

**CLARK COUNTY**  
**DEPARTMENT OF AIR QUALITY**  
*4701 West Russell Road, Suite 200, Las Vegas, Nevada 89118*  
**Part 70 Operating Permit**  
**Source: 652**  
Issued in accordance with the  
Clark County Air Quality Regulations  
(AQR Section 12.5)

**ISSUED TO: San Diego Gas & Electric Company- Desert Star Energy Center**

**SOURCE LOCATION:**  
701 El Dorado Valley Drive  
Boulder City, Nevada 89005  
T25S, R62E, Section 12  
Hydrographic Basin Number: 167

**COMPANY ADDRESS:**  
P.O. Box 62470  
Boulder City, Nevada 89006

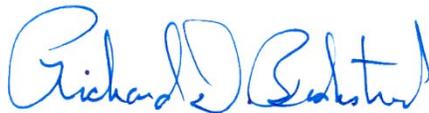
**NATURE OF BUSINESS:**  
SIC Code 4911: Electric Services  
NAICS Code 221112: Fossil Fuel Electric Power Generation

**RESPONSIBLE OFFICIAL:**  
Name: Kevin Lampman  
Title: Plant Manager  
Phone: (702) 568-8203  
Fax Number: (702) 568-8213

**Permit Issuance Date: June 20, 2016**

**Expiration Date: June 19, 2021**

**ISSUED BY: CLARK COUNTY DEPARTMENT OF AIR QUALITY**



Richard D. Beckstead  
Permitting Manager, Clark County Department of Air Quality

## EXECUTIVE SUMMARY

San Diego Gas & Electric Company – Desert Star Energy Center (DSEC) is a major stationary source of NO<sub>x</sub>, and a minor source of PM<sub>10</sub>, PM<sub>2.5</sub>, CO, SO<sub>x</sub>, VOC and HAP owned by San Diego Gas & Electric Company. The source is also a source of greenhouse gases. All processes at the site are grouped under SIC 4911: Electric Services (NAICS 221112: Fossil Fuel Electric Power Generation). The source is a categorical stationary source, as defined by AQR 12.2.2(j)(1).. The source is located at 701 El Dorado Valley Drive, Boulder City, Nevada 89005, in the Eldorado Valley airshed, hydrographic basin number 167. Hydrographic basin 167 is designated as attainment area for all regulated air pollutants.

The source is a 500 MW natural gas power generating plant. The plant has a two-on-one combined cycle configuration, consisting of two natural gas-fired stationary gas turbines, two Heat Recovery Steam Generators (HRSGs) with natural gas fired duct burners for supplemental firing and one steam turbine generator. The facility also operates a diesel emergency fire pump, a diesel emergency generator, a gasoline dispensing facility and several insignificant emission units or activities.

The following table summarizes the source PTE for each regulated air pollutant for all emission units addressed by this Part 70 Operating Permit:

### Source-wide PTE (tons per year)<sup>1</sup>

Pollutants	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>x</sub>	CO	SO <sub>x</sub>	VOC	HAP <sup>2</sup>	H <sub>2</sub> S	Lead (Pb)	GHG <sup>3</sup>
<b>PTE Totals</b>	<b>89.63</b>	<b>89.63</b>	<b>194.31</b>	<b>95.45</b>	<b>8.67</b>	<b>49.58</b>	<b>12.18</b>	<b>0</b>	<b>0</b>	<b>1,692,045</b>

<sup>1</sup> Not a source-wide emission limit; values are used for determining the major source status.

<sup>2</sup> Combination of all HAPs.

<sup>3</sup> Expressed as CO<sub>2</sub>e

This Part 70 OP renewal is issued based on the Title V renewal application submitted on June 15, 2015. The action will also include a minor revision to add a gasoline dispensing operation.

Pursuant to AQR Section 12.5.2 all terms and conditions in Sections I through V and the Attachments in this permit are federally enforceable unless explicitly denoted otherwise.

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## I. ACRONYMS

**Table I-1: List of Acronyms and Abbreviations**

<b>Acronym</b>	<b>Term</b>
Air Quality	Clark County Department of Air Quality
AQR	Clark County Air Quality Regulations
ATC	Authority to Construct
CAM	Compliance Assurance Monitoring
CEMS	Continuous Emissions Monitoring System
CFR	United States Code of Federal Regulations
CO	Carbon Monoxide
EPA	United States Environmental Protection Agency
EU	Emission Unit
HAP	Hazardous Air Pollutant
HHV	Higher Heating Value
bhp	Brake Horse Power
kW	kilowatt
LHV	Lower Heating Value
MMBtu	Millions of British Thermal Units
M/N	Model Number
MW	Megawatt
NAICS	North American Industry Classification System
NO <sub>x</sub>	Nitrogen Oxides
NRS	Nevada Revised Statutes
OP	Operating Permit
PM <sub>10</sub>	Particulate Matter less than 10 microns
ppm	Parts per Million
ppmvd	Parts per Million, Volumetric Dry
PTE	Potential to Emit
QA/QC	Quality Assurance/Quality Control
RATA	Relative Accuracy Test Audits
RMP	Risk Management Plan
SCR	Selective Catalytic Reduction
SIC	Standard Industrial Classification
SIP	State Implementation Plan
S/N	Serial Number
SO <sub>x</sub>	Sulfur Oxides
VOC	Volatile Organic Compound

## II. GENERAL CONDITIONS

### A. General Requirements

1. The Permittee shall comply with all conditions of the Part 70 OP. Any permit noncompliance may constitute a violation of the Clark County Air Quality Regulations, Nevada law, and the Clean Air Act, and is grounds for any of the following: enforcement action; permit termination; revocation and reissuance; 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 shall remain valid. *[AQR 12.5.2.6(f)]*
3. The Permittee shall pay all permit fees pursuant to AQR Section 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 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 4.3.3; AQR 4.9; AQR 5.1.1; AQR 12.5.2.8(b)]*
6. The Permittee shall allow the Control Officer, upon presentation of credentials to: *[AQR 4.3; 12.5.2.8(b)]*
  - a. Have access to 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 devices such as cameras or video equipment.
7. Any Permittee who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such 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 it filed a complete application but prior to release of a draft permit. A responsible official shall certify the additional information consistent with the requirements of AQR Section 12.5.2.4. *[AQR 12.5.2.2]*
8. The Permittee who has been issued a permit under Section 12.5 shall post such permit in a location which is clearly visible and accessible to the facility's employees and representatives of the department. *[AQR 12.5.2.6(m)]*

