PART 70 OPERATING PERMIT

SOURCE ID: 360
Nevada Cogeneration Associates 1
11401 North US 91 Highway
Las Vegas, Nevada 89165

ISSUED ON: December 27, 2021
EXPIRES ON: December 26, 2026

Current action: Renewal

Issued to: Nevada Cogeneration Associates 1
420 North Nellis Boulevard
#A3-400
Las Vegas, NV 89110

Responsible Official: Howard Forepaugh
Plant Manager
PHONE: (702) 651-1245
EMAIL: howard.forepaugh@nsgen.com

NATURE OF BUSINESS:
SIC code 4931, “Electric Services”
NAICS code 221112, “Fossil Fuel Electric Power Generation”

Issued by the Clark County Department of Environment and Sustainability in accordance with Section 12.5 of the Clark County Air Quality Regulations.

Theodore A. Lendis, Permitting Manager
EXECUTIVE SUMMARY

Nevada Cogeneration Associates 1 (NCA 1) is a topping cycle cogeneration plant that falls under SIC code 4931, “Electric Cogeneration,” and NAICS code 221112, “Fossil Fuel Electric Power Generation.” The source is located in Hydrographic Area 216 (Garnet Valley) and is a major stationary source for NO\textsubscript{x} and CO, and a minor source for PM\textsubscript{10}, PM\textsubscript{2.5}, SO\textsubscript{2}, VOCs, and HAPs. The source also emits pollutants that are categorized as greenhouse gases. The Garnet Valley hydrographic area is classified as attainment for all criteria air pollutants. NCA 1 is a categorical source as defined by AQR 12.2.2(j)(1): a fossil fuel-fired steam electric plant of more than 250 MMBtu/hr heat input.

NCA 1 has a generation capacity of 85 MW of electricity. The source operates natural gas-fired turbine generator packages, heat recovery steam generating (HRSG) units, each equipped with a 77 MMBtu/hr supplemental duct burner. A nominal 29.74 MW steam turbine generator is operated to produce electrical power. Other operating emission units include a diesel generator, a diesel fire pump, a diesel water pump, and a two-cell cooling tower. This Part 70 Operating Permit (OP) is issued based on the renewal application submitted on August 27, 2020.

The following table summarizes the source potential to emit (PTE) for each regulated air pollutant for all emission units addressed by this Part 70 OP:

<table>
<thead>
<tr>
<th>Pollutants</th>
<th>PM\textsubscript{10}</th>
<th>PM\textsubscript{2.5}</th>
<th>NO\textsubscript{x}</th>
<th>CO</th>
<th>SO\textsubscript{2}</th>
<th>VOC</th>
<th>HAP</th>
<th>GHG</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTE</td>
<td>67.38</td>
<td>61.00</td>
<td>169.27</td>
<td>141.97</td>
<td>9.17</td>
<td>26.51</td>
<td>6.39</td>
<td>505,512</td>
</tr>
</tbody>
</table>

\(^1\)The values in this table are not source-wide emission limits.
\(^2\)GHG is expressed as CO\textsubscript{2}e for information only.

Pursuant to AQR 12.5.2, all terms and conditions in Sections I through III in this permit are federally enforceable unless explicitly denoted otherwise.
TABLE OF CONTENTS

I. ACRONYMS .......................................................................................................................... 4

II. GENERAL CONDITIONS .................................................................................................. 5
    A. General Requirements .................................................................................................. 5
    B. Modification, Revision, and Renewal Requirements .................................................... 6
    C. Reporting, Notification, and Information Requirements ............................................. 7
    D. Compliance Requirements ............................................................................................. 8
    E. Performance Testing Requirements ................................................................................ 9

III. EMISSION UNITS AND APPLICABLE REQUIREMENTS ........................................... 10
    A. Emission Units .............................................................................................................. 10
    B. Nonroad Engines .......................................................................................................... 11
    C. Limitations ..................................................................................................................... 11
        1. Emission Limits ......................................................................................................... 11
        2. Operational Limits .................................................................................................... 13
        3. Emission Controls ..................................................................................................... 14
    D. Monitoring ...................................................................................................................... 17
    E. Testing ............................................................................................................................. 21
    F. Recordkeeping ............................................................................................................... 21
    G. Reporting and Notification ............................................................................................ 23
    H. Mitigation ....................................................................................................................... 26
    I. Acid Rain Requirements ................................................................................................. 26
    J. Streamlining ................................................................................................................... 26

LIST OF TABLES

Table III-A-1: List of Emission Units ..................................................................................... 10
Table III-A-2: List of Insignificant Emission Units and Activities ........................................ 10
Table III-C-1: Emission Unit PTE, Including Startup and Shutdowns (tpy) .......................... 11
Table III-C-2: Emission Rates, Excluding Startup and Shutdowns (lb/hr) ......................... 12
Table III-C-3: Emergency Operating Scenario\(^1\) PTE for Turbines on Diesel Fuel (tpy) ...... 12
Table III-C-4: Emergency Operating Scenario\(^1\) Rates for Turbines on Diesel Fuel (lb/hr) ... 12
Table III-C-5: Emission Rates/Concentrations on Natural Gas Fuel Excluding Startup and Shutdown (15% O\(_2\))^1 ........................................................ 12
Table III-G-1: Required Report Submission Dates ............................................................... 24
Table J-1: Streamlined Requirements ................................................................................... 26
I. ACRONYMS

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>AQR</td>
<td>Clark County Air Quality Regulation</td>
</tr>
<tr>
<td>ATC</td>
<td>Authority to Construct</td>
</tr>
<tr>
<td>CAAA</td>
<td>Clean Air Act Amendments</td>
</tr>
<tr>
<td>CEMS</td>
<td>continuous emissions monitoring system</td>
</tr>
<tr>
<td>CFC</td>
<td>chlorofluorocarbon</td>
</tr>
<tr>
<td>CFR</td>
<td>Code of Federal Regulations</td>
</tr>
<tr>
<td>CO</td>
<td>carbon monoxide</td>
</tr>
<tr>
<td>CTG</td>
<td>combustion turbine-generator</td>
</tr>
<tr>
<td>DAQ</td>
<td>Division of Air Quality</td>
</tr>
<tr>
<td>DES</td>
<td>Clark County Department of Environment and Sustainability</td>
</tr>
<tr>
<td>DLN</td>
<td>dry low-NOx</td>
</tr>
<tr>
<td>EPA</td>
<td>U.S. Environmental Protection Agency</td>
</tr>
<tr>
<td>EU</td>
<td>emission unit</td>
</tr>
<tr>
<td>GDO</td>
<td>gasoline dispensing operation</td>
</tr>
<tr>
<td>GHG</td>
<td>greenhouse gas</td>
</tr>
<tr>
<td>HAP</td>
<td>hazardous air pollutant</td>
</tr>
<tr>
<td>HCFC</td>
<td>hydrochlorofluorocarbon</td>
</tr>
<tr>
<td>HHV</td>
<td>Higher Heating Value</td>
</tr>
<tr>
<td>hp</td>
<td>horse power</td>
</tr>
<tr>
<td>HRSG</td>
<td>heat recovery steam generator</td>
</tr>
<tr>
<td>kW</td>
<td>kilowatt</td>
</tr>
<tr>
<td>LHV</td>
<td>Lower Heating Value</td>
</tr>
<tr>
<td>MMBtu</td>
<td>millions of British thermal units</td>
</tr>
<tr>
<td>MW</td>
<td>megawatt</td>
</tr>
<tr>
<td>NAICS</td>
<td>North American Industry Classification System</td>
</tr>
<tr>
<td>NOx</td>
<td>nitrogen oxides</td>
</tr>
<tr>
<td>NRS</td>
<td>Nevada Revised Statutes</td>
</tr>
<tr>
<td>OP</td>
<td>operating permit</td>
</tr>
<tr>
<td>PM10</td>
<td>particulate matter less than 10 microns</td>
</tr>
<tr>
<td>PM2.5</td>
<td>particulate matter less than 2.5 microns</td>
</tr>
<tr>
<td>ppm</td>
<td>parts per million</td>
</tr>
<tr>
<td>ppmvd</td>
<td>parts per million, volumetric dry</td>
</tr>
<tr>
<td>PTE</td>
<td>potential to emit</td>
</tr>
<tr>
<td>QA/QC</td>
<td>quality assurance/quality control</td>
</tr>
<tr>
<td>RATA</td>
<td>Relative Accuracy Test Audits</td>
</tr>
<tr>
<td>RICE</td>
<td>reciprocating internal combustion engine</td>
</tr>
<tr>
<td>scf</td>
<td>standard cubic feet</td>
</tr>
<tr>
<td>Acronym</td>
<td>Term</td>
</tr>
<tr>
<td>---------</td>
<td>-------------------------------------------</td>
</tr>
<tr>
<td>SCR</td>
<td>selective catalytic reduction</td>
</tr>
<tr>
<td>SIC</td>
<td>Standard Industrial Classification</td>
</tr>
<tr>
<td>SIP</td>
<td>State Implementation Plan</td>
</tr>
<tr>
<td>SO₂</td>
<td>sulfur dioxide</td>
</tr>
<tr>
<td>ULN</td>
<td>ultra low-NOₓ</td>
</tr>
<tr>
<td>VOC</td>
<td>volatile organic compound</td>
</tr>
<tr>
<td>WSAC</td>
<td>wet surface air cool</td>
</tr>
</tbody>
</table>

