owns or operates fuel-burning equipment with a rated heat input capacity of 100 Million Btu per hour or less shall:

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

(2) Perform a combustion analysis for each installation at least once each year and optimize combustion based on the analysis;
(3) Maintain the results of the combustion analysis at the site for at least 2 years and make this data available to the Department and the EPA upon request;
(4) Once every 3 years, require each operator of the installation to attend operator training programs on combustion optimization that are sponsored by the Department, the EPA, or equipment vendors; and
(5) Prepare and maintain a record of training program attendance for each operator at the site, and make these records available to the Department upon request. “

The emergency vent heater must also meet the BACT and LAER requirements as set forth in PSD-2005-01 and NSR-2005-01; NO\textsubscript{X} emission limit of 0.036 lbs/MMBtu of heat input on a 3-hour average basis. Compliance to be achieved by use of natural gas as fuel, low NO\textsubscript{X} burner and good combustion practices [Reference: NSR Approval #NSR-2005-01 & PSD Approval #PSD-2005-01 issued 6/26/06]]

**Compliance Demonstration:**
The Permittee shall perform combustion analysis on the vaporization heaters at least once per year and optimize combustion based on the analysis. [Reference: COMAR 26.11.09.08E(2)]
The Permittee shall maintain the following records on-site for a period of at least five years:
(3) Monthly natural gas usage in millions BTU per month for the emergency vent heater.
(4) NO\textsubscript{X} emission rates, lbs/MMBtu of heat input for the emergency vent heater.
(5) Monthly NO\textsubscript{X} emissions from the emergency vent heater.
(6) Training program attendance for each operator at the site and make these records available to the Department upon request.
(7) Results of combustion analysis. [Reference: MDE Permit to Construct No. 009-5-0058 issued 6/26/06]
The Permittee shall submit to the Department not later than 30 days following each calendar quarter a quarterly summary report. The report shall be in a format approved by the Department. The Permittee shall report incidences of excess emissions and related corrective actions taken in accordance with excess emissions reporting requirements. [Reference: MDE Permit to Construct #009-5-0058N issued on 06/26/06, NSR Approval #NSR-2005-01 & PSD Approval #PSD-2005-01 issued 06/26/06 & COMAR 26.11.01.07C]

D. **Control of VOC Emissions**
The emergency vent heater is subject to the VOC LAER emissions limit listed in the NSR Approval #NSR-2005-01: VOC emissions limit of 0.0054 lbs/MMBtu on a 3-hour average basis. [Reference: NSR Approval #NSR-2005-01 issued 6/26/06].
Compliance Demonstration:
The Permittee shall maintain the following records on-site for a period of at least five years:
(1) Monthly VOC emissions from the emergency vent heater based on the monthly natural gas usage.
(2) VOC emission rates, lbs/MMBtu of heat input for the emergency vent heater based on vendor data or any other method approved by the Department.
[Reference: MDE Permit to Construct #009-5-0058N issued 06/26/06 and NSR Approval #NSR-2005-01 issued 06/26/06]
The Permittee shall submit to the Department not later than 30 days following each calendar quarter a quarterly summary report. The report shall be in a format approved by the Department. The Permittee shall report incidences of excess emissions and related corrective actions taken in accordance with excess emissions reporting requirements. [Reference: MDE Permit to Construct #009-5-0058N issued on 06/26/06, NSR Approval #NSR-2005-01 issued 06/26/06 & COMAR 26.11.01.07C]

E. Control of Carbon Monoxide Emissions
The emergency vent heater is subject to the CO BACT requirements listed in the PSD Approval #PSD-2005-01: CO emissions limit of 0.082 lbs/MMBtu. Compliance to be achieved by use of natural gas as fuel and good combustion practices. [Reference: PSD Approval #PSD-2005-01 issued 6/26/06]]

Compliance Demonstration:
The Permittee shall report incidences of excess emissions and related corrective actions taken in accordance with excess emissions reporting requirements. [Reference: COMAR 26.11.01.07C]

Emission Unit: S019 & S020 – Emergency Generators

Two (2) natural gas-fired emergency generators, each with a rating of 1175 hp (825 kW).
Controls: None

These generators are not subject to 40 CFR Part 60 Subpart IIII - New Source Performance Standards (NSPS) under 40 CFR Part 60 Subpart IIII for Stationary Compression Ignition Internal Combustion Engines because they are natural gas fired generators which are spark ignited. These generators also are not subject to 40 CFR Part 60 Subpart JJJJ – New Source Performance Standards (NSPS) for Stationary Spark Ignition Internal Combustion Engines since they were manufactured prior to January 1, 2008, per 40 CFR 60.4230(a)(4)(ii). They were manufactured in August of 2007.
§60.4230(a) The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary spark ignition (SI) internal combustion engines (ICE) as specified in paragraphs (a)(1) through (6) of this section. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.

(4) Owners and operators of stationary SI ICE that commence construction after June 12, 2006, where the stationary SI ICE are manufactured: (ii) on or after January 1, 2008, for lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP.

They are also not subject to the requirements of 40 CFR Part 63 Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines since they were manufactured after June 12, 2006.

Applicable Standards and limits:

A. Control of Visible Emissions

COMAR 26.11.09.05 - Visible Emissions.

E. Stationary Internal Combustion Engine Powered Equipment.

“(2) Emissions During Idle Mode. A person may not cause or permit the discharge of emissions from any engine, operating at idle, greater than 10 percent opacity.

(3) Emissions During Operating Mode. A person may not cause or permit the discharge of emissions from any engine, operating at other than idle conditions, greater than 40 percent opacity.

(4) Exceptions.

(a) Section E(2) of this regulation does not apply for a period of 2 consecutive minutes after a period of idling of 15 consecutive minutes for the purpose of clearing the exhaust system.

(b) Section E(2) of this regulation does not apply to emissions resulting directly from cold engine start-up and warm-up for the following maximum periods:

(i) Engines that are idled continuously when not in service: 30 minutes;

(ii) All other engines: 15 minutes.

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

Compliance Demonstration:
The Permittee shall keep records of incidences of visible emissions and corrective actions. [Reference: COMAR 26.11.03.06C]
The Permittee shall report incidences of excess emissions and related corrective actions taken in accordance with excess emissions reporting requirements. [Reference: COMAR 26.11.01.07C]
B. Control of Particulate Matter Emissions
The emergency generators are subject to PM BACT emission standards as listed in PSD-2005-01: PM emissions limit of 0.12 lb/MW-hr to be achieved by natural gas as only and a limit on operations to no more than 200 hours during any consecutive 12-month period. [Reference: PSD Approval #PSD-2005-1 issued on 6/26/06].

Compliance Demonstration:
The Permittee shall maintain records of the hours of operation for the generators on site and make available to the Department upon request. [Reference: COMAR 26.11.03.06C & PSD Approval #PSD-2005-01 issued 6/26/06]
The Permittee shall report incidences of excess emissions and related corrective actions taken in accordance with excess emissions reporting requirements. [Reference: COMAR 26.11.01.07C]

C. Control of Nitrogen Oxides
COMAR 26.11.09.08G. - Requirements for Fuel-Burning Equipment with a Capacity Factor of 15 Percent or Less, and Combustion Turbines with a Capacity Factor Greater than 15 Percent.
“(1) A person who owns or operates fuel-burning equipment with a capacity factor (as defined in 40 CFR Part 72.2) of 15 percent or less shall:
(a) Provide certification of the capacity factor of the equipment to the Department in writing;
(b) For fuel-burning equipment that operates more than 500 hours during a calendar year, perform a combustion analysis and optimize combustion at least once annually;
(c) Maintain the results of the combustion analysis at the site for at least 2 years and make these results available to the Department and the EPA upon request;
(d) Require each operator of an installation, except combustion turbines, to attend operator training programs at least once every 3 years, on combustion optimization that are sponsored by the Department, the EPA, or equipment vendors; and
(e) Maintain a record of training program attendance for each operator at the site, and make these records available to the Department upon request.”