**B. Modification, Revision, 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 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. 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 that a complete application need not be received before a Part 70 general permit is issued pursuant to Section 12.5.2.20; and
  - b. The conditions of the permit provide for compliance with all applicable requirements and the requirements of Section 12.5
4. The Permittee shall not build, erect, install or use any article, machine, equipment or process, the use of which conceals an emission, which would otherwise constitute a violation of an applicable requirement. *[AQR 80.1 and 40 CFR 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 (6) months and not greater than eighteen (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 Operating Permit until final action is taken on its application for a renewed Part 70 Operating Permit. *[AQR 12.5.2.1(a)(2)]*

**C. Reporting/Notifications/Providing Information Requirements**

1. The Permittee shall submit all compliance certifications to EPA and to 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 AQRs shall contain certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification 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, within a reasonable time, any information that the Control Officer may request in writing 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 required to be kept by the permit or, for information claimed to be confidential, the Permittee may furnish such records 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 such information or analyses as will disclose the nature, extent, quantity or degree of air contaminants which are or may be discharged by such source, and type or nature of control equipment in use, and the Control Officer may require such disclosures be certified by a professional engineer registered in the state. In addition to such report, the Control Officer may designate an authorized agent to make an independent study and report as to the nature, extent, quantity or degree of any air contaminants which are or may be discharged from the source. An authorized agent so designated is authorized to inspect any article, machine, equipment, or other contrivance necessary to make the inspection and report. *[AQR 4.4]*
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 Air Quality by March 31 of each calendar year; and
  - b. The report shall include the emission factors and calculations used to determine the emissions from each permitted emission unit, even when an emission unit is not operated.

#### **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 in order to maintain compliance with the conditions of this permit. *[AQR 12.5.2.6(g)(2)]*
2. Any person who violates any provision of AQR, 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 by Air Quality is guilty of a civil offense and shall pay 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]*
3. Any person aggrieved by an order issued pursuant to AQR Section 9.1 is entitled to review as provided in Chapter 233B of NRS. *[AQR 9.12]*
4. The Permittee shall comply with the requirements of 40 CFR 61, Subpart M, of the National Emission Standard for Asbestos for all demolition and renovation projects. *[AQR 13.1(b)(8)]*
5. The Permittee shall certify compliance with terms and conditions contained in the Part 70 Operating Permit, 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 West Russell Road, Suite 200, Las Vegas, Nevada 89118) and the Administrator at USEPA Region IX (Director, Air and Toxics Divisions, 75 Hawthorne Street, San Francisco, California 94105). A compliance certification for each calendar year will be due on January 30th 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. The methods and means shall include, at a minimum, the monitoring and related recordkeeping and reporting requirements described in 40 CFR 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 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 Section III.D. 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 is 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 (4701 West Russell Road, Suite – 200, Las Vegas, Nevada 89118) any startup, shutdown, malfunction, emergency or deviation which cause emissions of regulated air pollutants in excess of any limits set by regulation or by 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 twenty-four (24) hours of the time the Permittee learns of the excess emissions, the report shall be communicated by phone (702) 455-5942, fax (702) 383-9994, or email: [airquality@clarkcountynv.gov](mailto:airquality@clarkcountynv.gov); and
  - b. within seventy-two (72) hours of the notification required by paragraph (a) above, the detailed written report containing the information required by AQR Section 25.6.3 shall be submitted.
8. The Permittee shall report to the Control Officer with the semiannual monitoring report all deviations from permit conditions that do not result in excess emissions, including those attributable to malfunction, startup, or shutdown. 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 Section 12 shall report to the Control Officer emissions that are in excess of an applicable requirement or emission limit that pose a potential imminent and substantial danger to public health, safety or the environment as soon as possible, but in no case later

than twelve (12) hours after the deviation is discovered, with a written report submitted within two (2) 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 the emissions of air contaminants from any source whenever the Control Officer has reason to believe that an emission in excess of that allowed by the Air Quality regulations 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 4.5]
2. Upon request of the Control Officer, the Permittee shall provide necessary holes 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 4.6]
3. The Permittee shall submit for approval a performance testing protocol which contains testing, reporting, and notification schedules, test protocols, and anticipated test dates to the Control Officer (4701 West Russell Road, Suite 200, Las Vegas, Nevada 89118) not less than 45 nor more than 90 days prior to the anticipated date of the performance test, unless otherwise specified in Section III.D. [AQR 12.5.2.8]
4. The Permittee shall submit to EPA for approval any alternative test methods that are not already approved by EPA, to demonstrate compliance with a requirement under 40 CFR Part 60. [40 CFR 60.8(b)]. [40 CFR 60.8(b)]
5. The Permittee shall submit a report describing the results of each performance test to the Control Officer within 60 days from the end of the performance test. [AQR 12.5.2.8]

### III. EMISSION UNITS AND APPLICABLE REQUIREMENTS

[Authority for all values, limits, and conditions in this section: NSR ATC Modification 1, Revision 1, (04/30/2007), Minor Title V Revision Application (00652\_20120227\_APP) and Part 70 OP Renewal Application (6/15/2015) incorporated into the Title V]

#### A. Emission Units

1. The stationary source covered by this Part 70 OP 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**

EU	Description	Rating	Make	Model #	Serial #
A01	Stationary Gas Turbine, natural gas fired	1,652.94 MMBtu/hr 165 MW	Westinghouse	501FC+	37A8029-1
A01A	Duct Burner for HRSG EU: A01	175 MMBtu/hr	Forney	394671-01	
A02	Stationary Gas Turbine, natural gas fired	1,652.94 MMBtu/hr 165 MW	Westinghouse	501FC+	37A8030-1
A02A	Duct Burner for HRSG EU: A02	175 MMBtu/hr	Forney	394671-01	
A03	Fire Pump	126 bhp	ITT		96-249297-01-01
	Emergency Diesel Engine, DOM: 1998	140 bhp			
A07	Genset – Emergency	33kW	Doosan	G40	
	Emergency Diesel Engine, DOM: 2011	44 bhp			
A08	Gasoline Dispensing Facility	280 gallon	Advanced Perfect Tank NFG. Ltd.		