**II. GENERAL CONDITIONS**

**A. GENERAL REQUIREMENTS**

1. The permittee shall comply with all conditions of the Part 70 Operating Permit. Any permit noncompliance may constitute a violation of the Clark County Air Quality Regulations (AQRs), Nevada law, and the Clean Air Act, and is grounds for enforcement action; permit termination, revocation and reissuance, or revision; or denial of a permit renewal application. [AQR 12.5.2.6(g)(1)]

2. If any term or condition of this permit becomes invalid as a result of a challenge to a portion of this permit, the other terms and conditions of this permit shall not be affected and remain valid. [AQR 12.5.2.6(f)]

3. The permittee shall pay all permit fees pursuant to AQR 18. [AQR 12.5.2.6(h)]

4. The permit does not convey any property rights of any sort, or any exclusive privilege. [AQR 12.5.2.6(g)(4)]

5. The permittee agrees to allow inspection of the premises to which this permit relates by any authorized representative of the Control Officer at any time during the permittee’s hours of operation without prior notice. The permittee shall not obstruct, hamper, or interfere with any such inspection. [AQR 4.1; AQR 5.1.1; AQR 12.5.2.8(b)]

6. The permittee shall allow the Control Officer, upon presentation of credentials, to: [AQR 4.1 & AQR 12.5.2.8(b)]

   a. Access and copy any records that must be kept under the conditions of the permit;

   b. Inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;

   c. Sample or monitor substances or parameters for the purpose of assuring compliance with the permit or applicable requirements; and

   d. Document alleged violations using such devices as cameras or video equipment.
7. Any permittee who fails to submit relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit the needed supplementary facts or corrected information. In addition, the permittee shall provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit. A responsible official shall certify the additional information consistent with the requirements of AQR 12.5.2.4. [AQR 12.5.2.2]

8. Anyone issued a permit under AQR 12.5 shall post it in a location where it is clearly visible and accessible to facility employees and DAQ representatives. [AQR 12.5.2.6(m)]

B. MODIFICATION, REVISION, AND RENEWAL REQUIREMENTS

1. No person shall begin actual construction of a new Part 70 source, or modify or reconstruct an existing Part 70 source that falls within the preconstruction review applicability criteria, without first obtaining an Authority to Construct (ATC) permit from the Control Officer. [AQR 12.4.1.1(a)]

2. The permit may be revised, revoked, reopened and reissued, or terminated for cause by the Control Officer. The filing of a request by the permittee for a permit revision, revocation, reissuance, or termination, or of a notification of planned changes or anticipated noncompliance, does not stay any permit condition. [AQR 12.5.2.6(g)(3)]

3. A permit, permit revision, or renewal may be approved only if all of the following conditions have been met: [AQR 12.5.2.10(a)]

   a. The permittee has submitted to the Control Officer a complete application for a permit, permit revision, or permit renewal (except a complete application need not be received before a Part 70 general permit is issued pursuant to AQR 12.5.2.20); and

   b. The conditions of the permit provide for compliance with all applicable requirements and the requirements of AQR 12.5.

4. The permittee shall not build, erect, install, or use any article, machine, equipment, or other contrivance, the use of which, without resulting in a reduction in the total release of air contaminants to the atmosphere, reduces or conceals an emission that would otherwise constitute a violation of an applicable requirement. [AQR 80.1 and 40 CFR Part 60.12]

5. No permit revisions shall be required under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit. [AQR 12.5.2.6(i)]

6. Permit expiration terminates the permittee’s right to operate unless a timely and complete renewal application has been submitted. [AQR 12.5.2.11(b)]

7. For purposes of permit renewal, a timely application is a complete application that is submitted at least six months, but not more than 18 months, prior to the date of permit expiration. If a source submits a timely application under this provision, it may continue operating under its current Part 70 OP until final action is taken on its application for a renewed Part 70 OP. [AQR 12.5.2.1(a)(2)]
C. REPORTING, NOTIFICATION, AND INFORMATION REQUIREMENTS

1. The permittee shall submit all compliance certifications to the U.S. Environmental Protection Agency (EPA) and the Control Officer. \([AQR \ 12.5.2.8(e)(4)]\)

2. Any application form, report, or compliance certification submitted to the Control Officer pursuant to the permit or the AQRs, shall contain a certification by a responsible official, with an original signature, of truth, accuracy, and completeness. This certification, and any other required under AQR 12.5, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. \([AQR \ 12.5.2.6(l)]\)

3. The permittee shall furnish to the Control Officer, in writing and within a reasonable time, any information that the Control Officer may request to determine whether cause exists for revising, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Control Officer copies of records that the permit requires keeping. The permittee may furnish records deemed confidential directly to the Administrator, along with a claim of confidentiality. \([AQR \ 12.5.2.6(g)(5)]\)

4. Upon request of the Control Officer, the permittee shall provide any information or analyses that will disclose the nature, extent, quantity, or degree of air contaminants that are or may be discharged by the source, and the type or nature of control equipment in use. The Control Officer may require such disclosures be certified by a professional engineer registered in the state. In addition to this report, the Control Officer may designate an authorized agent to make an independent study and report on the nature, extent, quantity, or degree of any air contaminants that are or may be discharged from the source. An agent so designated may examine any article, machine, equipment, or other contrivance necessary to make the inspection and report. \([AQR \ 4.1]\)

5. The permittee shall submit annual emissions inventory reports based on the following: \([AQR \ 18.6.1]\)

   a. The annual emissions inventory must be submitted to DAQ by March 31 of each calendar year (if March 31 falls on a Saturday or Sunday, or on a Nevada or federal holiday, the submittal shall be due on the next regularly scheduled business day);

   b. The calculated actual annual emissions from each emission unit shall be reported even if there was no activity, along with the total calculated actual annual emissions for the source based on the emissions calculation methodology used to establish the potential to emit (PTE) in the permit or an equivalent method approved by the Control Officer prior to submittal; and

   c. As the first page of text, a signed certification containing the sentence: “I certify that, based on information and belief formed after reasonable inquiry, the statements contained in this document are true, accurate, and complete.” This statement shall be signed and dated by a responsible official of the company (a sample form is available from DAQ).
6. Stationary sources that emit 25 tons or more of nitrogen oxide (NO\textsubscript{x}) and/or emit 25 tons or more of volatile organic compounds (VOCs) during a calendar year from their emission units, insignificant activities and exempt activities during a calendar year shall submit an annual emissions statement for both pollutants. Emissions statements must include actual annual NO\textsubscript{x} and VOC emissions from all activities, including emission units, insignificant activities and exempt activities. Emissions statements are separate from, and additional to, the calculated annual emissions reported each year for all regulated air pollutants (i.e., the Emissions Inventory Report). [AQR 12.9.1]