The Permittee is subject to the NO\textsubscript{X} BACT and LAER emission standards listed in the PSD-2005-01 and NSR-2005-01: NO\textsubscript{X} emission limit of 2.0 g/bhp-hr (6.3 lbs/MW-hr) on a 3-hour average basis. Compliance achieved by good combustion practices; proper operation and maintenance plan; and a limit on operations of no more than 200 hours during any consecutive 12-month period. [Reference: PSD Approval #PSD-2005-1 & NSR Approval #NSR-2005-01 issued on 6/26/06].
Compliance Demonstration:
The Permittee shall perform a combustion analysis and optimize combustion at least once annually on the generators operate more than 500 hours during a calendar year. [Reference: COMAR 26.11.09.08G(1)(b)].
The Permittee shall maintain records of the following: results of the combustion analysis, record of training program attendance for each operator, natural gas usage in lbs/MMBtu per month and hours of operation of the generators. [Reference: COMAR 26.11.09.08G(1)(c&е), NSR Approval #NSR-2005-01 & PSD Approval #PSD-2005-01 issued 6/26/06]
The Permittee shall submit to the Department not later than 30 days following each calendar quarter a quarterly summary report. The report shall be in a format approved by the Department. The Permittee shall report incidences of excess emissions and related corrective actions taken in accordance with excess emissions reporting requirements. [Reference: MDE Permit to Construct #009-5-0071 & 0072N issued on 06/26/06, NSR Approval #NSR-2005-01 & PSD Approval #PSD-2005-01 issued 06/26/06 & COMAR 26.11.01.07C]

D. Control of VOC Emissions
The emergency generators are subject to VOC LAER limit as listed in NSR Approval #NSR-2005-01: VOC emissions limit of 2.35 lbs/MW-hr on a 3-hour average basis. Each generator shall not operate more than 200 hours for any 12-month period, rolling monthly. [Reference: NSR Approval #NSR-2005-01 issued on 6/26/06].

Compliance Demonstration:
The Permit shall maintain records of monthly VOC emissions on site and make available to the Department upon request. The Permittee shall submit to the Department no later than 30 days following each calendar quarter a quarterly report. The report shall be in a format approved by the Department and shall include monthly VOC emission calculation from the generators. [Reference: NSR Approval #NSR-2005-01 issued 6/26/06]

E. Control of Carbon Monoxide Emissions
The emergency generators are subject to the CO BACT requirements listed in the PSD Approval #PSD-2005-01: CO emissions limit of 5.45 lbs/MW-hr to be achieved by natural gas as only and a limit on operations to no more than 200 hours during any consecutive 12-month period. [Reference: PSD Approval #PSD-2005-01 issued on 6/26/06].

Compliance Demonstration:
The Permittee shall maintain records of the hours of operation for the generators on site and make available to the Department upon request. [Reference: COMAR 26.11.03.06C & PSD Approval #PSD-2005-01 issued 6/26/06]
The Permittee shall report incidences of excess emissions and related corrective actions taken in accordance with excess emissions reporting requirements.  
[Reference: COMAR 26.11.01.07C]

**Emission Unit: S001 through S020, FL1-FL6: Premise-wide**

**Reactivation**

**S001, S002, & S003** – (009-5-0012, 009-5-0013, & 009-5-0014 formerly 009-9-0032 to 9-0034).  
Three (3) natural gas-fired, simple-cycle General Electric Frame 3 combustion turbines (model MS3142), each with a maximum rating of 135.6 MMBTU/hr – used to generate electricity.

**S004** – (009-5-0016 through 009-5-0025).  
Ten (10) T-Thermal (model HV-12049) natural gas-fired submerged combustion vaporizers (SCV), each with a rating of 72 MMBtu/hr, equipped with a water injection system: – Used to vaporize LNG

**S005** – (009-5-0015).  
One (1) Black, Sivalls & Bryson (model 2500 SGIH) natural gas-fired LNG emergency vent heater rated at 2.32 MM BTU/hr.: – Used, under emergency conditions, to heat cold natural gas vapor for venting to the atmosphere

**S006** – (009-9-0022).  
One (1) HEATEC (model HCI-6010-50G) natural gas-fired Liquefaction heater rated at 8.9 MM BTU/hr – Used to supply heat for regenerating zeolite molecular sieve used for cleaning pipeline gas

**S007 & S008** – (009-5-0032 & 009-5-0033).  
Two (2) Johnston Boiler Co. (PFTA-300-4-G) natural gas-fired packaged fire tube hot water boilers, each with a rating of 12.3 MMBTU/hr and equipped with low-NOx burner: – Used to heat water-glycol mixture to enable heat exchangers to heat natural gas for use at the facility.

**FL1-FL6** – (009-0021-9-0022)  
Liquefaction equipment components (LEC)

**Cove Point Expansion (CPX)**

**S009 & S010** – (009-5-0049 & 009-5-0050).  
Two (2) General Electric Frame 5 Turbine natural gas-fired simple-cycle with a maximum rating of 302 MMBtu/hr equipped with dry-low NOx combustion (DLN), SCR and oxidation catalyst (OC)
S011 through S017 – (009-5-0051 through 009-5-0057). Seven (7) Johnston water-ethylene glycol (WEG) heaters, each with a rating of 82.3 MMBtu/hr, each equipped with ultra low NO\(_X\) burners (ULNB).

S018 – (009-5-0058). One (1) emergency vent heater rated at 1.3 MMBtu/hr equipped with low-NO\(_X\) burners (LNB).


**Applicable Standards and limits:**

A. Control of VOC Emissions

   The VOC emissions are limited to 33.8 tons for any 12-month period rolling monthly for emission units associated with the 2002 re-activation project and the CPX expansion. The VOC emissions are limited to 48.7 tons for any 12-month period, rolling monthly, for the re-activation sources only. [Reference: NSR Approval #NSR-2005-01 issued 6/26/06 & MDE Permit to Construct Number 009-9-0032 to 9-0034 issued on 8/6/02 (modified on 4/1/05) & MDE Permit to Construct Number 009-0021-5-0032 & 009-0021-5-0033 issued on 6/21/12].

B. Control of Nitrogen Oxides

   The NO\(_X\) emissions are limited to 337.6 tons for any 12-month period rolling monthly for emission units associated with 2002 re-activation project and the CPX expansion. [Reference: NSR Approval #NSR-2005-01 issued on 6/26/06].
Compliance Demonstration:
The Permittee shall maintain records for the Expansion project premise-wide NO\textsubscript{X} emissions for any 12-month period, rolling monthly on site and make available to the Department upon request. [Reference: COMAR 26.11.03.06C]

For EU-S001 through S008, FL1-FFL6 only
The NSR premises-wide NO\textsubscript{X} emissions are limited to 278.8 tons for any 12-month period rolling monthly for emission units associated with 2002 re-activation project. [Reference: NSR Approval #NSR-2002-01 issued on 8/6/02].

Compliance Demonstration:
The Permittee shall maintain records of premise-wide NO\textsubscript{X} emissions for any 12-month period, rolling monthly on site and make available to the Department upon request. [Reference: COMAR 26.11.03.06C]
The Permittee shall maintain monthly natural gas usage, million BTU per month, and monthly NO\textsubscript{X} emissions from the liquefaction heater and each boiler on site for at least 5 years and shall make it available to the Department upon request. [PSD Approval #PSD-2002-1 and NSR Approval #NSR-2002-01 issued on 8/6/02]
The Permittee shall submit to the Department not later than 30 days following each calendar quarter a quarterly summary report. The report shall be in a format approved by the Department and shall include the following:
(a) Expansion project NO\textsubscript{X} emissions for each calendar month and each rolling 12-month period for the previous calendar quarter.
(b) The cause, time periods, except start-up and shut-down phases, and magnitude of all emissions which exceed the applicable standards.
(c) The source downtime including the time and date of the beginning and end of each downtime period and whether the source downtime was planned or unplanned for the following emission units: S001 thru S004, S009 & S010, and S011 thru S017.
(d) Other information required by the Department that is determined to be necessary to be necessary to evaluate the data, to ensure that compliance is achieved, or to determine the applicability of this requirement. [Reference: COMAR 26.11.03.06C & NSR Approval #NSR-2005-01 issued 6/26/06]

Emission Unit: S021 – Combustion Turbine

S021 – (009-5-0065)
One (1) natural gas-fired, Solar Titan turbine with maximum rating of 137 MMBtu/hr equipped with DLN combustors, SCR, and oxidation catalyst.
Controls: DLN, SCR and OC
The Solar Titan combustion turbine is subject to NSPS for Combustion Turbines Subpart KKKK:

§60.4305 - Does this subpart apply to my stationary combustion turbine?
“(a) If you are the owner or operator of a stationary combustion turbine with a heat input at peak load equal to or greater than 10.7 gigajoules (10 MMBtu) per hour, based on the higher heating value of the fuel, which commenced construction, modification, or reconstruction after February 18, 2005, your turbine is subject to this subpart.”

Stationary combustion turbines subject to Subpart KKKK are exempt from the requirements of Subpart GG.