**Table III-A-2: Insignificant Units or Activities**

Description
Diesel Storage Tank (100 gallons)
Diesel Storage Tank (200 gallons)
Diesel Storage Tank (500 gallons)
0.1 MMBtu/hr Diesel Powered Space Heater
0.1 MMBtu/hr Diesel Powered Space Heater
29 hp Diesel Powered Mobile Welder, Miller Big Blue, M/N: 251D
10.5 hp Diesel Powered Light Tower
16 hp Gasoline Powered Pressure Washer
0.028 MMBtu/hr Diesel Powered Pressure Washer Heater
Evaporative Intake Air Coolers
Aqueous Ammonia Storage and Distribution
Lube Oil Tanks

## B. Emission Limitations and Standards

### 1. Emission Limits

- a. The Permittee shall not allow actual total emissions from each emission unit to exceed the PTE listed in Table III-B-1 for any consecutive 12-month period. Tons-per-year emission limits of each emission unit include startup and shutdown emissions. *[NSR ATC Modification 1, Revision 1, (04/30/2007), and Minor Title V Revision Application (2/27/2012) and Part 70 OP renewal application (6/15/2015) incorporated into the Title V]*

**Table III-B-1: Emission Unit PTE, Including Startup and Shutdowns (tons per year)**

EU	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>x</sub>	CO	SO <sub>x</sub>	VOC	HAP
A01	39.42	39.42	96.50	45.55	4.30	22.78	---
A01+A01A	44.80	44.80	96.50	47.65	4.30	24.60	6.07
A02	39.42	39.42	96.50	45.55	4.30	22.78	---
A02+A02A	44.80	44.80	96.50	47.65	4.30	24.60	6.07
A03	0.02	0.02	1.17	0.05	0.05	0.05	0.02
A07	0.01	0.01	0.14	0.10	0.02	0.03	0.01
A08	0	0	0	0	0	0.30	0.01

- b. The Permittee shall not allow actual emissions from each emission unit to exceed the emission rates listed in Table III-B-2. NO<sub>x</sub> emissions, for the stationary gas turbine units, shall not be exceeded for any three (3)-hour rolling average period as determined by the CEMS. Pound-per-hour limits are normal operation (exclude startup and shutdown) limits only. *[NSR ATC Modification 1, Revision 1 (04/30/2007)]*

**Table III-B-2: Emission Rates, Excluding Startup and Shutdowns (pounds per hour)**

EU	NO <sub>x</sub> (3-hr average)	CO	VOC
A01	23.00	10.40	5.20
A01+A01A	23.00	13.10	6.60
A02	23.00	10.40	5.20
A02+A02A	23.00	13.10	6.60

- c. The Permittee shall not allow actual emissions from each emission unit to exceed the emission rates listed in Table III-B-3, as determined by the CEMS for NO<sub>x</sub> and performance testing for CO. The emission limits are normal operation (exclude startup and shutdown) limits only. *[NSR ATC Modification 1, Revision 1 (04/30/2007)]*

**Table III-B-3: Emission Rates, Excluding Startup and Shutdown**

EU	Averaging Period	O <sub>2</sub> Standard	NO <sub>x</sub> (ppmvd)	CO (ppmvd)
A01	3-Hour	15%	3.5	2.6
A01+A01A	3-Hour	15%	3.7	3.5
A02	3-Hour	15%	3.5	2.6
A02+A02A	3-Hour	15%	3.7	3.5

- d. The Permittee shall comply with the emissions rates in Table III-B-4 during periods of startups and shutdowns. The Permittee shall include actual startup and shutdown emissions in the annual emission inventory reporting.

**Table III-B-4: Startup and Shutdown Emission Rates (pounds per hour)<sup>1</sup>**

EU	NO <sub>x</sub>	CO
A01	44.63	132.24
A02	44.63	132.24

<sup>1</sup> Emissions do not include contribution from HRSG units.

- e. The Permittee shall not allow actual emissions from the diesel generator to exceed the emission rates listed in Table III-B-5. *[40 CFR 60.4202 and Minor Title V Revision Application (2/27/2012) incorporated into the Title V]*

**Table III-B-5: Emission Limitations for the Diesel Generator (pounds per hour)**

EU	Rating	PM <sub>10</sub>	CO	VOC and NO <sub>x</sub>
A07	44 bhp	0.02	0.40	0.54

- f. The Permittee shall not discharge into the atmosphere, from any emission unit, any air contaminant in excess of an average of 20 percent opacity for a period of more than 6 consecutive minutes, when viewed in accordance with EPA Method 9. *[AQR 26.1]*

## 2. Operational Limits

- a. The Permittee shall limit the operation of each emission unit to the fuel limitations listed in Table III-B-6. Compliance with the limitation for total fuel consumed shall be demonstrated for any consecutive 12-month period. *[NSR ATC Modification 1, Revision 1 (04/30/2007)]*

**Table III-B-6: Fuel Limitations for Combustion Equipment (Turbines)**

Equipment	Fuel Type	MMBtu/hr	MMBtu/year	Reference
A01	Natural Gas	1,653 <sup>1</sup>	14,479,755	Based on LHV of Natural Gas
A02	Natural Gas	1,653 <sup>1</sup>	14,479,755	Based on LHV of Natural Gas

<sup>1</sup> Based on 100 percent load at 8°F.

- b. The Permittee shall limit the operation of each emission unit to the fuel limitations listed in Table III-B-7. Compliance with the limitation for total fuel consumed shall be demonstrated for any consecutive 12-month period. *[NSR ATC Modification 1, Revision 1 (04/30/2007)]*

**Table III-B-7: Fuel Limitations for Combustion Equipment (Duct Burners)**

Equipment	Fuel Type	MMBtu/hr	MMBtu/year	Reference
A01A	Natural Gas	175 <sup>1</sup>	692,000	Based on HHV of Natural Gas
A02A	Natural Gas	175 <sup>1</sup>	692,000	Based on HHV of Natural Gas

<sup>1</sup> Based on 100 percent load at 116°F.

- c. Cold startup shall be defined as the period beginning with the flow of fuel to the stationary gas turbine when the steam turbine initial temperature is 290 degrees Fahrenheit or less and lasting until a stationary gas turbine load reaches 100 MW. *[NSR ATC Modification 1, Revision 1 (04/30/2007)]*
- d. Warm startup shall be defined as the period beginning with the flow of fuel to the stationary gas turbine when the steam turbine initial temperature is greater than 290 degrees Fahrenheit and lasting until a stationary gas turbine load reaches 100 MW. *[NSR ATC Modification 1, Revision 1 (04/30/2007)]*
- e. The Permittee shall limit the duration of a cold startup to 8 hours and a warm startup to 5 hours. *[Part 70 OP Renewal Application (04/11/2008)]*
- f. Shutdown shall not exceed 180 minutes per event. Shutdown is defined as the period beginning with the lowering of the electric load of a turbine below 50 percent of nameplate