D. COMPLIANCE REQUIREMENTS

1. The permittee shall not use as a defense in an enforcement action that it would have been necessary to halt or reduce the permitted activity to maintain compliance with the conditions of this permit. [AQR 12.5.2.6(g)(2)]

2. Any person who violates any provision of the AQRs, including, but not limited to, any application requirement; any permit condition; any fee or filing requirement; any duty to allow or carry out inspection, entry, or monitoring activities; or any requirements from DAQ is guilty of a civil offense and shall pay a civil penalty levied by the Air Pollution Control Hearing Board and/or the Hearing Officer of not more than $10,000. Each day of violation constitutes a separate offense. [AQR 9.1; NRS 445B.640]

3. Any person aggrieved by an order issued pursuant to AQR 9.1 is entitled to review, as provided in Chapter 233B of the NRS. [AQR 9.12]

4. The permittee shall comply with the requirements of Title 40, Part 61 of the Code of Federal Regulations (40 CFR Part 61), Subpart M—the National Emission Standard for Asbestos—for all demolition and renovation projects. [AQR 13.1(b)(8)]

5. The permittee shall certify compliance with the terms and conditions contained in this Part 70 OP, including emission limitations, standards, work practices, and the means for monitoring such compliance. [AQR 12.5.2.8(e)]

6. The permittee shall submit compliance certifications annually in writing to the Control Officer (4701 W. Russell Road, Suite 200, Las Vegas, NV 89118) and the Region 9 Administrator (Director, Air and Toxics Divisions, 75 Hawthorne St., San Francisco, CA 94105). A compliance certification for each calendar year will be due on January 30 of the following year, and shall include the following: [AQR 12.5.2.8(e)]

   a. The identification of each term or condition of the permit that is the basis of the certification;

   b. The identification of the methods or other means used by the permittee for determining the compliance status with each term and condition during the certification period. These methods and means shall include, at a minimum, the monitoring and related recordkeeping and reporting requirements described in 40 CFR Part 70.6(a)(3). If necessary, the permittee shall also identify any other material information that must be included in the certification to comply with Section 113(c)(2) of the Clean Air Act, which prohibits knowingly making a false certification or omitting material information; and
c. The status of compliance with the terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certification shall be based on the methods or means designated in (b) above. The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify, as possible exceptions to compliance, any periods during which compliance was required and in which an excursion or exceedance, as defined under 40 CFR Part 64, occurred

7. The permittee shall report to the Control Officer any startup, shutdown, malfunction, emergency, testing, tuning or deviation that causes emissions of regulated air pollutants in excess of any limits set by regulations or this permit. The report shall be in two parts, as specified below: [AQR 12.5.2.6(d)(4)(B); AQR 25.6.1]
   a. Within 24 hours of the time the permittee learns of the event, the permittee shall notify DAQ by phone at (702) 455-5942, by fax at (702) 383-9994, or by email at airquality@clarkcountynv.gov.
   b. Within 72 hours of the required notification, the permittee shall submit a detailed written report to DAQ containing the information required by AQR 25.6.3.

8. With the semiannual monitoring report, the permittee shall report to the Control Officer all deviations from permit conditions that do not result in excess emissions, including those attributable to malfunction, startup, shutdown, testing or tuning. Reports shall identify the probable cause of each deviation and any corrective actions or preventative measures taken. [AQR 12.5.2.6(d)(4)(B)]

9. The owner or operator of any source required to obtain a permit under AQR 12 shall report to the Control Officer emissions in excess of an applicable requirement or emission limit that pose a potential imminent and substantial danger to public health and safety or the environment as soon as possible, but no later than 12 hours after the deviation is discovered, and submit a written report within two days of the occurrence. [AQR 25.6.2]

E. PERFORMANCE TESTING REQUIREMENTS

1. Upon request of the Control Officer, the permittee shall test (or have tests performed) to determine emissions of air contaminants from any source whenever the Control Officer has reason to believe that an emission in excess of those allowed by the AQRs is occurring. The Control Officer may specify testing methods to be used in accordance with good professional practice. The Control Officer may observe the testing. All tests shall be conducted by reputable, qualified personnel. [AQR 4.2]

2. Upon request of the Control Officer, the permittee shall provide necessary ports in stacks or ducts and such other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices, as may be necessary for proper determination of the emission of air contaminants. [AQR 4.2]

3. The permittee shall submit to the Control Officer for approval a performance testing protocol that contains testing, reporting, and notification schedules, test protocols, and anticipated test dates no less than 45 days, but no more than 90 days, before the anticipated date of the performance test unless otherwise specified in Section III.E of this permit. [AQR 12.5.2.8]
4. The permittee shall submit to EPA for approval any alternative test methods EPA has not already approved to demonstrate compliance with a requirement under 40 CFR Part 60. [40 CFR Part 60.8(b)]

5. The permittee shall submit a report describing the results of each performance test to the Control Officer within 60 days of the end of the test. [AQR 12.5.2.8]

III. EMISSION UNITS AND APPLICABLE REQUIREMENTS

A. EMISSION UNITS

The stationary source covered by this Part 70 Operating Permit consists of the emission units and associated appurtenances summarized in Table III-A-1. [AQR 12.5.2.3]

Table III-A-1: List of Emission Units

<table>
<thead>
<tr>
<th>EU</th>
<th>Rating</th>
<th>Description</th>
<th>Make</th>
<th>Model #</th>
<th>Serial #</th>
</tr>
</thead>
<tbody>
<tr>
<td>A001</td>
<td>22.2 MW 285 MMBtu/hr</td>
<td>Turbine Generator Package 1</td>
<td>General Electric</td>
<td>LM-2500 PE-MEE-06</td>
<td>260157-1</td>
</tr>
<tr>
<td>A001a</td>
<td>77 MMBtu/hr</td>
<td>Supplemental Duct Burner</td>
<td>Coen</td>
<td>GV ALPHA</td>
<td></td>
</tr>
<tr>
<td>A002</td>
<td>22.2 MW 285 MMBtu/hr</td>
<td>Turbine Generator Package #2</td>
<td>General Electric</td>
<td>LM-2500 PE-MEE-06</td>
<td>260157-2</td>
</tr>
<tr>
<td>A002a</td>
<td>77 MMBtu/hr</td>
<td>Supplemental Duct Burner</td>
<td>Coen</td>
<td>GV BRAVO</td>
<td></td>
</tr>
<tr>
<td>A003</td>
<td>22.2 MW 285 MMBtu/hr</td>
<td>Turbine Generator Package #3</td>
<td>General Electric</td>
<td>LM-2500 PE-MEE-06</td>
<td>260157-3</td>
</tr>
<tr>
<td>A003a</td>
<td>77 MMBtu/hr</td>
<td>Supplemental Duct Burner</td>
<td>Coen</td>
<td>GV CHARLIE</td>
<td></td>
</tr>
<tr>
<td>A004</td>
<td>265 hp</td>
<td>Fire Pump; Diesel; DOM: Pre-2006</td>
<td>Detroit</td>
<td>DDFP-L6AT 7017</td>
<td>6A465176</td>
</tr>
<tr>
<td>A005</td>
<td>26,600 gpm total</td>
<td>Cooling Tower; Two Cells</td>
<td>Ecodyne</td>
<td>2CFF-60595L2610</td>
<td>DO0-15665-A</td>
</tr>
<tr>
<td>A006</td>
<td>81.8 hp</td>
<td>Water Pump; Diesel; DOM: Pre-2006</td>
<td>Perkins</td>
<td>3PKXL04.2AR1</td>
<td>AR36677</td>
</tr>
<tr>
<td>A010</td>
<td>1,000 gallons</td>
<td>Aboveground Storage Tank; Gasoline</td>
<td>Air Boy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B01</td>
<td>Up to 1,038 kW</td>
<td>Genset</td>
<td>Various</td>
<td>Various</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Up to 1,392 hp</td>
<td>Diesel Engine; DOM: 2011 or newer</td>
<td>Various</td>
<td>Various</td>
<td></td>
</tr>
</tbody>
</table>