The Solar Titan combustion turbine is not subject to the NESHAP for Combustion Turbines Subpart YYYY:

§63.6090 - What parts of my plant does this subpart cover?
“This subpart applies to each affected source.
(a) Affected source. An affected source is any existing, new, or reconstructed stationary combustion turbine located at a major source of HAP emissions.”

The Cove Point terminal is not a major source of HAP emissions.

Compliance Status
On February 24, 2009 the Permittee conducted stack test on the Solar combustion turbine for CO, VOC, NOₓ, and PM₁₀. The test results are as follows:

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Pollutant</th>
<th>Test Results</th>
<th>Allowable Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>S021</td>
<td>CO</td>
<td>0.00 ppm</td>
<td>6.0 ppm @ 15% O₂</td>
</tr>
<tr>
<td>S021</td>
<td>NOₓ</td>
<td>0.76 ppm @ 15% O₂</td>
<td>5.0 ppm</td>
</tr>
<tr>
<td>S021</td>
<td>PM₁₀</td>
<td>0.0077lb/mmBtu</td>
<td>0.0066 lb/mmBtu</td>
</tr>
<tr>
<td>S021</td>
<td>VOC</td>
<td>0.01 lb/mmBtu</td>
<td>0.7 lb/mmBtu</td>
</tr>
</tbody>
</table>

12/7/2011 – 12/8/2011 stack testing results for PM₁₀

| S021 | PM₁₀ | 0.0037lb/mmBtu | 0.0066 lb/mmBtu |

The PM₁₀ emissions exceeded the PM₁₀ allowable limit of 0.0066 lb/mmBtu. On December 7, 2011 to December 8, 2011, PM₁₀ stack test was performed on the Solar combustion turbine and the data showed compliance with the PM BACT limit.

Applicable Standards and limits:
A. Control of Visible Emissions
COMAR 26.11.09.05 - Visible Emissions.
“A. Fuel Burning Equipment.”
(1) Areas I, II, V, and VI. In Areas I, II, V, and VI, 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 greater than 20 percent opacity.

(3) Exceptions. Section A(1) and (2) of this regulation do not apply to emissions during load changing, soot blowing, startup, or adjustments or occasional cleaning of control equipment if:
(a) The visible emissions are not greater than 40 percent opacity; and
(b) The visible emissions do not occur for more than 6 consecutive minutes in any sixty minute period. “

Compliance Demonstration:
The Permittee shall record any incidences of visible emissions and the corrective actions. [Reference: COMAR 26.11.03.06C].
The Permittee shall report incidences of excess emissions and related corrective actions taken in accordance with excess emissions reporting requirements. [Reference: COMAR 26.11.01.07C]

B. Control of Particulate Matter Emissions
The Solar combustion turbine is subject to PM$_{10}$ BACT requirements listed in the CPCN Case No. 9055 Licensing Conditions: PM$_{10}$ emission limit of 0.0066 lbs/MMBtu on a 3-hour average to be achieved by exclusive use of pipeline quality, low sulfur natural gas. [Reference: CPCN Case No. 9055, issued 8/15/06].

Compliance Demonstration:
The Permittee shall perform stack testing to demonstrate compliance with PM emission limit in the exhaust gases of the stack of the combustion turbines at the facility once during the term of this permit. During the stack emission testing, the combustion turbine shall be operating at 90% or higher of its rated capacity. [Reference: CPCN Case No. 9055 issued 8/15/06 & COMAR 26.11.03.06C]
The Permittee shall perform routine and preventative maintenance in accordance with manufacturer’s specifications. The Permittee shall maintain the following on site for at least 5 years: records of stack testing results; record of the date, time and description of maintenance performed on the combustion turbines and shall submit records to the Department upon request. The Permittee shall submit a test protocol to the Department, for approval, at least 30 days prior to the scheduled test date. The Permittee shall report the results of the stack tests to the Department within 60 days of completion of the tests. [Reference: COMAR 26.11.03.06C]

Rationale: Dominion completed an initial performance test on the combustion turbine at the facility in December 2011. The PM limit for the Solar combustion turbine is 0.0066 lb/MMBtu and the test result was 0.000203 lb/MMBtu (filterable only) which is 3% of the permit limit. The test results demonstrate a sufficient
margin of compliance with the permit limit. In addition, Dominion continuously monitors the SCR (i.e., chemical reagent use) and oxidation catalyst (i.e., visual inspections) as well as properly maintains the equipment and controls devices. Finally, Solar combustion turbine burns only natural gas as a fuel. When equipment is properly maintained, emissions from natural gas are stable and relatively low.

C. Control of Nitrogen Oxides

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

“(2) A person who owns or operates a combustion turbine with a capacity factor greater than 15 percent shall meet an hourly average NO\textsubscript{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. “


Emission Limits

§60.4315 - What pollutants are regulated by this subpart?
The pollutants regulated by this subpart are nitrogen oxide (NO\textsubscript{X}) and sulfur dioxide (SO\textsubscript{2}).

§60.4320 - What emission limits must I meet for nitrogen oxides (NO\textsubscript{X})?
You must meet the emission limits for NO\textsubscript{X} specified in Table 1 to this subpart.

| Table 1 to 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\textsubscript{X} emission standard |
| New turbine firing natural gas | > 50 MM Btu/h and ≤ 850 MM Btu/h | 25 ppm at 15 percent O\textsubscript{2} or 150 ng/J of useful output (1.2 lb/MWh). |

The Solar combustion turbine is subject to the NO\textsubscript{X} LAER requirements and the NO\textsubscript{X} BACT requirements listed in the CPCN Case No. 9055: NO\textsubscript{X} emission limit of 5,0 ppmvd corrected to 15% oxygen on a 1-hour average basis during base-load operating conditions to be achieved by exclusive use of pipeline quality, low sulfur natural gas; low-NO\textsubscript{X} combustion design and operation of selective catalytic reduction system. Emissions are subject to startup and shutdown conditions as listed in the same permit: NO\textsubscript{X} emissions are limited to 12.8 tons for any 12-month period rolling monthly for emission units associated with the ASU project [Reference: CPCN Case No. 9055 issued 8/15/06].
Compliance Demonstration:
The Permittee shall conduct performance test for NO\textsubscript{X} in accordance with the methodologies specified in 40 CFR §60.4340 & §60.4400.

§60.4340 - How do I demonstrate continuous compliance for NO\textsubscript{X} if I do not use water or steam injection?

“(a) If you are not using water or steam injection to control NO\textsubscript{X} emissions, you must perform annual performance tests in accordance with §60.4400 to demonstrate continuous compliance. If the NO\textsubscript{X} emission result from the performance test is less than or equal to 75 percent of the NO\textsubscript{X} emission limit for the turbine, you may reduce the frequency of subsequent performance tests to once every 2 years (no more than 26 calendar months following the previous performance test). If the results of any subsequent performance test exceed 75 percent of the NO\textsubscript{X} emission limit for the turbine, you must resume annual performance tests.

(b) As an alternative, you may install, calibrate, maintain and operate one of the following continuous monitoring systems:

(1) Continuous emission monitoring as described in §60.4335(b) and §60.4345, or

(2) Continuous parameter monitoring as follows:

(i) For a diffusion flame turbine without add-on selective catalytic reduction (SCR) controls, you must define parameters indicative of the unit's NO\textsubscript{X} formation characteristics, and you must monitor these parameters continuously.

(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\textsubscript{X} mode.

(iii) For any turbine that uses SCR to reduce NO\textsubscript{X} emissions, you must continuously monitor appropriate parameters to verify the proper operation of the emission controls.

(iv) For affected units that are also regulated under part 75 of this chapter, with state approval you can monitor the NO\textsubscript{X} emission rate using the methodology in appendix E to part 75 of this chapter, or the low mass emissions methodology in §75.19, the requirements of this paragraph (b) may be met by performing the parametric monitoring described in Section 2.3 of part 75 appendix E or in §75.19(c)(1)(iv)(H).”

The Permittee shall continuously monitor the NO\textsubscript{X} emission of the stack gases using a NO\textsubscript{X} Continuous Emission Monitor (CEM) that is certified in accordance 40 CFR Part 60, Appendix B, or Part 75, Appendix A and meet the quality assurance criteria in 40 CFR Part 60, Appendix F. [Reference: COMAR 26.11.09.08(B)(2)(b&c)]

The Permittee shall demonstrate continuous compliance with NO\textsubscript{X} in accordance with 40 CFR §60.4340 as follows:

“(a) If you are not using water or steam injection to control NO\textsubscript{X} emissions, you must perform annual performance tests in accordance with §60.4400 to demonstrate continuous compliance. If the NO\textsubscript{X} emission result from the
performance test is less than or equal to 75 percent of the NO\textsubscript{X} emission limit for the turbine, you may reduce the frequency of subsequent performance tests to once every 2 years (no more than 26 calendar months following the previous performance test). If the results of any subsequent performance test exceed 75 percent of the NO\textsubscript{X} emission limit for the turbine, you must resume annual performance tests.