- capacity and ending when combustion has ceased. *[NSR ATC Modification 1, Revision 1 (04/30/2007)]*
- g. The Permittee shall limit the operation of the fire pump (EU: A03) for testing and maintenance purposes to 100 hours per year. The Permittee may operate the emergency generator up to 50 hours per year for nonemergency situations, but those hours count towards the 100 hours provided for testing and maintenance. *[NSR ATC Modification 1, Revision 1 (04/30/2007), 40 CFR 63.6640(f) and 40 CFR 60.4211(e)]*
  - h. The Permittee shall limit the emergency generator (EU: A07) for testing and maintenance purposes to 100 hours per year. The Permittee may operate the emergency generator up to 50 hours per year for nonemergency situations, but those hours count towards the 100 hours provided for testing and maintenance. The emergency generator cannot be used for peak shavings, demand response, or to generate income for the facility. *[NSR ATC Modification 1, Revision 1 (04/30/2007), 40 CFR 63.6640(f) and 40 CFR 60.4211(f)(3)]*
  - i. The Permittee shall limit the throughput (aggregate of all gasoline products) to less than 10,000 gallons per year (EUs: A08). *[AQR 12.1.4.1(c)&(f) and Part 70 OP renewal application (6/15/2015)]*

### 3. Emission Controls

#### Combined Cycle System

- a. The Permittee shall control PM<sub>10</sub> exhaust emissions from each combined cycle system by properly maintaining and periodically replacing the inlet air filters preceding each stationary gas turbine (EUs: A01 and A02). *[NSR ATC Modification 1, Revision 1 (04/30/2007)]*
- b. The Permittee shall burn only natural gas containing no more than 0.2 grains of sulfur per 100 standard cubic foot of fuel in each stationary gas turbine (EUs: A01 and A02) and the associated duct burners (EUs: A01A and A02A). *[NSR ATC Modification 1, Revision 1 (04/30/2007)]*
- c. The Permittee shall maintain and operate each SCR system to control NO<sub>x</sub> emissions in accordance with manufacturer's specifications and good operating practices. SCR shall operate at all times the stationary gas turbines and associated duct burners are operating, excluding periods of startup and shutdown. *[NSR ATC Modification 1, Revision 1 (04/30/2007)]*
- d. The Permittee shall further control NO<sub>x</sub> emissions with dry low-NO<sub>x</sub> combustors, operated in accordance with manufacturer's specifications and good combustion practices (EUs: A01 and A02). *[NSR ATC Modification 1, Revision 1 (04/30/2007)]*
- e. The Permittee shall operate SCR such that NO<sub>x</sub> emissions will not exceed the limits listed in Tables III-B-2 and III-B-3, excluding periods of startup and shutdown. *[NSR ATC Modification 1, Revision 1 (04/30/2007)]*
- f. The Permittee shall operate an oxidation catalyst to control CO emissions on each of the stationary gas turbines at all times the associated emission units are operating, excluding periods of startup and shutdown (EUs: A01 and A02). *[NSR ATC Modification 1, Revision 1 (04/30/2007)]*
- g. The Permittee shall operate each oxidation catalyst such that CO emissions do not exceed the limitations listed in Tables III-B-2 and III-B-3, excluding periods of startup and shutdown. *[NSR ATC Modification 1, Revision 1 (04/30/2007)]*

### Diesel Engines

- h. The Permittee shall operate the emergency fire pump with a turbocharger and an aftercooler and employ fuel injection timing retardation (EU: A03). *[NSR ATC Modification 1, Revision 1 (04/30/2007)]*
- i. The Permittee shall operate and maintain the emergency fire pump and emergency generator in accordance with the manufacturers' emission-related operation and maintenance instructions (EUs: A03 and A07). *[NSR ATC Modification 1, Revision 1 (04/30/2007) and Minor Title V Revision Application (2/27/2012)]*
- j. The Permittee shall only combust diesel fuel in the diesel engine with a maximum sulfur content of 15 ppm and either a minimum cetane index of 40 or a maximum aromatic content of 35 percent by volume (EUs: A03 and A07). *[40 CFR 63.6604 and 40 CFR 60.4207]*
- k. The Permittee shall comply with the following applicable requirements for the diesel emergency fire pump (EU: A03): *[40 CFR 63.6603]*
  - i. change the oil and filter every 500 hours of operation or annually, whichever comes first;
  - ii. inspect the air cleaner 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
  - iv. install a non-resettable hour meter.

### Gasoline Dispensing

- I. The Permittee shall implement control technology requirements on gasoline dispensing equipment (EU: A08) as follows: *[40 CFR 63 Subpart CCCCCC and AQR 12.1.4.1(f)]*
  - A. The Permittee shall not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Preventative measures to be taken include, but are not limited to, the following: *[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. Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.
  - B. The Permittee shall install, maintain and operate a Phase I Vapor Recovery System on all storage tanks that meets the following requirements: *[AQR 12.1.4.1(f)]*
    - i. The Phase I vapor recovery system shall be rated with at least 95.0 percent control efficiency when in operation. This system shall be certified by an industry recognized certification body, i.e., California Air Resources Board (CARB) or equivalent.
    - ii. The Phase I vapor recovery system shall be a dual-point vapor balance system, as defined by 40 CFR 63.11132, in which the storage tank is equipped with an entry port for a gasoline fill pipe and a separate exit port for a vapor connection.
    - iii. All Phase I vapor recovery equipment shall be installed and operated in accordance with the manufacturer's specifications and certification requirements.
    - iv. All Phase I vapor recovery equipment shall be maintained and in good working order.

- v. All vapor connections and lines on storage tanks shall be equipped with closures that seal upon disconnect.
  - vi. The vapor line from the gasoline storage tanks to the gasoline cargo tank shall be vapor-tight, as defined in 40 CFR 63.11132.
  - vii. The vapor balance system shall be designed such that the pressure in the cargo tank does not exceed 18 inches water pressure or 5.9 inches water vacuum during product transfer.
  - viii. The vapor recovery and product adaptors, and the method of connection with the delivery elbow, shall be designed so as to prevent the over-tightening or loosening of fittings during normal delivery operations.
  - ix. If a gauge well separate from the fill tube is used, it shall be provided with a submerged drop tube that extends the same distance from the bottom of the tank as the fill tube.
  - x. Liquid fill connections for all systems shall be equipped with vapor-tight caps.
  - xi. A pressure/vacuum (PV) vent valve on each gasoline storage tank system shall be installed, maintained and operated in accordance with the manufacturer's specifications. The pressure specifications for PV vent valves shall comply with:
    - 1. a positive pressure setting of 2.5 to 6.0 inches of water, and a negative pressure setting of 6.0 to 10.0 inches of water; and
    - 2. the total leak rate of all PV vent valves at the affected facility, including connections, shall not exceed 0.17 cubic foot per hour at a pressure of 2.0 inches of water and 0.63 cubic foot per hour at a vacuum of 4 inches of water. [AQR 12.1.4.1(f)]
  - xii. The vapor balance system shall be capable of meeting the static pressure performance requirement in 40 CFR 63, Subpart CCCCCC, Table 1, Part 1 and comply with the equation:  $P_f = 2e^{-500.887/V}$
- C. The Permittee shall comply with good management practices during the unloading of Cargo as follows: [AQR 12.1.4.1(f)]
- i. All hoses in the vapor balance system are properly connected.
  - ii. The adapters or couplers that attach to the vapor line on the storage tank have closures that seal upon disconnect.
  - iii. All vapor return hoses, couplers, and adapters used in the gasoline delivery are vapor-tight.
  - iv. All tank truck vapor return equipment is compatible in size and forms a vapor-tight connection with the vapor balance equipment on the GDF storage tank.
  - v. All hatches on the tank truck are closed and securely fastened.
  - vi. The filling of storage tanks shall be limited to unloading from vapor-tight gasoline cargo tanks with documentation carried onboard that it has met the specifications of EPA Method 27.