Table III-A-2: List of Insignificant Emission Units and Activities

- 3 Generator Lube Oil Tanks, 215 gallons (units A-C)
- Steam Turbine Lube Oil Tank
- Steam Turbine Lube Oil Conditioner Tank, 270 gallons
- Oil/Water Sump
- 3 Gas Turbine Lube Oil Tanks, 150 gallons (units 1-3)
- Diesel AST, 350 gallons (Fire Water Pump)
B. NONROAD ENGINES

Pursuant to Title 40, Part 1068.30 of the Code of Federal Regulations (40 CFR Part 1068.30), nonroad engines that are portable or transportable (i.e., not used on self-propelled equipment) shall not remain at a location for more than 12 consecutive months; otherwise, the engine(s) will constitute a stationary reciprocating internal combustion engine (RICE) and be subject to the applicable requirements of 40 CFR Part 63, Subpart ZZZZ; 40 CFR Part 60, Subpart IIII; and/or 40 CFR Part 60, Subpart JJJJ. Stationary RICE shall be permitted as emission units upon commencing operation at this stationary source. Records of location changes for portable or transportable nonroad engines shall be maintained, and shall be made available to the Control Officer upon request. These records are not required for engines owned and operated by a contractor for maintenance and construction activities as long as records are maintained demonstrating that such work took place at the stationary source for periods of less than 12 consecutive months.

Nonroad engines used on self-propelled equipment do not have this 12-month limitation or the associated recordkeeping requirements. [AQR 12.5.2.6]

C. LIMITATIONS

1. Emission Limits

   a. The permittee shall not allow the actual emissions from each emission unit to exceed the PTE listed in Table III-C-1 in any consecutive 12-month period. Tons per year emission limits for each emission unit include startup and shutdown emissions. [NSR ATC/OP 360, Modification 9, Revision 0 (04/05/07)]

<table>
<thead>
<tr>
<th>EU</th>
<th>PM₁₀</th>
<th>PM₂.₅</th>
<th>NOₓ (SCR)</th>
<th>NOₓ (no SCR)</th>
<th>CO</th>
<th>SO₂</th>
<th>VOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>A001 &amp; A001a¹</td>
<td>17.00</td>
<td>17.00</td>
<td>40.77</td>
<td>14.13</td>
<td>46.71</td>
<td>3.03</td>
<td>8.75</td>
</tr>
<tr>
<td>A002 &amp; A002a¹</td>
<td>17.00</td>
<td>17.00</td>
<td>40.77</td>
<td>14.13</td>
<td>46.71</td>
<td>3.03</td>
<td>8.75</td>
</tr>
<tr>
<td>A003 &amp; A003a¹</td>
<td>17.00</td>
<td>17.00</td>
<td>40.77</td>
<td>14.13</td>
<td>46.71</td>
<td>3.03</td>
<td>8.75</td>
</tr>
<tr>
<td>A004</td>
<td>0.33</td>
<td>0.33</td>
<td>0</td>
<td>3.33</td>
<td>1.16</td>
<td>0.01</td>
<td>0.07</td>
</tr>
<tr>
<td>A005</td>
<td>15.96</td>
<td>9.58</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>A006</td>
<td>0.06</td>
<td>0.06</td>
<td>0</td>
<td>0.42</td>
<td>0.20</td>
<td>0.06</td>
<td>0.08</td>
</tr>
<tr>
<td>A010</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.06</td>
</tr>
<tr>
<td>B01</td>
<td>0.03</td>
<td>0.03</td>
<td>0</td>
<td>0.82</td>
<td>0.48</td>
<td>0.01</td>
<td>0.05</td>
</tr>
</tbody>
</table>

¹Turbines operate 7,446 hours with Selective Catalytic Reduction (SCR) and 1,314 hours without SCR.
b. The permittee shall not allow the actual emissions from each emission unit to exceed the emission rates listed in Table III-C-2 during normal operation (exclude startup and shutdown). [NSR ATC/OP 360, Modification 9, Revision 0 (04/05/07)]

Table III-C-2: Emission Rates, Excluding Startup and Shutdowns (lb/hr)

<table>
<thead>
<tr>
<th>EU</th>
<th>PM_{10}</th>
<th>PM_{2.5}</th>
<th>NO\textsubscript{X}(SCR)</th>
<th>NO\textsubscript{X}(no SCR)</th>
<th>CO</th>
<th>SO\textsubscript{2}</th>
<th>VOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>A001, A001a</td>
<td>3.88</td>
<td>3.88</td>
<td>10.30</td>
<td>21.50</td>
<td>10.70</td>
<td>0.69</td>
<td>2.00</td>
</tr>
<tr>
<td>A002, A002a</td>
<td>3.88</td>
<td>3.88</td>
<td>10.30</td>
<td>21.50</td>
<td>10.70</td>
<td>0.69</td>
<td>2.00</td>
</tr>
<tr>
<td>A003, A003a</td>
<td>3.88</td>
<td>3.88</td>
<td>10.30</td>
<td>21.50</td>
<td>10.70</td>
<td>0.69</td>
<td>2.00</td>
</tr>
</tbody>
</table>

c. The permittee shall not allow the actual emissions from each emission unit to exceed the PTE listed in Tables III-C-3 and III-C-4 when operated with diesel fuel during a natural gas emergency. Tons per year emission limits for each emission unit include startup and shutdown emissions [NSR ATC/OP 360, Modification 9, Revision 0 (04/05/07)]

Table III-C-3: Emergency Operating Scenario\(^1\) PTE for Turbines on Diesel Fuel (tpy)

<table>
<thead>
<tr>
<th>EU</th>
<th>PM_{10}</th>
<th>PM_{2.5}</th>
<th>NO\textsubscript{X}</th>
<th>CO</th>
<th>SO\textsubscript{2}</th>
<th>VOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>A001, A001a</td>
<td>0.58</td>
<td>0.58</td>
<td>4.10</td>
<td>1.14</td>
<td>1.31</td>
<td>0.37</td>
</tr>
<tr>
<td>A002, A002a</td>
<td>0.58</td>
<td>0.58</td>
<td>4.10</td>
<td>1.14</td>
<td>1.31</td>
<td>0.37</td>
</tr>
<tr>
<td>A003, A003a</td>
<td>0.58</td>
<td>0.58</td>
<td>4.10</td>
<td>1.14</td>
<td>1.31</td>
<td>0.37</td>
</tr>
</tbody>
</table>

\(^1\)Up to 216 hr/yr of emergency low sulfur diesel fuel combustion (<0.05% sulfur by weight).