(b) As an alternative, you may install, calibrate, maintain and operate one of the following continuous monitoring systems:

(1) Continuous emission monitoring as described in §60.4335(b) and §60.4345, or

(2) Continuous parameter monitoring as follows:

(i) For a diffusion flame turbine without add-on selective catalytic reduction (SCR) controls, you must define parameters indicative of the unit's NO\textsubscript{X} formation characteristics, and you must monitor these parameters continuously.

The Permittee shall maintain the following records on site for at least 5 years and make available to the Department upon request:

(a) Total NO\textsubscript{X} emissions (tons) for each calendar month and each rolling 12-month period.

(b) Monthly natural gas usage in MMBtu per month and power output in kW/hour.

(c) NO\textsubscript{X} emission rates, lb/MMBtu of heat input.

(d) Monthly chemical reagent usage for the SCR system, lbs/month.

(e) All CEM system monitoring data, which are used to demonstrate compliance with the emission limits;

(f) All CEM certifications and calibration results; and

(g) The repairs and maintenance made to the SCR or oxidation catalyst emission control devices or the NO\textsubscript{X} CEM system.

[Reference: CPCN Case No. 9055 issued 8/15/06]

The Permittee shall submit a quarterly summary report to the Department not later than 30 days following each calendar quarter. The report shall be in a format approved by the Department, and shall include the following:

(i) The cause, time periods, and magnitude of all emissions which exceed the applicable emission standards;

(ii) The source downtime including the time and date of the beginning and end of each downtime period and whether the source downtime was planned or unplanned;

(iii) The time periods and cause of all CEM downtime including records of any repairs, adjustments, or maintenance that may affect the validity of emission data;

(iv) Quarterly totals of excess emissions, installation downtime, and CEM downtime during the calendar quarter;

(v) Quarterly quality assurance activities; and

(vi) Daily calibration activities that include reference values, actual values, absolute or percent of span differences, and drift status; and
(vii) Other information required by the Department that is determined to be necessary to evaluate the data, to ensure that compliance is achieved, or to determine the applicability of this regulation.”

[Reference: COMAR 26.11.03.06C]

CEM System Downtime Reporting Requirement: The Permittee shall report all system downtime that lasts or is expected to last more than 24 hours to the Department by telephone before 10 a.m. of the first regular business day following the breakdown. The system breakdown report shall include the reason, if known, for the breakdown and the estimated period of time that the CEM will be down. The owner or operator of the CEM shall notify the Department by telephone when an out-of-service CEM is back in operation and producing valid data. [Reference: COMAR 26.11.03.06C]

COMAR 26.11.09.08K(1). - Reporting Requirements.
(1) When demonstration of compliance with the NO\textsubscript{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. The summaries shall include:
(i) NO\textsubscript{X} emission rates in pounds of NO\textsubscript{X} per hour and pounds of NO\textsubscript{X} per million BTU reported as a daily 24-hour average and as a thirty (30) day rolling average;
(ii) Boiler downtime, including the beginning time and date and ending time and date of each downtime period;
(iii) The time periods and cause of all CEM downtime including records of any repairs, adjustments, or maintenance that may affect the validity of emission data;
(iv) Quarterly totals of boiler downtime and CEM downtime during the calendar quarter; and
(v) Quarterly quality assurance activities.

D. Control of SO\textsubscript{X} Emissions
§60.4330 - What emission limits must I meet for sulfur dioxide (SO\textsubscript{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. If your turbine is located in Alaska, you do not have to comply with the requirements in paragraph (a) of this section until January 1, 2008.
(1) You must not cause to be discharged into the atmosphere from the subject stationary combustion turbine any gases which contain SO\textsubscript{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\textsubscript{2}/J (0.060 lb SO\textsubscript{2}/MMBtu) heat input. If your turbine simultaneously fires multiple fuels, each fuel must meet this requirement.
Compliance Demonstration:
The Permittee shall conduct performance test for SO\textsubscript{X} in accordance with the methodologies specified in 40 CFR §60.4415.

§60.4360 - How do I determine the total sulfur content of the turbine’s combustion fuel?
You must monitor the total sulfur content of the fuel being fired in the turbine, except as provided in §60.4365. The sulfur content of the fuel must be determined using total sulfur methods described in §60.4415. Alternatively, if the total sulfur content of the gaseous fuel during the most recent performance test was less than half the applicable limit, ASTM D4084, D4810, D5504, or D6228, or Gas Processors Association Standard 2377 (all of which are incorporated by reference, see §60.17), which measure the major sulfur compounds, may be used.

§60.4370 - How often must I determine the sulfur content of the fuel?
“The frequency of determining the sulfur content of the fuel must be as follows:
(b) Gaseous fuel. If you elect not to demonstrate sulfur content using options in §60.4365, and the fuel is supplied without intermediate bulk storage, the sulfur content value of the gaseous fuel must be determined and recorded once per unit operating day.”

The FERC Gas Tariff for Dominion Cove Point LNG requires gas delivered to Cove Point to have less than 25 grains of total sulfur per 100 ft\textsuperscript{3} of natural gas.

The Permittee shall maintain records of the sulfur content of the fuel on site for at least 5 years and make available to the Department upon request. [Reference: COMAR 26.11.03.06C]
The Permittee shall report incidences of excess emissions and related corrective actions taken in accordance with excess emissions reporting requirements. [Reference: COMAR 26.11.01.07C]

E. Control of VOC Emissions
The Solar combustion turbine is subject to the VOC LAER requirements listed in the CPCN Case No. 9055: VOC emission limit of 0.7 lb/hr on a 3-hour average basis at loads of 75% or greater and 0.6 lbs/hr on a 3-hour average basis at loads less than 75%..
Emissions are subject to startup and shutdown conditions as listed in the same permit: VOC emissions are limited to 3.7 tons for any 12-month period rolling monthly for emission units associated with the ASU project. [Reference: CPCN Case No. 9055 issued 8/15/06].

Compliance Demonstration:
The Permittee shall perform stack testing to demonstrate compliance with VOC emission limit in the exhaust gases of the stack of the combustion turbine once
during the term of this permit. During the stack emission testing, the combustion turbine shall be operating at 90% or higher of its rated capacity. [Reference: CPCN Case No. 9055 issued 8/15/06 & COMAR 26.11.03.06C]

The Permittee shall calculate monthly VOC emissions from each combustion turbine based on the monthly fuel usage and VOC emission rate, lbs/MBtu of heat input, collected from the stack emission testing or any other method approved by the Department. The Permittee shall maintain the following records on site for at least 5 years and make available to the Department upon request: monthly VOC emissions from the combustion turbine and stack testing results. The Permittee shall submit a test protocol to the Department, for approval, at least 30 days prior to the scheduled test date. The Permittee shall report the results of the stack tests to the Department within 60 days of completion of the tests. [Reference: COMAR 26.11.03.06C].

**Rationale:** Dominion completed an initial performance test on the combustion turbine at the facility in February 2009. The VOC limit for the Solar combustion turbine is 0.6 lb/hr at less than 75% capacity and 0.7 lb/hr at 75% or greater capacity. The test results was 0.1 lb/hr, which is at 17% of the 0.6 lb/hr permit limit. The test results demonstrate a sufficient margin of compliance with the permit limit. In addition, Dominion continuously monitors the oxidation catalyst as part of CAM. Finally, Solar combustion turbine burns only natural gas as a fuel. When equipment is properly maintained, emissions from natural gas are stable and relatively low.