#### Other

- m. The Permittee must comply with the control requirements contained in this section. If there is inconsistency between standards or requirements, the most stringent standard or requirement shall apply. [NSR ATC Modification 1, Revision 1 (04/30/2007)]

- n. The Permittee shall, under all conditions, maintain and operate the source in a manner consistent with good air pollution control practice for minimizing emissions as required by 40 CFR 60.11. *[NSR ATC Modification 1, Revision 1 (04/30/2007)]*

### C. Monitoring

#### Turbines

1. To demonstrate continuous, direct compliance with all emission limitations for NO<sub>x</sub> specified in this permit, the Permittee shall install, calibrate, maintain, operate, and certify CEMS for NO<sub>x</sub> on each stationary gas turbine unit in accordance with 40 CFR 75, as applicable. CEMS shall include an automated data acquisition and handling system. Each system shall monitor and record at least the following data: *[AQR 12.5.2.6(d) and 40 CFR 75]*
  - a. hours of operation;
  - b. electrical load;
  - c. fuel consumption and type;
  - d. exhaust gas flow rate (by direct or indirect methods);
  - e. exhaust gas concentration of NO<sub>x</sub> and diluent O<sub>2</sub>;
  - f. three-hour rolling average NO<sub>x</sub> concentrations;
  - g. the mass flow rate of NO<sub>x</sub>;
  - h. daily and quarterly accumulated mass emissions of NO<sub>x</sub>; and
  - i. hours of downtime of the CEMS.
2. The Permittee submitted a Quality Assurance (QA) Plan for CEMS and the QA Plan has been accepted by the Control Officer (October 1999). The QA Plan is binding and consistent with the regulations. The QA Plan contains auditing schedules, reporting schedules, design specifications and other quality assurance requirements for the CEMS system. The CEMS shall conform to applicable provisions of 40 CFR 60.13 and 40 CFR 60, Subpart GG. Audit procedures shall conform to the applicable provisions of 40 CFR 60, Appendix F. *[AQR 12.5.2.6(d)]*
3. The Permittee shall conduct relative accuracy test audits (RATA) of the NO<sub>x</sub> and O<sub>2</sub> CEMS at least annually. *[AQR 12.5.2.6(d)]*
4. The Permittee shall operate CEMS such that total "out-of-control" periods as defined in 40 CFR 75, Appendix B, shall not exceed two percent (2%) of the time that the associated HRSG is in operation. *[40 CFR 70.6]*
5. The turbines with duct burners (EUs: A01/A01A and A02/A02A) are subject to the requirements of 40 CFR 64 for CO. The Permittee shall use the oxidation catalyst operating temperature to demonstrate compliance with 40 CFR 64, Compliance Assurance Monitoring (CAM). The monitoring approach is listed in Table III-C-1 *[40 CFR 64.3(c)]*:
  - a. The Permittee shall continuously monitor the oxidation catalyst operating temperature all times when the turbines are operating. (Continuous monitoring is defined as data recorded at least every fifteen (15) minutes with three hour average). This monitoring frequency requirement is not applicable during periods of monitor downtime including calibration, maintenance, and malfunction of the meter, with such downtime not to exceed (5) five percent of the total operating time. *[AQR 12.5.2.6(d)]*
  - b. The Permittee shall submit the monitoring system performance report or summary report to the Control Officer, if the total downtime of the continuous monitoring system is five (5) percent or greater of the total monitoring time of the reporting period. *[AQR 12.5.2.6(d)]*
  - c. The Permittee shall establish, maintain and monitor the catalyst temperature so that yearly emissions of CO can be accurately recorded and reported. *[AQR 12.5.2.6(d)]*

**Table III-C-1: Monitoring Approach<sup>1</sup>**

Criteria	Indicator
Indicator and Measurement Approach	The oxidation catalyst operating temperature is monitored as the indicator of CO emissions compliance.
Indicator Range	The operating temperature range of the catalyst is used to determine the required CO destruction efficiency. An excursion is defined as a three-hour average temperature outside the specified catalyst temperature range. The real-time continuous measurements of inlet temperature are collected and archived by the facility's distributed control system (DCS). The minimum oxidation catalyst inlet temperature was established at 515°F and the maximum catalyst inlet temperature was established at 1,000°F. Excursions trigger an investigation, corrective actions and a reporting requirement. Number of temperature excursions greater than five percent (5%) of the total unit operating time will require a quality improvement plan (QIP).
Performance Criteria Data Representativeness	The catalyst temperature is measured by a thermocouple mounted in the inlet duct leading to the catalyst bed and represents an overall average temperature. The accuracy of this measurement is within $\pm 5^\circ\text{F}$ . The turbine emissions are tested annually using EPA Method 10 to ensure the CO emissions are below the emission rate listed in the permit.
Verification of Operational Status	Compliance with Part 70 OP conditions.
QA/QC Practices and Criteria	Annual or biannual verification of thermocouple accuracy is performed (based on manufacturer's specification). Annual or biannual source testing using EPA Method 10. Visual inspection of the catalyst bed for debris is also performed.
Monitoring Frequency	The real-time oxidation catalyst inlet temperature is monitored continuously by a thermocouple system.
Data Collection Procedures	A real-time continuous measurements of the oxidation catalyst inlet temperatures are collected and archived by the facility distributed control system (DCS).
Averaging Period	A three-hour fixed block averaging period is used. All reported emissions are based on rolling 3-hour average.

<sup>1</sup> Except during periods of startup, shutdown, calibration, maintenance/planned outage, or malfunction. Neither short term permit limits nor CO controls are applicable to turbine startup and shutdown periods.