Table III-C-4: Emergency Operating Scenario\(^1\) Rates for Turbines on Diesel Fuel (lb/hr)

<table>
<thead>
<tr>
<th>EU</th>
<th>PM_{10}</th>
<th>PM_{2.5}</th>
<th>NO\textsubscript{X}</th>
<th>CO</th>
<th>SO\textsubscript{2}</th>
<th>VOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>A001, A001a</td>
<td>5.40</td>
<td>5.40</td>
<td>37.93</td>
<td>10.52</td>
<td>12.11</td>
<td>3.40</td>
</tr>
<tr>
<td>A002, A002a</td>
<td>5.40</td>
<td>5.40</td>
<td>37.93</td>
<td>10.52</td>
<td>12.11</td>
<td>3.40</td>
</tr>
<tr>
<td>A003, A003a</td>
<td>5.40</td>
<td>5.40</td>
<td>37.93</td>
<td>10.52</td>
<td>12.11</td>
<td>3.40</td>
</tr>
</tbody>
</table>

\(^1\)Up to 216 hr/yr of emergency low sulfur diesel fuel combustion (<0.05% sulfur by weight).

d. The permittee shall not allow the actual emissions from each emission unit to exceed the emission rates and concentrations listed in Tables III-C-5 during normal operation using natural gas (excluding startup and shutdown). [NSR ATC/OP 360, Modification 9, Revision 0 (04/05/07)]

Table III-C-5: Emission Rates/Concentrations on Natural Gas Fuel Excluding Startup and Shutdown (15% O\textsubscript{2})\(^1\)

<table>
<thead>
<tr>
<th>EU</th>
<th>NO\textsubscript{X}</th>
<th>CO</th>
<th>VOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>A001-A003</td>
<td>12 ppmvd</td>
<td>23 ppmvd</td>
<td>0.0077 lb/MMBtu</td>
</tr>
<tr>
<td>A001a-A003a</td>
<td>Without SCR(^1)</td>
<td>25 ppmvd</td>
<td>23 ppmvd</td>
</tr>
</tbody>
</table>

\(^1\)Limits based on a 3-hour averaging period.
e. The permittee shall not discharge into the atmosphere, from any emission unit, any air contaminant in excess of an average of 20% opacity for a period of more than 6 consecutive minutes. [AQR 26.1]

f. The permittee shall not allow NO\textsubscript{x} emissions from the stack of each turbine to exceed 25 ppmvd at 15% oxygen, as measured on a 3-hr rolling average, when the SCR is not operational. [ATC March 9, 1999, Modification 4, Condition E.6 and NSR ATC/OP 360, Modification 9, Revision 0 (04/05/07)]

g. The permittee shall not allow NO\textsubscript{x} emissions from the stack of each turbine to exceed 12 ppmvd at 15% oxygen, as measured on a 3-hr rolling average, during all times the SCRs are in use. [ATC March 9, 1999, Modification 4, Condition E.7 and NSR ATC/OP 360, Modification 9, Revision 0 (04/05/07)]

h. The permittee shall not burn in any stationary gas turbine any fuel that contains sulfur over 0.8% by weight (8,000 ppmw). [40 CFR Part 60.334(b)]

2. Operational Limits

_Turbines and Duct Burners_

a. The permittee shall limit each turbine package (EUs: A001, A002, and A003) to a maximum heat input rating of 285 MMBtu/hr, based on an LHV at 67ºF. [NSR ATC/OP 360, Modification 9, Revision 0, Condition III-A-2 (04/05/07)]

b. The permittee shall, for each unit, supply equal to or less than one-third of its potential electrical output capacity, or equal to or less than 219,000 MWe-hr of its actual electric output, annually to any utility power distribution system for sale (on a gross basis). However if, in any three-calendar-year period, such unit sells to a utility power distribution system an annual average of more than one-third of its potential electrical output capacity and more than 219,000 MWe-hr of its actual electric output (on a gross basis), that unit shall be an affected unit subject to the requirements of the Acid Rain Program. [NSR ATC/OP 360, Modification 9, Revision 0, Condition III-A-3 (04/05/07) and 40 CFR Part 72.6(b)(4)(ii)]

c. The permittee shall limit combustion of low sulfur diesel fuel in turbines to 216 hrs/yr (810,000 gal/yr) for each turbine in the event of a natural gas emergency, defined as a disruption in the delivery of natural gas through the pipeline. [NSR ATC/OP 360, Modification 9, Revision 0, Condition III-A-4 (04/05/07)]

d. The permittee shall limit each shutdown period to one hour immediately following the initiation of a combustion gas turbine shutdown. A shutdown ends when combustion ceases in the gas turbine, or upon initiation of a new startup if combustion during the preceding shutdown has not terminated. A NO\textsubscript{x} emission exceedance event resulting from a loss of NO\textsubscript{x} steam injection caused by upsets in process gas export will be treated as a shutdown and, if the affected gas turbine(s) do not completely shut down within one hour, the time immediately following such an upset in export gas shall be treated and reported as a startup event. [Modification 9, Revision 0, Condition III-A-5 (04/05/07) and ATC/OP February 27, 2002, Modification 5, Condition III-A-5]
e. The permittee shall limit each start-up period to two hours immediately following the starting of the combustion gas turbine. Startups of the turbines at the facility shall be limited to 300 events per month, and the total cumulative startup time shall not exceed 450 hours per calendar month for the facility. [NSR ATC/OP 360, Modification 9, Revision 0, Condition III-A-6 (04/05/07) and ATC March 9, 1999, Modification 4, Condition E-10]

f. The permittee shall limit the heat input for each duct burner to 77 MMBtu/hour (EUs: A001a, A002a, and A003a). [NSR ATC/OP 360, Modification 9, Revision 0 (04/05/07)]

**Engines**

g. The permittee shall limit the operation of the diesel fire pump (EU: A004) for testing and maintenance purposes to 100 hours per year. The permittee may operate the fire pump up to 50 hours per year for nonemergency situations, but those hours count towards the 100 hours provided for testing and maintenance. [40 CFR 60.4211]

h. The permittee shall limit operation of the diesel water pump (EU: A006) to 720 hours per any consecutive 12-month period. [NSR ATC/OP 360, Modification 9, Revision 0, Condition III-A-9 (04/05/07)]

i. The permittee shall limit operation of the diesel generator (EU: B01) to 120 hours per any consecutive 12-month period. [AQR 12.5.2.6(a)]

**GDO**

j. The permittee shall limit the maximum throughput of all gasoline products to 9,000 gallons per any consecutive 12-month period (EU: A010). [AQR 12.5.2.6(a)]

3. **Emission Controls**

**Turbines**

a. The permittee shall operate the SCR systems installed on the gas turbine units (EUs: A001–A003) a minimum of 85% of the plant operating hours calculated over any consecutive 12-month period, with an allowance of no more than 15% downtime due to low-temperature excursions (defined as temporary temperature drops below 570°F). The permittee shall determine the operating hours by averaging across the three units at the source. [NSR ATC/OP 360, Modification 9, Revision 0, Condition III-B-1 (04/05/07) and ATC, Modification 4, Condition E.3 (1/7/1999)]

b. The permittee shall continuously operate steam injection as long as the temperature in a gas turbine’s associated heat recovery steam generator remains at or above 550°F or the pressure of the recovery boiler remains at or above 450 pounds per square inch as measured by a calibrated gauge (psig). [NSR ATC/OP 360, Modification 9, Revision 0, Condition III-B-4 (04/05/07) and ATC, Modification 4, Condition E.3 (1/7/1999)]

c. The permittee shall commence ammonia injection no more than 5 minutes after the SCR inlet’s temperature reaches 570°F. [ATC/OP, Modification 5, Condition III-B-5(2/27/202) and ATC March 9, 1999, Modification 4, Condition E.11]
d. The permittee shall control the ammonia flow using the continuous monitoring system, which will limit NOx to 12 ppmvd at 15% O2 on a 3-hr rolling average. [NSR ATC/OP 360, Modification 9, Revision 0, Condition III-B-5 (04/05/07)]

e. The permittee shall maintain and operate the oxidation catalysts to control CO on each of the turbine units in accordance with the manufacturer’s specifications (EUs: A001-A003).