---

**F. Control of Carbon Monoxide (CO) Emissions**

The Solar combustion turbine is subject to the CO BACT requirements listed in the CPCN Case No. 9055 Licensing Conditions: CO emission limit of 6.0 ppmvd corrected to 15% oxygen on a 3-hour average basis to be achieved by use of good combustion practices and operation of oxidation catalyst system. [Reference: CPCN Case No. 9055 issued 8/15/06]

**Compliance Demonstration:**
The Permittee shall perform stack testing to demonstrate compliance with CO BACT emission limit in the exhaust gases of the stack of the combustion turbine once during the term of this permit. During the stack emission testing, the combustion turbine shall be operating at 90% or higher of its rated capacity. [Reference: CPCN Case No. 9055 issued 8/15/06 & COMAR 26.11.05.06C]

The Permittee shall maintain records of stack testing results on site for at least 5 years and make available to the Department upon request. The Permittee shall submit a test protocol to the Department, for approval, at least 30 days prior to the scheduled test date. The Permittee shall report the results of the stack tests to the Department within 60 days of completion of the tests. [Reference: COMAR 26.11.03.06C].
Rationale: Dominion completed an initial performance test on the combustion turbine at the facility in February 2009. The CO limit for the Solar combustion turbine is 6 ppmvd and the test result was zero. In addition, Dominion continuously monitors the oxidation catalyst as part of CAM (i.e. visual inspections). Finally, Solar combustion turbine burns only natural gas as a fuel. When equipment is properly maintained, emissions from natural gas are stable and relatively low.

Emission Unit: S022 – Heater

S022 – (N/A).
One (1) natural gas-fired process heater equipped with LNB rated at 0.93 MMBtu/hr.

Controls: None

Applicable Standards and limits:
A. Control of Visible Emissions
COMAR 26.11.09.05 - Visible Emissions.
“A. Fuel Burning Equipment.
(1) Areas I, II, V, and VI. In Areas I, II, V, and VI, 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 greater than 20 percent opacity.
(3) Exceptions. Section A(1) and (2) of this regulation do not apply to emissions during load changing, soot blowing, startup, or adjustments or occasional cleaning of control equipment if:
(a) The visible emissions are not greater than 40 percent opacity; and
(b) The visible emissions do not occur for more than 6 consecutive minutes in any sixty minute period. “

Compliance Demonstration:
The Permittee shall maintain records of any incidences of visible emissions and related corrective actions taken. [Reference: COMAR 26.11.03.06C].
The Permittee shall report incidences of excess emissions and related corrective actions taken in accordance with excess emissions reporting requirements. [Reference: COMAR 26.11.01.07C]

B. Control of Particulate Matter Emissions
The process heater is subject to the PM$_{10}$ BACT requirements listed in CPCN Case No. 9055 Licensing Conditions: PM$_{10}$ emission limit of 0.0074 lb/MMBtu on a 3-hour average basis (filterable and condensable) to be achieved by exclusive use of pipeline quality and low sulfur natural gas. [Reference: CPCN Case No. 9055 issued 8/15/06]
Compliance Demonstration:
The Permittee shall report incidences of excess emissions and related corrective actions taken in accordance with excess emissions reporting requirements. [Reference: COMAR 26.11.01.07C]

C. Control of Nitrogen Oxides
The process heater is subject to the NO$_X$ BACT requirement and the NO$_X$ LAER requirements listed in the CPCN Case No. 9055 Licensing Conditions: NO$_X$ emission limit of 17 ppmvd corrected to 3% oxygen on a 3-hour average basis to be achieved by the exclusive use of natural gas, good combustion practices and dry low-NO$_X$ burners. [Reference: CPCN Case No. 9055 issued 8/15/06]

Compliance Demonstration:
The Permittee shall maintain records of the following on site for at least 5 years and make available to the Department upon request: monthly natural gas usage, million BTU per month, and NO$_X$ emission rates, lbs/MMBtu of heat input. [Reference: CPCN Case No. 9055 issued 8/15/06]

The Permittee shall submit to the Department not later than 30 days following each calendar quarter a quarterly summary report. The report shall be in a format approved by the Department. The Permittee shall report incidences of excess emissions and related corrective actions taken in accordance with excess emissions reporting requirements. [Reference: COMAR 26.11.01.07C]

D. Control of VOC Emissions
The process heater is subject to the VOC LAER requirements listed in the CPCN Case No. 9055 Licensing Conditions: VOC emission limit of 143 ppmvd corrected to 3% oxygen on a 3-hour average basis. [Reference: CPCN Case No. 9055 issued 8/15/06]

Compliance Demonstration:
The Permit shall maintain records of the following on site for at least 5 years and make available to the Department upon request: monthly natural gas usage, million BTU per month, and VOC emission rates, lbs/MMBtu of heat input. [Reference: CPCN Case No. 9055 issued 8/15/06]

The Permittee shall report incidences of excess emissions and related corrective actions taken in accordance with excess emissions reporting requirements. [Reference: COMAR 26.11.01.07C]

E. Control of Carbon Monoxide Emissions
The process heater is subject to the CO BACT requirements listed in the CPCN Case No. 9055 Licensing Conditions: CO emission limit of 143 ppmvd corrected
to 3% oxygen on a 3-hour average basis to be achieved by good combustion practices.  [Reference: CPCN Case No. 9055 issued 8/15/06]

**Compliance Demonstration:**
The Permittee shall report incidences of excess emissions and related corrective actions taken in accordance with excess emissions reporting requirements.  [Reference: COMAR 26.11.01.07C]

---

**Emission Unit: S023 – Emergency Generator**

**S023 – (009-9-0082)**
One (1) natural gas-fired Caterpillar black-start emergency generator rated at 1032 horsepower (770 kW).

**Controls:** None

This generator is not subject to 40 CFR Part 60 Subpart IIII - New Source Performance Standards (NSPS) under 40 CFR Part 60 Subpart IIII for Stationary Compression Ignition Internal Combustion Engines because it is a natural gas fired generator which is spark ignited.

This generator also is not subject to 40 CFR Part 60 Subpart JJJJ – New Source Performance Standards (NSPS) for Stationary Spark Ignition Internal Combustion Engines since it was manufactured prior to January 1, 2008, per 40 CFR 60.4230(a)(4)(ii). This generator was manufactured in March of 2007.

§60.4230(a) The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary spark ignition (SI) internal combustion engines (ICE) as specified in paragraphs (a)(1) through (6) of this section. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.

(4) Owners and operators of stationary SI ICE that commence construction after June 12, 2006, where the stationary SI ICE are manufactured: (ii) on or after January 1, 2008, for lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP.

This generator is also not subject to the requirements of 40 CFR Part 63 Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines since it was manufactured after June 12, 2006.

**Applicable Standards and limits:**

A. Control of Visible Emissions

**COMAR 26.11.09.05 - Visible Emissions.**

E. Stationary Internal Combustion Engine Powered Equipment.
“(2) Emissions During Idle Mode. A person may not cause or permit the discharge of emissions from any engine, operating at idle, greater than 10 percent opacity.

(3) Emissions During Operating Mode. A person may not cause or permit the discharge of emissions from any engine, operating at other than idle conditions, greater than 40 percent opacity.

(4) Exceptions.

(a) Section E(2) of this regulation does not apply for a period of 2 consecutive minutes after a period of idling of 15 consecutive minutes for the purpose of clearing the exhaust system.

(b) Section E(2) of this regulation does not apply to emissions resulting directly from cold engine start-up and warm-up for the following maximum periods:

(i) Engines that are idled continuously when not in service: 30 minutes;

(ii) All other engines: 15 minutes.

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

Compliance Demonstration:
The Permittee shall keep records of incidences of visible emissions and corrective actions. [Reference: COMAR 26.11.03.06C]
The Permittee shall report incidences of excess emissions and related corrective actions taken in accordance with excess emissions reporting requirements. [Reference: COMAR 26.11.01.07C]

B. Control of Particulate Matter Emissions

The engine is subject to PM\textsubscript{10} BACT emission standards listed in the CPCN Case No. 9055: PM\textsubscript{10} emissions limit of 0.0099 lbs/MBtu on a 3-hour average basis to be achieved by exclusive use of pipeline quality, low sulfur natural gas and a limit on operations of no more than 200 hours during any consecutive 12-month period. [Reference: CPCN Case No. 9055, issued 8/15/06].

Compliance Demonstration:
The Permittee shall maintain the following records on site and make available to the Department upon request: monthly fuel usage rates in MMBtu per month and hours of operation for the generator [Reference: CPCN Case No. 9055 issued 8/15/06]
The Permittee shall report incidences of excess emissions and related corrective actions taken in accordance with excess emissions reporting requirements. [Reference: COMAR 26.11.01.07C]
C. Control of Nitrogen Oxides

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

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

The engine is subject to NO\textsubscript{X} BACT and LAER emission standards listed in the CPCN Case No. 9055: NO\textsubscript{X} emission limit of 2.0 g/bhp-hr on a 3-hour average basis to be achieved by good combustion practices, proper operation and maintenance plan and a limit on operations of no more than 200 hours during any consecutive 12-month period. [Reference: CPCN Case No. 9055, issued 8/15/06].