6. For purpose of CAM, an exceedance of CO is deemed to occur if the data logging system records a three-hour average oxidation catalyst temperature outside the optimum range or performance test records a CO result higher than the 3.5 ppmvd limit. [40 CFR 64.6(c)(2)]
7. In the event of an exceedance, the Permittee shall restore operation of the unit, including the control device, to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. [40 CFR 64.7(a)]
8. In the event of an exceedance, the Permittee shall comply with the applicable CAM reporting and record keeping requirements of 40 CFR 64.9(a). [40 CFR 64.9(a)]
9. The Permittee shall use CO performance testing; and information from the data logging system as a measure of compliance with the turbine's CO yearly emission limits. This does not, however, preclude the use of other credible evidence in determining or showing compliance. [AQR 12.5.2.6(d)]
10. The Permittee shall verify the sulfur content of the natural gas at least annually. These verifications shall be based on reports or written data from the gas supplier or by sampling and analysis and must demonstrate compliance with emission control conditions of this permit. [AQR 12.5.2.6(d)]

### Gasoline Dispensing

11. The Permittee shall monitor the combined throughput of gasoline (EU: A08) in gallons and calculate monthly the total of the last 365 days of gasoline throughput divided by 12. *[40 CFR 63, Subpart CCCCCC]*
12. The Permittee shall monitor the fuel storage and dispensing system to determine if components of the system are in compliance with the control requirements of this permit. The monitoring shall consist of, but not be limited to:
  - a. The Permittee shall inspect daily for gasoline spills and record the times and dates the source became aware of a spill and when the spill was cleaned up.
  - b. The Permittee shall inspect covers on gasoline containers and fill-pipes after each respective delivery and record the date of fuel deliveries and corresponding inspections.
  - c. The Permittee shall record the date and approximate volume of gasoline sent to open waste collection systems that collect recyclable gasoline. *[40 CFR 63, Subpart CCCCCC]*
13. The Permittee shall conduct inspections on the Phase I Vapor Recovery System after each delivery to determine if components of the system are in compliance with the control requirements of this permit as well as, but not limited to, the following. The Permittee may limit inspections to once daily if multiple deliveries are received in a given day: *[AQR 12.1.4.1(d)]*
  - a. the condition of the spill bucket and presence of fuel or debris;
  - b. the condition of the vapor cap and cap seal;
  - c. the condition of the vapor adapter and adapter seal;
  - d. the condition of the fill cap and cap seal;
  - e. the tightness of the fill adapter (non EVR systems);
  - f. the condition of the fill tube seal; and
  - g. the condition of the P/V valve.

### Diesel Engines

14. The Permittee shall monitor the sulfur content and cetane index or aromatic content of the fuel burned in the fire pump and emergency generator by retaining a copy of vendor fuel specifications. *[AQR 12.5.2.6(d)]*
15. The Permittee shall operate each emergency generator (EUs: A03 and A07) with a nonresettable hour meter and monitor the duration of operation for testing, maintenance and nonemergency operation, and separately for emergencies. The nature of the emergency leading to emergency operation shall be documented. *[40 CFR 63.6625(f) and 40 CFR 60.4209]*

### Other

16. On-site personnel familiar with EPA Method 9 shall perform quarterly visible emissions checks for each emission unit. If the emergency generator does not operate during the calendar quarter, then no observation of that unit shall be required. *[AQR 12.5.2.6(d) and 40 CFR 70.6]*
  - a. If the observer, during required visible emissions check, does not see any plume that, on an instantaneous basis, appears to exceed the opacity standard, then the observer shall keep a record of the name of the observer, the date on which the observation was made, the location, and the results of the observation.

- b. If the observer sees a plume during required visible emissions check that, on an instantaneous basis, appears to exceed the opacity standard, then the Permittee shall have a certified VE observer take an EPA Method 9, or equivalent, observation of the plume and record the results.
- c. If Method 9 readings cannot be obtained, the observer shall indicate in the log: a) the reason why a Method 9 could not be performed, b) the color of the emissions, c) whether the emissions were light or heavy, d) the cause of the abnormal emissions, and e) any corrective action taken.
- d. The Permittee shall investigate any occurrence of visible fugitive dust at or near the opacity limit. Corrective actions shall be immediately taken to correct causes of fugitive dust in excess of allowable opacity limits.

## D. Testing

### Turbines

1. Performance testing is subject to 40 CFR 60 Subpart A, 40 CFR 60 Subpart GG, Subpart Db, 40 CFR 72 and Air Quality's Guideline on Performance Testing. [AQR 12.5.2.6(d) and 40 CFR 60.335]
2. The Permittee shall conduct annual performance testing for CO on each of the turbine/HRSC (EUs: A01/A01A and A02/A02A) as per the protocol requirements listed in Table III-D-1. The tests shall be completed within 90 days of the anniversary of the last performance tests. [AQR 12.5.2.6(d)]
3. If the oxidizing catalyst is replaced on a turbine, the Permittee shall conduct performance testing for CO every other year for the first four years after the replacement and annually thereafter. [AQR 12.5.2.6(d)]

**Table III-D-1: Performance Testing Requirements for Stationary Gas Turbines/Duct Burners**

Test Point	Pollutant	Method (40 CFR 60, Appendix A)
Turbine Exhaust Outlet Stack	CO	EPA Method 10 analyzer
Stack Gas Parameters	---	EPA Methods 1, 2, 3, 4

### Gasoline Dispensing

4. The Permittee shall conduct Phase I vapor recovery tests in accordance with the California Air Resources Board (CARB)-approved vapor recovery test procedures (as revised) listed in Table III-D-2, as applicable. [AQR 12.5.2.6(d)]
5. The Permittee shall schedule each vapor recovery test with the Stationary Sources Compliance Supervisor at least 30 calendar days prior to the anticipated date of testing, unless otherwise specified in this permit. [AQR 12.5.2.6(d)]
6. Any prior approved scheduled vapor recovery system test cannot be canceled and/or rescheduled except with the prior approval of the Control Officer, Compliance Division. [AQR 12.5.2.6(d)]
7. The Permittee shall conduct Phase I Vapor Recovery System Testing on affected gasoline dispensing equipment according to the following requirements: [AQR 12.5.2.6(d)]
  - a. The Permittee shall conduct an initial vapor recovery system test within 180 days of startup of new equipment, or when the integrity of the vapor recovery system has been affected by a modification or repair. Routine maintenance, including the replacement of