f. The permittee shall operate the oxidation catalysts at all times the associated turbine units are operating, excluding periods of startup and shutdown. [NSR ATC/OP 360, Modification 9, Revision 0, Condition III-B-6 (04/05/07)]

g. The permittee shall control SO2 exhaust emissions from each combined cycle system (EUs: A001–A003) by exclusively using pipeline-quality natural gas (in accordance with the Federal Energy Regulatory Commission) and good combustion practices. [NSR ATC/OP 360, Modification 9, Revision 0, Condition 11 (04/05/07)]

h. The permittee shall control PM10 exhaust emissions from each combined cycle system (EUs: A001-A003) by properly maintaining the inlet air filters preceding each turbine (as recommended by the manufacturer) and through good operating practices. [NSR ATC/OP 360, Modification 9, Revision 0, Condition 12 (04/05/07)]

Engines

i. The permittee shall maintain the fire pump (EU: A004) as follows, unless the manufacturer’s O&M manual recommendations are more stringent: [40 CFR Part 63.6603(b)]

   i. Change oil and filter every 500 hours of operation or annually, whichever comes first;

   ii. Inspect air cleaners every 1,000 hours of operation or annually, whichever comes first;

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

   iv. Utilize as desired an oil analysis program, as described in 40 CFR Part 63.6625(i), to extend the specified oil change requirement; pursuant to the requirements of 40 CFR Part 63.6(g), the permittee may petition the Control Officer for alternative work practices.

j. The permittee shall maintain the diesel water pump (EU: A006) as follows, unless the manufacturer’s O&M manual recommendations are more stringent: [40 CFR Part 63.6603(b)]

   i. Change oil and filter every 1,000 hours of operation or annually, whichever comes first;
ii. Inspect air cleaners every 1,000 hours of operation or annually, whichever comes first;

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

iv. Utilize as desired an oil analysis program, as described in 40 CFR Part 63.6625(i), to extend the specified oil change requirement; pursuant to the requirements of 40 CFR Part 63.6(g), the permittee may petition the Control Officer for alternative work practices.

k. The permittee shall operate the diesel generator with a turbocharger and aftercooler (EU: B01). [AQR 12.5.2.6(a)]

**Cooling Tower**

1. The permittee shall operate the cooling towers (EU: A005) with drift eliminators that maintain the drift rate at or below 0.0007% of the circulating water flow rate. [NSR ATC/OP 360, Modification 9, Revision 0, Condition III-B-8 (04/05/07)]

m. The permittee shall limit the total dissolved solids (TDS) concentration in the cooling tower process water to 57,750 ppm at any one time. The annual average TDS concentration shall not exceed 38,500 ppm (EU: A005). [NSR ATC/OP 360, Modification 9, Revision 0, Condition III-B-9 (04/05/07)]

n. The permittee shall operate and maintain all cooling towers in accordance with the manufacturer’s O&M manual (EU: A005). [AQR 12.5.2.6(a)]

**GDO**

o. The permittee must not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following (EU: A010): [40 CFR 63.11116]

i. Minimize gasoline spills;

ii. Clean up spills as expeditiously as practicable;

iii. Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use;

iv. Only load gasoline into storage tanks using a submerged fill tube where the greatest distance from the bottom of the storage tank to the point of the fill tube opening is no more than six inches; and

v. Have records available documenting gasoline throughput within 24 hours of a request from the Control Officer.
D. MONITORING

Visible Emissions [AQR 12.5.2.6(d) and 40 CFR 70.6]

1. The responsible official shall sign and adhere to the Visible Emissions Check Guidebook and keep a copy of the signed guide on-site at all times.

2. The permittee shall conduct a visual emissions check at least quarterly on the fire pump (EU: A004), the diesel water pump (EU: A006), and the diesel generator (EU: B01) while in operation. If the fire pump, the water pump, or the diesel generator do not operate during the quarter, then no observation of that unit(s) shall be required.

3. If no plume appears to exceed the opacity standard during the visible emissions check, the date, location, and results shall be recorded, along with the viewer’s name.

4. If a plume appears to exceed the opacity standard, the permittee shall do one of the following:
   a. Immediately correct the perceived exceedance, then record the first and last name of the person who performed the emissions check, the date the check was performed, the unit(s) observed, and the results of the observation; or
   b. Call a certified Visible Emissions Evaluation (VEE) reader to perform a U.S. Environmental Protection Agency (EPA) Method 9 evaluation.
      i. For sources required to have a certified reader on-site, the reader shall start Method 9 observations within 15 minutes of the initial observation. For all other sources, the reader shall start Method 9 observations within 30 minutes of the initial observation.
      ii. If no opacity exceedance is observed, the certified VEE reader shall record the first and last name of the person who performed the VEE, the date the VEE was performed, the unit(s) evaluated, and the results. A Method 9 VEE form shall be completed for each emission unit that was initially perceived to have exceeded the opacity limit, and the record shall also indicate:
         (1) The cause of the perceived exceedance;
         (2) The color of the emissions; and
         (3) Whether the emissions were light or heavy.
      iii. If an opacity exceedance is observed, the certified VEE reader shall take immediate action to correct the exceedance. The reader shall then record the first and last name of the person performing the VEE, the date the VEE was performed, the unit(s) evaluated, and the results. A Method 9 VEE form shall be completed for each reading identified, and the record shall also indicate:
         (1) The cause of the exceedance;
         (2) The color of the emissions;
(3) Whether the emissions were light or heavy;
(4) The duration of the emissions; and
(5) The corrective actions taken to resolve the exceedance.

5. Any scenario of visible emissions noncompliance can and may lead to enforcement action.

**Turbines**

6. The permittee shall install, calibrate, maintain, operate, and certify CEMS for NO\textsubscript{x}, CO, and O\textsubscript{2} on each turbine unit in accordance with 40 CFR Part 75, Appendix B and 40 CFR Part 60.13, as applicable (EUs: A001–A003) to demonstrate continuous direct compliance with all emission limitations for NO\textsubscript{x} and CO.

7. Each CEMS shall include an automated data acquisition and handling system. Each system shall monitor and record at least the following data: [ATC, Condition III-E-1 (January 2002), AQR 12.5.2.6(d) and 40 CFR Part 70.6]
   a. Exhaust gas concentrations (in ppm) of NO\textsubscript{x}, CO, and diluent O\textsubscript{2} for all turbine units (EUs: A001–A003) at least once every 15 minutes when required by 40 CFR Part 60 or 40 CFR Part 75, as appropriate;
   b. Exhaust gas flow rate (by direct or indirect methods);
   c. Fuel flow rate;
   d. Hours of operation;
   e. Three-hour rolling averages of NO\textsubscript{x} and CO concentrations;
   f. Hourly, daily, and quarterly accumulated mass emissions (in pounds) of NO\textsubscript{x} and CO;
   g. Hours of downtime of the CEMS;
   h. Catalyst inlet temperature at each SCR unit; and
   i. Temperature and pressure of each heat recovery boiler that produces steam.

8. The permittee shall follow a written quality control program plan for the CEMS that describes, in detail, the complete, step-by-step procedures and operations required by 40 CFR Part 75, Appendix B, Part 1 (“Quality Control Program”). The requirements of 40 CFR Part 75, Appendix B, Section 2.3.4 (“Bias Adjustment Factor”) do not apply to this source. [NSR ATC/OP 360, Modification 9, Revision 0, Condition III-E-4 (04/05/07) and ATC/OP, Modification 8, Condition III-E-4 (1/30/2007)]

9. The permittee shall conduct periodic audits and implement QA/QC procedures for CEMS conforming to the provisions of 40 CFR Part 75, Appendix B. [ATC, Condition III-E-4 (January 2002) and NSR ATC/OP 360, Modification 9, Revision 0, Condition III-E-5 (04/05/07)]
10. The permittee shall conduct RATA of the CO, NOx, and diluent O2 CEMS at least annually. \[AQR 12.5.2.6(d)\]

11. The permittee shall perform RATA of the NOx and diluent monitors individually or in combination, i.e., the relative accuracy tests of the CEMS may be performed: \[40 CFR Part 60.334(b)(1)\]
   a. On a ppm basis for NOx and a percent O2 basis for oxygen; or
   b. On a ppm at 15% O2 basis; or
   c. On a ppm basis for NOx and a percent CO2 basis for a CO2 monitor that uses the procedures in Method 20 to correct the NOx data to 15% O2.