Compliance Demonstration:
The Permittee shall perform a combustion analysis and optimize combustion at least once annually on the generators operate more than 500 hours during a calendar year. [Reference: COMAR 26.11.09.08G(1)(b)]. The Permittee shall maintain records of the following: monthly fuel usage rates, million BTU per month, number of hours each generator operates per month, results of combustion analysis and record of training program attendance for each operator. [Reference: CPCN Case No. 9055 issued 8/15/06 & COMAR 26.11.09.08G(1)(c&e)]
The Permittee shall submit to the Department not later than 30 days following each calendar quarter a quarterly summary report. The report shall be in a format approved by the Department. The Permittee shall report incidences of excess emissions and related corrective actions taken in accordance with excess emissions reporting requirements. [Reference: COMAR 26.11.03.06C & COMAR 26.11.01.07C]
D. Control of VOC Emissions
The engine is subject to VOC LAER emission standards listed in the CPCN Case No. 9055; Licensing Conditions: VOC emission limit of 0.6 g/bhp-hr on a 3-hour average basis. [Reference: CPCN Case No. 9055, issued 8/15/06].

Compliance Demonstration:
The Permittee shall maintain the following records on site and make available to the Department upon request: monthly fuel usage rates in MMBtu per month and hours of operation for the generator. [Reference: CPCN Case No. 9055 issued 8/15/06] The Permittee shall report incidences of excess emissions and related corrective actions taken in accordance with excess emissions reporting requirements. [Reference: COMAR 26.11.01.07C]

E. Control of Carbon Monoxide Emissions
The engine is subject to CO BACT emission standards listed in the CPCN Case No.9055; Licensing Conditions: CO emission limit of 1.5 g/bhp-hr on a 3-hour average basis to be achieved by good combustion practices, proper operation and maintenance plan and a limit on operations of no more than 200 hours during any consecutive 12-month period. [Reference: CPCN Case No. 9055, issued 8/15/06].

Compliance Demonstration:
The Permittee shall maintain the following records on site and make available to the Department upon request: monthly fuel usage rates in MMBtu per month and hours of operation for the generator. [Reference: CPCN Case No. 9055 issued 8/15/06] The Permittee shall report incidences of excess emissions and related corrective actions taken in accordance with excess emissions reporting requirements. [Reference: COMAR 26.11.01.07C]

Emission Unit: S021 through S023: Associated with the ASU Project

S021 – (009-5-0065)
One (1) natural gas-fired, Solar Titan turbine with maximum rating of 137 MMBtu/hr equipped with DLN combustors, SCR, and oxidation catalyst. Controls: DLN, SCR and OC

S022 – (N/A).
One (1) natural gas-fired process heater equipped with LNB rated at 0.93 MMBtu/hr.
Controls: None
S023 – (009-9-0082)
One (1) natural gas-fired Caterpillar black-start emergency generator rated at 1032 horsepower (770 kW).

**Controls:** None

**Applicable Standards and limits:**
A. **Control of VOC Emissions**
The VOC emissions are limited to 3.7 tons for any 12-month period rolling monthly for emissions unit associated with the ASU project. [Reference: CPCN Case No. 9055 issued 8/15/06]

**Compliance Demonstration:**
The Permit shall maintain records of VOC emissions for any 12-month period, rolling monthly on site for at least 5 years and make available to the Department upon request. The Permittee shall submit to the Department no later than 30 days following each calendar quarter a quarterly report. The report shall be in a format approved by the Department and shall include monthly and rolling 12-month VOC emission calculations. [Reference: COMAR 26.11.03.06C]

B. **Control of Nitrogen Oxides**
The NO\textsubscript{X} emissions are limited to 12.8 tons for any 12-month period rolling monthly for emission units associated with ASU project. [Reference: CPCN Case No. 9055 issued 8/15/06].

**Compliance Demonstration:**
The Permittee shall maintain records of NO\textsubscript{X} emissions for any 12-month period, rolling monthly on site for at least 5 years and make available to the Department upon request. The Permittee shall submit to the Department not later than 30 days following each calendar quarter a quarterly summary report. The report shall be in a format approved by the Department and shall include monthly and rolling 12-month NO\textsubscript{X} emission calculations. [Reference: COMAR 26.11.03.06C]

**Emission Unit: S024 & S025 - WEG Heaters**

S024 & S025 – (009-5-0060 and 009-5-0062).
Two (2) Johnston water-ethylene glycol (WEG) heaters, each with a rating of 82.3 MMBtu/hr, each equipped with ultra low NO\textsubscript{X} burners (ULNB)

**Controls:** None

The WEG heaters are subject to the NSPS for small industrial-institutional-commercial steam generating units, Subpart Dc.

§60.40c - Applicability and delegation of authority.
(a) Except as provided in paragraph (d) of this section, the affected facility to which this subpart applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/hr)) or less, but greater than or equal to 2.9 MW (10 MMBtu/hr).

Compliance Status
The Permittee conducted stack test on the two heaters on February 25, 2010 and determined that the NO\textsubscript{X} emission rate of 0.02 lb/mmBtu is in compliance with the allowable RACT limit of 0.20 lb/mmBtu.

Applicable Standards and limits:
A. Control of Visible Emissions
COMAR 26.11.09.05 - Visible Emissions.
“A. Fuel Burning Equipment.
(1) Areas I, II, V, and VI. In Areas I, II, V, and VI, 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 greater than 20 percent opacity.
(3) Exceptions. Section A(1) and (2) of this regulation do not apply to emissions during load changing, soot blowing, startup, or adjustments or occasional cleaning of control equipment if:
(a) The visible emissions are not greater than 40 percent opacity; and
(b) The visible emissions do not occur for more than 6 consecutive minutes in any sixty minute period. “

Compliance Demonstration:
The Permittee shall record any incidences of visible emissions and the corrective actions. [Reference: COMAR 26.11.03.06C].

The Permittee shall report incidences of excess emissions and related corrective actions taken in accordance with excess emissions reporting requirements. [Reference: COMAR 26.11.01.07C]

B. Control of Nitrogen Oxides
COMAR 26.11.09.08B. - General Requirements and Conditions.
(1) Emission Standards and Requirements.
(a) A person who owns or operates an installation that causes NO\textsubscript{X} emissions subject to this regulation is in compliance with this regulation if the person establishes compliance with the emissions standards in §B(1)(c) of this regulation. (c) Emission Standards in Pounds of NO\textsubscript{X} per Million Btu of heat input. – Gas only: 0.2. “
Compliance Demonstration:
The Permittee shall test emissions from WEG heaters using portable analyzers semiannually for the first 2 years after startup. After the first 2 years of operation, the Permittee may request that the testing be stopped if the Permittee consistently demonstrates compliance with the permit. [Reference: MDE Permit to Construct No. 009-0021-5-0060 and 5-0062 issued 2/12/09]
The Permittee shall maintain the following records on-site for a period of at least five years:
(1) Monthly natural gas usage in millions BTU per month for each WEG heater.
(2) NO\textsubscript{X} emission rates, lbs/MMBtu of heat input for each WEG heater. [Reference: MDE Permit to Construct No. 009-0021-5-0060 and 5-0062 issued 2/12/09]
The Permittee shall submit to the Department not later than 30 days following each calendar quarter a quarterly summary report. The report shall be in a format approved by the Department. The Permittee shall report incidences of excess emissions and related corrective actions taken in accordance with excess emissions reporting requirements. [Reference: COMAR 26.11.03.06C]

C. NSPS for PM and SO\textsubscript{X} Emissions
40 CFR Part 60 Subpart Dc—Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units
§60.40c - Applicability and delegation of authority.
(a) Except as provided in paragraphs (d), (e), (f), and (g) of this section, the affected facility to which this subpart applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/h)) or less, but greater than or equal to 2.9 MW (10 MMBtu/h). Since the heaters are fired on natural gas only, the record keeping and reporting requirements §60.48c apply.

Compliance Demonstration:
§60.48c - Reporting and recordkeeping requirements.
“(g)(1) Except as provided under paragraphs (g)(2) and (g)(3) of this section, the owner or operator of each affected facility shall record and maintain records of the amount of each fuel combusted during each operating day.”
“(j) The reporting period for the reports required under this subpart is each six-month period. All reports shall be submitted to the Administrator and shall be postmarked by the 30th day following the end of the reporting period.”

Emission Unit: Emergency Generators
One (1) Onan 605 hp diesel-fired engine intended for emergency purposes. (009-0021-9-0091)
Three (3) 465 hp emergency generators
Three (3) fire pumps (two (2) onshore and one (1) offshore)
Generators installed prior to July 11, 2005, except one (1) onshore fire pump manufactured in July 2008.