- hoses, nozzles and ECD (bellows, face shields, splash guards, etc.), does not require an initial vapor recovery system test.
- b. The Permittee shall conduct and pass subsequent Phase I vapor recovery system tests within 90 days of the anniversary of the last performance tests at the frequency specified in Table III-D-2. [AQR 12.5.2.6(d)]
  - c. Each vapor recovery system test may be witnessed by an inspector from Air Quality.
8. The Permittee submit a Gasoline Dispensing Operation Certification of Vapor Recovery System Test Results Submittal Form (available on Air Quality's website) to the Control Officer after each vapor recovery system test. The submittal form shall meet the following conditions: [AQR 12.5.2.6(d)]
    - a. The test results shall be complete and signed by the Responsible Official for the equipment being tested. The Responsible Official must certify that the test results are true, accurate and complete.
    - b. Test results shall be submitted by regular mail, fax, or in person.
    - c. The test report shall be submitted by the source or by the Permittee's testing company or consultant, but the source is the responsible party and must ensure that the test report is delivered to Air Quality within the applicable timeline.
  9. If the source passes the vapor recovery system test, the Permittee shall submit the test results report to the Control Officer within 60 days from the date of the vapor recovery system test.
  10. If the source fails a vapor recovery system test, the Permittee shall comply with the following:
    - a. The Permittee shall notify the Control Officer within 24 hours of equipment test failure, make all necessary repairs and retest the affected facility. After retesting, the Permittee shall notify the Control Officer to advise of the retest and submit test results within 15 days of completion.
    - b. The process of retesting shall continue until the affected facility successfully passes all aspects of the vapor recovery system test.
    - c. The Control Officer may require the Permittee to conduct any test after a failed vapor recovery system test in the presence of an Air Quality representative. [AQR 12.5.2.6(d)]

**Table III-D-2: Vapor Recovery System Testing Procedures and Schedules**

Type of Vapor Recovery System	Test Procedure	Frequency
Phase I Vapor Balance System	Pressure Decay/Leak test: CARB Procedure TP201.3A (as revised for AST)	Initial and every three years thereafter
	Leak Rate and Cracking Pressure of Pressure/Vacuum Vent Valves: CARB Procedure TP-201.1E (as revised)	Initial and every three years thereafter

AST = Aboveground Storage Tank

## E. Record Keeping

1. The Permittee shall comply with all applicable record keeping requirements of 40 CFR 60.7; 40 CFR 60 Subpart GG and Subpart Db; 40 CFR 72 and 40 CFR 75, Subpart F, 40 CFR 63, Subpart CCCCC and any other applicable regulations. The Permittee shall report semiannually and maintain records on site that include, at a minimum: [AQR AQR 12.5.2.6(d)]

### Stationary Gas Turbines and Duct Burners (EUs: A01/A01A and A02/A02A)

- a. each monthly consecutive 12-month total quantity of natural gas consumed in each stationary gas turbine;
- b. each monthly consecutive 12-month total quantity of natural gas consumed in each duct burner;
- c. each monthly consecutive 12-month total hours of operation of each duct burner;
- d. dates, times and duration of each startup and shutdown cycle;

### Diesel Engines (EUs: A03 and A07)

- e. monthly hours of operation of the fire pump engine and the emergency generator engine for testing and maintenance purposes, and separately for operation during emergency;

### Gasoline Dispensing (EU: A08)

- f. the monthly 12-month average combined throughput of gasoline;

### CEMS

- g. CEMS audit results or accuracy checks, corrective actions, etc., as required by 40 CFR 60, Appendix F and the CEMS QA Plan;
- h. all CEMS information required by the CEMS monitoring plan as specified in 40 CFR 75 Subpart F and Monitoring Section of this permit; and
- i. time, duration, nature and probable cause of any CEMS downtime and corrective actions taken.

2. The Permittee shall maintain records on site that include, at a minimum [AQR 12.5.2.6(d)]:

### Stationary Gas Turbines and Duct Burners (EUs: A01/A01A and A02/A02A)

- a. startup and shutdown short-term total emissions for each pollutant per stationary gas turbine for each cycle event and yearly emissions for each pollutant in tons per year (each 12-month cumulative total calculated on a monthly basis);
- b. documentation verifying sulfur content of natural gas;
- c. manufacturer's operation and maintenance specifications for SCR and Oxidation Catalyst controls;

### Diesel Engines (EUs: A03 and A07)

- d. records of fire pump and emergency generator inspection/maintenance;
- e. documentation verifying sulfur content of diesel fuel;

### Gasoline Dispensing (EU: A08)

- f. equipment inspections;
- g. maintenance on distribution and control (i.e. Phase I) equipment, including a general description of location and parts;
- h. date and time storage and distribution equipment was taken out-of-service;
- i. date of repair or replacement of storage and distribution equipment/parts;

- j. deviations from permit requirements resulting in excess emissions (report as required by Section II-D);
- k. deviations from permit requirements not resulting in excess emissions;
- l. vapor recovery system testing results, if applicable (reported as required by Section III-D);
- m. the calendar year combined annual gasoline product throughput; and (annual report only);
- n. the calendar year annual emissions for the entire source (annual report only);

#### General

- o. the QA Plan shall contain auditing schedules, reporting schedules, and design specifications for the CEMS. The CEMS shall conform to applicable provisions of 40 CFR 60, Subpart GG and 40 CFR 75 (The QA Plan has been approved by the Control Officer)
  - p. log of visual emissions checks on all emission units to include the stationary gas turbines, emergency generator and the fire pump;
  - q. log of thermocouple calibrations, maintenance, and operation;
  - r. the magnitude and duration of excess emissions, notifications, monitoring system performance, malfunctions, corrective actions taken, etc., as required by 40 CFR 60.7;
  - s. certificates of representation for the designated representative and the alternate designated representative that meet all requirements of 40 CFR 72.24;
  - t. copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program; and
  - u. summary of results of all performance testing.
3. For all inspections, visible emission checks, and testing required under monitoring, logs, reports, and records shall include at least the date and time, the name of the person performing the action, the results or findings, and the type of corrective action taken (if required). *[AQR 12.5.2.6(d)]*
  4. Records and data required by this Part 70 OP to be maintained by Permittee may, at the Permittee's expense, be audited at any time by a third party selected by the Control Officer. *[AQR 4.4 and AQR 12.5.2.6(d)]*
  5. All records and logs, or a copy thereof, shall be kept on-site for a minimum of five (5) years from the date the measurement or data was entered and shall be made available to Air Quality upon request. *[AQR 12.5.2.6(d)]*
  6. The Control Officer reserves the right to require additional requirements concerning records and record keeping for this source. *[AQR 12.5.2.6(d)]*

#### **F. Reporting**

1. The Permittee shall comply with all applicable notification and reporting requirements of 40 CFR 60.7, 40 CFR 60 Subparts Db and GG, 40 CFR 63 Subpart IIII, 40 CFR 63 Subpart ZZZZ, 40 CFR 72.9(f), and 40 CFR 75. *[AQR 12.5.2.6(d)]*
2. The following requirements apply to semiannual reports: *[AQR 12.5.2.6(d)]*
  - a. The report shall include items listed in Section III-E-1; and
  - b. The report shall include any permit deviations, their probable cause, and corrective or preventative actions taken.
3. Regardless of the date of issuance of this permit, the source shall comply with the schedule for report submissions outlined in Table III-F-1 *[AQR 12.5.2.6(d)]*:

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

Required Report	Applicable Period	Due Date
Semiannual Report for 1st half of the year.	January, February, March, April, May, June	July 30 each year <sup>1</sup>
Semiannual Report for 2nd half of the year.	July, August, September, October, November, December	January 30 each year <sup>1</sup>
Annual Compliance Certification Report	Preceding Calendar Year	January 30 each year <sup>1</sup>
Annual Emission Inventory Report	Preceding Calendar Year	March 31 each year <sup>1</sup>
Excess Emission Notification	As Required	Within 24 hours of the time the Permittee first learns of the excess emissions
Excess Emission Report	As Required	Within 72 hours of notification of the event
Deviation Report	As Required	Along with semiannual reports <sup>1</sup>
Performance Testing	As Required	Within 60 days from the end of the test <sup>1</sup>

<sup>1</sup>If the due date falls on a Saturday, Sunday or a Federal or Nevada holiday, then the submittal is due on the next regularly scheduled business day.