12. As specified in 40 CFR Part 60.13(e)(2), the permittee must, during each full unit operating hour, ensure that each monitor completes a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute period to validate the hour. For partial unit operating hours, at least one valid data point must be obtained for each 15-minute period 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 distinct 15-min. periods) are required to validate the hour. \[40 CFR Part 60.334(b)(2)\]

13. To identify excess emissions, the permittee must reduce CEMS data to hourly averages, as specified in 40 CFR Part 60.13(h). \[40 CFR Part 60.334(b)(3)\]
   a. For each unit operating hour in which a valid hourly average, as described in paragraph 40 CFR Part 60.334(b)(b)(2), is obtained for both NOx and diluent, the data acquisition and handling system must calculate and record the hourly NOx emissions in the units of the applicable NOx emission standard under 40 CFR Part 60.332(a), i.e., percent NOx by volume, dry basis, corrected to 15% O2 and International Organization for Standardization (ISO) standard conditions (if required as given in 40 CFR Part 60.335(b)(1)). For any hour in which the hourly average O2 concentration exceeds 19.0% O2, a diluent cap value of 19.0% O2 may be used in emission calculations.
   b. A worst case ISO correction factor may be calculated and applied using historical ambient data. For this calculation, substitute the maximum humidity of ambient air (Ho), minimum ambient temperature (Ta), and minimum combustor inlet absolute pressure (Po) into the ISO correction equation.
   c. If the owner or operator has installed a NOx CEMS to meet the requirements of 40 CFR Part 75, and is continuing to meet the ongoing requirements of Part 75, the CEMS may be used to meet the requirements of this section, except that the missing data substitution methodology in 40 CFR Part 75, Subpart D is not required for identifying excess emissions. Instead, the permittee shall report periods of missing CEMS data as monitor downtime in the excess emissions and monitoring performance report required by 40 CFR Part 60.7(c).
14. The permittee shall demonstrate the gas quality characteristics using a current, valid purchase contract, tariff sheet, or transportation contract for the gaseous fuel, specifying that the maximum total sulfur content of the fuel is 20.0 gr/100 scf or less, if the gaseous fuel meets the definition of natural gas in 40 CFR Part 60.331(u). [40 CFR Part 60.334(h)(3)]

15. The permittee shall sample the sulfur and nitrogen content of fuel oil according to the frequency described in 40 CFR Part 75, Appendix D: daily samples, sampling from a storage tank, or sampling from each delivery, respectively. [40 CFR Part 60.334(i)(1)]

16. The permittee shall submit reports of excess emissions and monitor downtime in accordance with 40 CFR Part 60.7(c). Excess emissions shall be reported for all periods of unit operation, including startup, shutdown, and malfunction. For reports required under 40 CFR Part 60.7(c), periods of excess emissions and monitor downtime that shall be reported are defined in 40 CFR 60.334(j)(1)(iii):

a. NO\textsubscript{x} for turbines using NO\textsubscript{x} and diluent CEMS as follows:

b. An hour of excess emissions shall be any unit operating hour in which the 4-hour rolling average NO\textsubscript{x} concentration exceeds the applicable emission limit in 40 CFR Part 60.332(a)(1) or (2). For the purposes of Subpart GG, a “4-hour rolling average NO\textsubscript{x} concentration” is the arithmetic average of the average NO\textsubscript{x} concentration measured by the CEMS for a given hour (corrected to 15% O\textsubscript{2} and, if required under 40 CFR Part 60.335(b)(1), to ISO standard conditions) and the three unit operating hour average NO\textsubscript{x} concentrations immediately preceding that unit operating hour.

c. A period of monitor downtime shall be any unit operating hour in which sufficient data are not obtained to validate the hour for the NO\textsubscript{x} concentration or diluent (or both).

d. Each report shall include the ambient conditions (i.e., temperature, pressure, and humidity) at the time of the excess emission period and, if the owner or operator has claimed an emission allowance for fuel-bound nitrogen, the nitrogen content of the fuel during the period of excess emissions. Reporting ambient conditions is not required if the permittee opts to use the worst case ISO correction factor, as specified in 40 CFR Part 60.334(b)(3)(ii), or opts not to use the ISO correction equation under the provisions of 40 CFR Part 60.335(b)(1).

17. The permittee shall monitor incidents of “out of control” periods of the CEMS. For each calendar quarter, each CEMS shall not have total out-of-control periods, as defined in 40 CFR Part 75, Appendix B, more than 2% of the time its associated HRSG is in operation. [NSR ATC/OP 360, Modification 9, Revision 0, Condition III-E-10 (04/05/07)]

18. The permittee shall monitor and record (on a gross basis) each turbine’s potential electrical output capacity supplied or actual electric output (in MWe-hr) sold annually to any utility power distribution system. [40 CFR Part 72.6(b)(4)(ii)]

Engines

19. The permittee shall install a nonresettable hour meter on the diesel fire pump, the diesel water pump, and the generator, and monitor the hours of operation (EUs: A004, A006, and B01, respectively).
20. The permittee shall maintain a log of dates and times when maintenance is performed on the diesel fire and water pumps (EUs: A004 and A006, respectively).

Cooling Tower

21. The permittee shall monitor the TDS of the cooling tower recirculation water daily using a conductivity meter, or another device the Control Officer has approved in advance (EU: A005). [AQR 12.5.2.6(d)]

22. The permittee must complete a second test within the 24-hour period if the daily test for TDS ppm is within 10% of exceeding the allowable concentration (51,975 ppm). If the second test result is below 57,750 ppm, both tests shall be averaged together for the daily report to determine permit compliance. At no time shall the TDS test result exceed 57,750 ppm. [NSR ATC/OP 360, Modification 9, Revision 0, Condition III-E-7 (04/05/07)]

GDO

23. The permittee shall monitor and record the throughput of gasoline (EUs: A010) in gallons to determine monthly combined throughput; each month, the permittee shall calculate the total of the last 365 days of gasoline throughput and divide by 12.

E. TESTING

1. The Control Officer may require performance testing when operating conditions appear to be inadequate to demonstrate compliance with the limitations in this permit. (Initial testing was successfully completed on May 1, 2004.) [AQR 4.2]

2. The permittee shall follow the performance testing requirements of 40 CFR Part 60, Subpart A; 40 CFR Part 60, Subpart GG; and DAQ’s Guideline for Source Testing if performance testing is required. [AQR 12.5.2.6(d) and 40 CFR Part 60.335]

F. RECORDKEEPING

1. The permittee shall comply with all applicable recordkeeping requirements of 40 CFR Part 60, Subparts A, GG, and IIII; 40 CFR Part 63, Subparts CCCCCC and ZZZZ; 40 CFR Part 75, Subpart F; and any other applicable regulations.