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

Compliance Demonstration:
The Permittee shall maintain records of any visible emissions and the corrective actions. [Reference: COMAR 26.11.03.06C]
The Permittee shall report incidences of excess emissions and related corrective actions taken in accordance with excess emissions reporting requirements. [Reference: COMAR 26.11.01.07C]

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:
(1) In Areas I, II, V, and VI: (c) Distillate fuel oils, 0.3 percent.
Compliance Demonstration:
The Permittee shall obtain a certification from the fuel supplier that the fuel oil is in compliance with the sulfur in fuel limitation. [Reference: COMAR 26.11.03.06C]
The Permittee shall retain fuel supplier certifications stating that the fuel oil is in compliance with this regulation for at least 5 years. The Permittee shall report fuel supplier certification to the Department upon request. [Reference: COMAR 26.11.09.07C].

C. Control of Nitrogen Oxides
“(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)].
For engines that operate more than 500 hours during a calendar year, the Permittee shall perform a combustion analysis and optimize combustion.
[Reference: COMAR 26.11.03.06C]
The Permittee shall:
(1) Maintain the results of the combustion analysis at the site for at least 5 years and make these results available to the Department and the EPA upon request. [Reference: COMAR 26.11.09.08G(1)(c) & COMAR 26.11.03.06C].
(2) Retain records of training program attendance for each operator at the site for at least 5 years and make these records available to the Department upon request. [Reference: COMAR 26.11.09.08G(1)(e) and COMAR 26.11.03.06C].
(3) Retain records of hours of operation on a monthly basis for all generators. At the end of each month, the Permittee shall calculate the total hours for the prior rolling 12-month period. [Reference: 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 certification report. [Reference: COMAR 26.11.09.08G(1)(a) & COMAR 26.11.03.06C]

Emission Unit: Emergency Generators Cont’d

One (1) Onan 605 hp diesel-fired engine intended for emergency purposes. (009-0021-9-0091)
Three (3) 465 hp emergency generators
Two (2) fire pumps (one (1) onshore and one (1) offshore)
Generators Installed prior to July 11, 2005.

Applicable Standards and limits:
§63.6595 - When do I have to comply with this subpart?
(a) Affected sources. (1)” ….. If you have an existing non-emergency CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, an existing stationary CI 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 stationary CI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations and operating limitations no later than May 3, 2013. …..”.

§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 2b to this subpart that apply to you.”
Table 2d to Subpart ZZZZ of Part 63—Requirements for Existing Stationary RICE Located at Area Sources of HAP Emissions

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:

<table>
<thead>
<tr>
<th>For each . . .</th>
<th>You must meet the following requirement, except during periods of startup . . .</th>
<th>During periods of startup you must . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Emergency stationary CI RICE and black start stationary CI RICE.²</td>
<td>a. Change oil and filter every 500 hours of operation or annually, whichever comes first;¹</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.</td>
<td></td>
</tr>
</tbody>
</table>

¹Sources have the option to utilize an oil analysis program as described in §63.6625(i) in order to extend the specified oil change requirement in Table 2d of this subpart.

²If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of this subpart, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.

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

“(a) You must be in compliance with the emission limitations and operating limitations 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.”
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.”

“(h) If you operate a new, reconstructed, or existing stationary engine, you must minimize the engine’s time spent at idle during startup and minimize the engine’s startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to this subpart apply.”

“(i) If you own or operate a stationary CI engine that is subject to the work, operation or management practices in items 1 or 2 of Table 2c to this subpart or in items 1 or 4 of Table 2d to this subpart, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the
parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.”

§63.6640 - How do I demonstrate continuous compliance with the emission limitations and operating limitations?
(a) You must demonstrate continuous compliance with each emission limitation and operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you according to methods specified in Table 6 to this subpart.

(b) You must report each instance in which you did not meet each emission limitation or operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you. These instances are deviations from the emission and operating limitations in this subpart. These deviations must be reported according to the requirements in §63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you re establish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE.

“(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 (4) of this section. In order for the engine to be considered an emergency stationary RICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (4) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (4) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

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

(2) You may operate your emergency stationary RICE 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 paragraphs (f)(3) and (4) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).

(i) Emergency stationary RICE 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 RICE beyond 100 hours per calendar year.

(ii) Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

(iii) Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

(3) Emergency stationary RICE located at major 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 and emergency demand response provided in paragraph (f)(2) of this section. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(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 and emergency demand response provided in paragraph (f)(2) of this section. Except as provided in paragraphs (f)(4)(i) and (ii) of this section, the 50 hours per year for non-emergency 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.

(i) Prior to May 3, 2014, the 50 hours per year for non-emergency situations can be used for peak shaving or non-emergency demand response to generate income for a facility, or to otherwise supply power as part of a financial arrangement with another entity if the engine is operated as part of a peak shaving (load management program) with the local distribution system.
operator and the power is provided only to the facility itself or to support the local distribution system.

(ii) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

(A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator.

(B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

(C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

(D) The power is provided only to the facility itself or to support the local transmission and distribution system.

(E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.”

§63.6655 - What records must I keep?
“(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.
(3) An existing stationary RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to this subpart.”

“(f) If you own or operate any of the stationary RICE in paragraphs (f)(1) through (2) of this section, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation; including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in §63.6640(f)(2)(ii) or (iii) or §63.6640(f)(4)(ii), the owner or operator must keep
records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.

(2) An existing emergency stationary RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines.”

§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.

(1) The report must contain the following information:
   (i) Company name and address where the engine is located.
   (ii) Date of the report and beginning and ending dates of the reporting period.
   (iii) Engine site rating and model year.
   (iv) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.
   (v) Hours operated for the purposes specified in §63.6640(f)(2)(ii) and (iii), including the date, start time, and end time for engine operation for the purposes specified in §63.6640(f)(2)(ii) and (iii).
   (vi) Number of hours the engine is contractually obligated to be available for the purposes specified in §63.6640(f)(2)(ii) and (iii).
   (vii) Hours spent for operation for the purpose specified in §63.6640(f)(4)(ii), including the date, start time, and end time for engine operation for the purposes specified in §63.6640(f)(4)(ii). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.
   (viii) If there were no deviations from the fuel requirements in §63.6604 that apply to the engine (if any), a statement that there were no deviations from the fuel requirements during the reporting period.
   (ix) If there were deviations from the fuel requirements in §63.6604 that apply to the engine (if any), information on the number, duration, and cause of deviations, and the corrective action taken.

(2) The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.

(3) The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA’s Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this
subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in §63.13.

“Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.” [Footnote 2 of Table 2d]

**Emission Unit: Emergency Generators Cont’d**

One (1) 360 bhp onshore fire pump manufactured in July 2008

**Applicable Standards and limits:**

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

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

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

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

4. For pre-2007 model year NSPS emergency diesel engines, the Permittee must demonstrate compliance with the emission standards specified in Table 1 to 40 CFR Part 60, Subpart III, by either [Reference: §60.4205(a)]:
   (a) Purchasing and installing an engine certified according to 40 CFR Part 89 as meeting the Tier 1 emission standards of 40 CFR §89.112. The engine must be installed and configured according to the manufacturer’s specifications [Reference: §60.4211(b)(1)] or
   (b) Keeping records of engine manufacturer test data indicating compliance with the standard [Reference: §60.4211(b)(3)].

5. For 2007 model year and later model year NSPS emergency diesel engines, the Permittee must purchase and install an engine certified to the emission
standards of §60.4205(b) for the same model year and maximum engine horsepower, to wit [Reference: §60.4211(c)]:

(a) For engines with a maximum engine power less than or equal to 2,237 KW (3,000 HP), the certification emission standards for new nonroad diesel engines in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants [Reference: §62.4202(b)];

(b) For engines with a maximum engine power greater than 2,237 KW (3,000 HP), and for 2007 through 2010 model years, the emission standards in Table 1 to 40 CFR Part 60, Subpart IIII (which are the same as the Tier 1 emission standards of 40 CFR §89.112) [Reference: §62.4202(b)(1)].

(c) For 2011 model year and later, the certification emission standards for new nonroad diesel engines in 40 CFR 89.112 and 40 CFR 89.113 [Reference: §62.4202(b)(2)].

(6) After December 31, 2008, owners and operators may not install an emergency diesel generator that does not meet the applicable requirements for 2007 model year engines [Reference: §60.4208].