2. The permittee shall maintain the following records for reporting: [AQR 12.5.2.6(d)]

General

a. The magnitude and duration of excess emissions, permit deviations, notifications, monitoring system performance, malfunctions, and corrective actions taken, as required by 40 CFR Part 60.7;

Turbine/Duct Burner Units

b. Monthly, consecutive 12-month total quantity of natural gas consumed in each gas turbine;
c. Annual diesel fuel consumed in each turbine;

Engines

d. Date and duration of operation of the diesel fire pump for testing, maintenance, and nonemergency use (EU: A004);

e. Date and duration of operation of the diesel fire pump for emergency use, including documentation justifying use during the emergency (EU: A004);

Cooling Tower

f. Annual average TDS content of the cooling tower; and

GDO

g. Monthly, consecutive 12-month total of gasoline throughput. \[40 \text{ CFR Part 63.11116(b)}\]

3. The permittee shall maintain the following records on site: \[AQR \text{ 12.5.2.6(d)}\]

General

a. Log of visual emissions checks;

b. Results of performance tests conducted within the last 5 years, if applicable;

c. Daily TDS content readings of the cooling tower;

d. Manufacturer’s operation specifications for SCR and oxidation catalyst controls;

Turbine and Duct Burners

e. Dates and hours of operation for each turbine using natural gas (EUs: A001–A003);

f. Dates and hours of operation for each turbine using diesel, when applicable (EUs: A001–A003);

g. Calculated NOx and CO emissions from the CEMS;

h. Each CEMS “out-of-control” period, as defined in 40 CFR Part 75, Appendix B;

i. Time, duration, nature, and probable cause of any CEMS downtime and corrective actions taken;

j. Dates, times, and duration of each startup and shutdown event for each turbine (EUs: A001-A003);

k. Sulfur content of natural gas;

l. Sulfur content of diesel fuel, as certified by the supplier with each fuel delivery;
m. Records of supply of actual electric output to the utility power distribution system for sale (on a gross basis), as required by Section III-C-2(b);

**CEMS**

n. All CEMS and/or PEMS information required by the CEMS and/or PEMS monitoring plan, as specified in 40 CFR Part 75, Subpart F;
o. CEMS audit results, RATA (reported annually), and corrective actions as required by 40 CFR Part 60, Appendix F;
p. A quality assurance plan containing auditing schedules, reporting schedules, and design specifications for the CEMS. The CEMS shall conform to all provisions of 40 CFR Part 60.13; 40 CFR Part 60, Subpart GG; and 40 CFR 75; *[AQR 12.5.2.6(d)]*

**Engines**

q. Records of inspection and maintenance for the fire and water pumps (EUs: A004 and A006);
r. Dates and hours of operation for the diesel water pump engine (EU: A006); and
s. Dates and hours of operation, make, model number, serial number, horsepower, and kilowatts for each diesel generator (EU: B01) brought on site.

4. The permittee shall include in each record above, where applicable, the date and time the monitoring or measurement was taken, the person performing the monitoring or measurement, and the emission unit or location where the monitoring or measurement was performed. Each record must also contain the action taken to correct any deficiencies, when applicable. *[AQR 12.5.2.6(d)]*

5. Records and data required by this operating permit to be maintained by the permittee may, at the permittee’s expense, be audited at any time by a third party selected by the Control Officer. *[AQR 4.1 and AQR 12.5.2.6(d)]*

6. All records and logs, or a copy thereof, shall be kept on-site for a minimum of five years from the date the measurement was taken or data was entered, and shall be made available to DAQ upon request. *[AQR 12.5.2.6(d)]*

7. The Control Officer reserves the right to impose additional requirements concerning records and recordkeeping for this source. *[AQR 12.5.2.6(d)]*

**G. REPORTING AND NOTIFICATION**

1. All report submissions shall be addressed to the attention of the Control Officer. *[AQR 12.5.2.8(e)(4), 21.4, and 22.4]*

2. All reports shall contain the following: *[AQR 12.5.2.6(d)]*

   a. A certification statement on the first page to the effect of, “I certify that, based on information and belief formed after reasonable inquiry, the statements contained in this document are true, accurate and complete.” (A sample form is available from DAQ); and
b. A certification signature from a responsible official of the company and a date certification.

3. The permittee shall submit semiannual reports to the Control Officer. [AQR 12.5.2.6(d)]

4. The following requirements apply to semiannual reports: [AQR 12.5.2.6(d)]
   a. The report shall include each item listed in Section III-F-2.
   b. The report shall include semiannual summaries of any permit deviations, their probable cause(s), and corrective or preventative action(s) taken.
   c. The report shall be submitted to DAQ within 30 calendar days after the reporting period.

5. Regardless of the date of issuance of this permit, the source shall comply with the schedule for report submissions outlined in Table III-G-1. [AQR 12.5.2.6(d)]

**Table III-G-1: Required Report Submission Dates**

<table>
<thead>
<tr>
<th>Required Report</th>
<th>Applicable Period</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semiannual report for 1st six-month period</td>
<td>January, February, March, April, May, June</td>
<td>July 30 of each year¹</td>
</tr>
<tr>
<td>Semiannual report for 2nd six-month period and any additional annual records required.</td>
<td>July, August, September, October, November, December</td>
<td>January 30 of each year¹</td>
</tr>
<tr>
<td>Annual Compliance Certification</td>
<td>Calendar year</td>
<td>January 30 of each year¹</td>
</tr>
<tr>
<td>Annual Emission Inventory Report</td>
<td>Calendar year</td>
<td>March 31 of each year¹</td>
</tr>
<tr>
<td>Annual Emission Statement²</td>
<td>Calendar year</td>
<td>March 31 of each year¹</td>
</tr>
<tr>
<td>Notification of Malfunctions, Startups, Shutdowns, or Deviations with Excess Emissions</td>
<td>As required</td>
<td>Within 24 hours of when the permittee learns of the event</td>
</tr>
<tr>
<td>Report of Malfunctions, Startups, Shutdowns, or Deviations with Excess Emissions</td>
<td>As required</td>
<td>Within 72 hours of notification</td>
</tr>
<tr>
<td>Excess Emissions that Pose a Potential Imminent and Substantial Danger</td>
<td>As required</td>
<td>Within 12 hours of the permittee learning of the event</td>
</tr>
<tr>
<td>Deviation Report without Excess Emissions</td>
<td>As required</td>
<td>Along with semiannual reports¹</td>
</tr>
<tr>
<td>Performance Testing Protocol</td>
<td>As required</td>
<td>No less than 45 days, but no more than 90 days, before the anticipated test date¹</td>
</tr>
<tr>
<td>Performance Testing</td>
<td>As required</td>
<td>Within 60 days of end of test¹</td>
</tr>
<tr>
<td>RATA Testing</td>
<td>As required</td>
<td>Within 45 days of end of test¹</td>
</tr>
</tbody>
</table>

¹If the due date falls on a Saturday, Sunday, or federal or state holiday, the submittal is due on the next regularly scheduled business day.

²Required only for stationary sources that emit 25 tons or more of NOₓ and/or 25 tons or more of VOCs during a calendar year.
6. The Control Officer reserves the right to require additional reports and reporting to verify compliance with permit conditions, permit requirements, and requirements of applicable federal regulations. [*AQR 4.1 and AQR 12.5.2.6(d)*]
H. MITIGATION

The source has no federal offset requirements. [*AQR 12.7]*

I. ACID RAIN REQUIREMENTS

The source is a cogeneration facility and is exempted based on the applicability criteria defined in 40 CFR Part 72.6(b)(4)(ii). [*40 CFR Part 72.6(b)(4)(ii)*]

J. STREAMLINING

1. The source has not requested a permit shield for any of the applicable requirements. However, the following requirements have been streamlined for the turbine units; the most stringent requirements have been included in the permit (EUs: A001–A003 & A001a–A003a).

**Table J-1: Streamlined Requirements**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Std. Value</td>
<td>Permit Limit Value</td>
</tr>
<tr>
<td>A001-A003</td>
<td>60.332 (GG)</td>
<td>79.7 NO_x ppmvd</td>
<td>12 ppmvd NO_x @15% O_2</td>
<td>79.7 ppmvd</td>
<td>12 ppmvd</td>
</tr>
<tr>
<td>A001-A003</td>
<td>60.332 (GG)</td>
<td>79.7 NO_x ppmvd</td>
<td>25 ppmvd NO_x @15% O_2</td>
<td>79.7 ppmvd</td>
<td>25 ppmvd</td>
</tr>
<tr>
<td>A001-A003</td>
<td>60.333 (GG)</td>
<td>0.8% sulfur by wt. (20 gr/100 scf)</td>
<td>0.05% sulfur by wt.</td>
<td>0.05%</td>
<td>0.05%</td>
</tr>
</tbody>
</table>

*This fuel standard is for diesel only.*