(7) The requirements of condition (7) above do not apply to owners or operators of NSPS emergency diesel engines that have been modified, reconstructed, and do not apply to engines that were removed from one existing location and reinstalled at a new location [Reference: §60.4208].

Compliance Demonstration:

(1) 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.).

(2) 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).

(3) Beginning October 1, 2007, 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. The Permittee shall maintain the required records on site for at least five (5) years.

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

This subpart applies to each affected source.

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

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

Compliance Demonstration:
See NSPS Requirements.

C. Operational Limits

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

(2) Beginning October 1, 2007, an NSPS emergency diesel generator must combust diesel fuel meeting the requirements of 40 CFR §80.510(a), unless a waiver is obtained from the Department and/or the EPA Administrator. [Reference: §60.4207]

(3) Beginning October 1, 2010, an NSPS emergency diesel generator must combust diesel fuel meeting the requirements of 40 CFR §80.510(b), unless a waiver is obtained from the Department and/or the EPA Administrator. [Reference: §60.4207].

(4) Except as noted in condition (5) below, the emergency diesel generator shall be used for emergency use only and shall not operate more than 260 hours a year, unless the Permittee obtains prior written approval from the Department.

In accordance with 40 CFR §60.4211(e), non-emergency use of each NSPS emergency diesel generator for the purpose of maintenance checks and readiness testing is limited to 100 hours per year or less unless prior approval is received from the Department.
Compliance Demonstration:
See NSPS Requirements.

<table>
<thead>
<tr>
<th>Table IV-16</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>COMPLIANCE ASSURANCE MONITORING REQUIREMENTS – PART 64</strong></td>
</tr>
<tr>
<td><strong>Emission Unit:</strong> GE Frame 5 and Solar Turbines with oxidation catalyst (S009, S010 &amp; S021)</td>
</tr>
<tr>
<td><strong>Applicable Requirement</strong></td>
</tr>
<tr>
<td><strong>Emission Limits</strong></td>
</tr>
<tr>
<td><strong>Monitoring Requirements</strong></td>
</tr>
<tr>
<td><strong>I. Indicator</strong></td>
</tr>
<tr>
<td><strong>II. Measurement Approach</strong></td>
</tr>
<tr>
<td><strong>III. Indicator Value</strong></td>
</tr>
<tr>
<td><strong>IV Performance Criteria</strong></td>
</tr>
<tr>
<td><strong>A. Data Representativeness</strong></td>
</tr>
<tr>
<td><strong>B. Verification of Operational Status</strong></td>
</tr>
<tr>
<td><strong>C. QA/QC Practices and Criteria</strong></td>
</tr>
<tr>
<td><strong>D. Monitoring Frequency</strong></td>
</tr>
<tr>
<td><strong>E. Data Collection Procedures</strong></td>
</tr>
<tr>
<td><strong>F. Averaging Period</strong></td>
</tr>
</tbody>
</table>

**Justification**

Rationale for Selection of Performance Indicator: The principal mechanisms in the operation of an oxidation catalyst system, is the reaction of the CO with oxygen in the exhaust gas as aided by the catalyst. The performance of the oxidation catalyst is affected by catalyst deactivation, thermal degradation, poisoning, sintering or masking.
Darkening indicates the oxidation catalyst is becoming fouled and lowers the effectiveness of the unit. The plan is designed to ensure proper operation of the catalyst and to avoid operating conditions that could damage the catalyst.

Rationale for Selection of Indicator value: The indicator to be used will be observed during visual inspections. When an excursion occurs, corrective action will be initiated as soon as possible. Excursions will be monitored and evaluated to determine the action required to correct the excursion.

---

**COMPLIANCE SCHEDULE**

Dominion Cove Point, LLC is currently in compliance with all applicable air quality regulations.

**TITLE IV – ACID RAIN**

Not Applicable.

**TITLE VI – OZONE DEPLETING SUBSTANCES**

Dominion Cove Point, LLC is not subject to Title VI requirements.

**SECTION 112(r) – ACCIDENTAL RELEASE**

Dominion Cove Point, LLC is not subject to the requirements of Section 112(r).

**PERMIT SHIELD**

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

**INSIGNIFICANT ACTIVITIES**

This section provides a list of insignificant emissions units that were reported in the Title V permit application. The applicable Clean Air Act requirements, if any, are listed below the insignificant activity.
Stationary internal combustion engines with an output less than 500 brake horsepower (373 kilowatts) and which are not used to generate electricity for sale or for peak or load shaving;

The affected units are subject to the following requirements:

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

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

(C) Exceptions:

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

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

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

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

(D) COMAR 26.11.36.03A(1), which establishes that the Permittee may not operate an emergency generator except for emergencies, testing and maintenance purposes.

(E) COMAR 26.11.36.03A(5), which establishes that the Permittee may not operate an emergency generator for testing and engine maintenance purposes between 12:01 a.m. and 2:00 p.m. on any day on which the Department forecasts that the air quality will be a code orange, code
red, or code purple unless the engine fails a test and engine maintenance and a re-test are necessary.

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

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

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

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

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

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

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

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

(b) Written descriptions of good operating practices designed to minimize spills and evaporation of VOC degreasing materials.
(4) Containers, reservoirs, or tanks used exclusively for:

(a) ✓ Storage of butane, propane, or liquefied petroleum, or natural gas;
(b) No. 9 Storage of lubricating oils;
(c) No. 6 Storage of Numbers 1, 2, 4, 5, and 6 fuel oil and aviation jet engine fuel;
(d) No. 1 Storage of motor vehicle gasoline and having individual tank capacities of 2,000 gallons (7.6 cubic meters) or less;

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

For the following, attach additional pages as necessary:

(6) any other emissions unit at the facility which is not subject to an applicable requirement of the Clean Air Act (list and describe):

No. 1 12,000 gallon aqueous ammonia (<20%Conc) storage tank 214F.

No. 1 18,000 gallon aqueous ammonia (<20%Conc) storage tank 127F.

STATE ONLY ENFORCEABLE REQUIREMENTS

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

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 constructed 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.”
COMAR 26.11.15.05 – Control Technology Requirements
“A person who complies with the ambient impact requirement in Regulation .06 of this chapter may not be affected by the amount of the installation’s stack height that exceeds good engineering practice (GEP), or by any other dispersion technique.
(3) Unless an existing installation is controlled using T-BACT, the degree of emission limitation required in order to demonstrate compliance with Regulation .06 of this chapter may not be affected by the amount of the installation’s stack height that exceeds good engineering practice (GEP), or by any other dispersion technique.”

COMAR 26.11.15.06 – Ambient Impact Requirement
(A) “Except as provided in §B(3) of this regulation, a person may not cause or permit the discharge of a toxic air pollutant listed in COMAR 26.11.16.07 from an existing installation or source if total allowable emissions of that TAP from the premises will unreasonably endanger human health.
(B) A person shall demonstrate compliance with §B(1) of this regulation using the procedures established in Regulation .07 of this chapter and COMAR 26.11.16.
(C) A person who owns or operates an existing premises shall meet the requirements of §B(1) and (2) of this regulation for each TAP listed in COMAR 26.11.16.07 by the applicable compliance dates listed in COMAR 26.11.16.07, or not later than 2 years after becoming subject to this chapter, whichever is later.”

For Emergency Generators only
COMAR 26.11.36.03 – Emergency Generators and Load Shaving Units NOx Requirements.
“A. Applicability and General Requirements for Emergency Generators and Load Shaving Units.
(1) The owner or operator of an emergency generator may not operate the generator except for emergencies, testing, and maintenance purposes.
(2) Except as provided in §A(5) of this regulation, this regulation does not apply to any engine that is fueled with natural gas or propane.
(3) This regulation does not apply to any engine that operates as a redundant system for power without direct or indirect compensation that is:
   (a) Located at a nuclear power plant; or
   (b) Located at a facility where operation of the engine is necessary to support critical national activities relating to security, aerospace research, or communications.”
(4) The owner or operator of an emergency generator or load shaving unit may be subject to the federal standards for stationary internal combustion engines under 40 CFR Parts 60 and 63.

(5) The owner or operator of an emergency generator or load shaving unit may not operate the engine for testing and engine maintenance purposes between 12:01 a.m. and 2:00 p.m. on any day on which the Department forecasts that the air quality will be a code orange, code red, or code purple unless the engine fails a test and engine maintenance and a re-test are necessary.

(6) The owner or operator of an engine that is used for any purpose other than for emergency purposes shall install and operate a non-resettable hourly time meter on the engine for the purpose of maintaining the operating log required in §E of this regulation.

Record Keeping and Reporting:

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

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

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