4. 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 4.4 and AQR 12.5.2.6(d)]
5. The Permittee shall include actual startup and shutdown emissions in the annual emission inventory reporting. [AQR 12.5.2.6(d)]
6. The designated representative or alternate designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR 72, 40 CFR 73, and 40 CFR 75. [40 CFR 72.9(f)]
7. A Risk Management Plan is required for the storing, handling and use of ammonia or aqueous ammonia pursuant to 40 CFR 68. The Permittee shall submit revisions of the RMP to the appropriate authority and a copy thereof to Air Quality. [40 CFR 68.150(b)(3)]

## **G. Mitigation**

1. The source has no federal offset requirements associated with this permitting action. [AQR 12.7]

## **IV. ACID RAIN REQUIREMENTS**

1. In accordance with the provisions of Title IV of the Clean Air Act and 40 CFR Parts 72 through 77, this Acid Rain Permit is issued to Desert Star Energy Center, Boulder City, Nevada.
2. All terms and conditions of the Acid Rain Permit are enforceable by Air Quality and EPA under the Clean Air Act. [40 CFR 72]
3. The Permittee shall comply with all the applicable requirements of the Acid Rain Permit Application. [40 CFR 72.30]
4. This Acid Rain Permit incorporates the definitions of terms in 40 CFR Part 72.2. [40 CFR 72.2]
5. This permit is valid for a term of five (5) years from the date of issuance unless a timely and complete renewal application is submitted to Air Quality. [40 CFR 72.69]

6. A timely renewal application is an application that is received at least six months prior to the permit expiration date. *[40 CFR 72.30]*
7. Emissions from this source shall not exceed any allowances that the source lawfully holds under Title IV of the Act or its regulations. *[40 CFR 70.6(a)(4)]*

#### **V. OTHER REQUIREMENTS**

1. The Permittee is subject to 40 CFR 60 Subparts A, Db, IIII and GG; 40 CFR 63 Subpart ZZZZ and CCCCC, 40 CFR 70; 40 CFR 72 (Acid Rain Permits); 40 CFR 73 (Acid Rain Sulfur Dioxide Allowance System) and 40 CFR 75 (Acid Rain CEMS). It is the Permittee's responsibility to know and comply with all requirements within these federal regulations. *[NSR ATC Modification 1, Revision 1, (04/30/2007) and Part 70 OP renewal application (6/15/2015)]*
2. The Permittee shall not build, erect, install or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in gases discharged to the atmosphere. *[40 CFR 60.12]*
3. The Permittee shall not use, sell, or offer for sale any fluid as a substitute material for any motor vehicle, residential, commercial, or industrial air conditioning system, refrigerator freezer unit, or other cooling or heating device designated to use a CFC or HCFC compound as a working fluid, unless such fluid has been approved for sale in such use by the Administrator. The Permittee shall keep record of all paperwork relevant to the applicable requirements of 40 CFR 82 on site. *[40 CFR 82]*

**ATTACHMENT 1**

**APPLICABLE REGULATIONS**

**REQUIREMENTS SPECIFICALLY IDENTIFIED AS APPLICABLE:**

1. NRS, Chapter 445B.
2. Applicable AQR Sections:

<b>Citation</b>	<b>Title</b>
AQR Section 0	Definitions
AQR Section 1	Selected Definitions
AQR Section 4	Control Officer
AQR Section 5	Interference with Control Officer
AQR Section 8	Persons Liable for Penalties – Punishment: Defense
AQR Section 9	Civil Penalties
AQR Section 10	Compliance Schedule
AQR Section 11	Ambient Air Quality Standards
AQR Section 12.3	Permit Requirements for Major Sources in Nonattainment Areas
AQR Section 12.4	Authority to Construct Application and Permit Requirements for Part 70 Sources
AQR Section 12.5	Part 70 Operating Permit Requirements
AQR Section 12.10	Continuous Emissions Monitoring (CEMS) Systems
AQR Section 13.2.b.82	National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
AQR Section 13.2.b.106	National Emission Standards for Hazardous Air Pollutants for Gasoline Dispensing Facilities
AQR Section 14.1.b.4	Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units
AQR Section 14.1.b.40	Standards of Performance for New Stationary Sources (NSPS) – Standards of Performance for Stationary Gas Turbines
AQR Section 14.1.b.80	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
AQR Section 18	Permit and Technical Service Fees
AQR Section 21	Acid Rain Permits
AQR Section 22	Acid Rain Continuous Emission Monitoring
AQR Section 24	Sampling and Testing – Records and Reports
AQR Section 25	Affirmative Defense for Excess Emissions due to Malfunctions, Startup and Shutdown
AQR Section 26	Emissions of Visible Air Contaminants
AQR Section 28	Fuel Burning Equipment
AQR Section 40	Prohibition of Nuisance Conditions
AQR Section 41	Fugitive Dust
AQR Section 42	Open Burning
AQR Section 43	Odors in the Ambient Air
AQR Section 52	Gasoline Dispensing Facilities
AQR Section 60	Evaporation and Leakage
AQR Section 70	Emergency Procedures
AQR Section 80	Circumvention

3. CAAA, Authority: 42 U.S.C. § 7401, et seq.
4. Applicable 40 CFR Subsections:

Citation	Title
40 CFR 52.21	Prevention of Significant Deterioration (PSD)
40 CFR 52.1470	SIP Rules
40 CFR 60, Subpart A	Standards of Performance for New Stationary Sources (NSPS) – General Provisions
40 CFR 60, Subpart Db	Standards of Performance for Industrial – Commercial – Institutional Steam Generating Units
40 CFR 60, Subpart GG	Standards of Performance for New Stationary Sources (NSPS) – Stationary Gas Turbines
40 CFR 60	Appendix A, Method 9 or equivalent, (Opacity)
40 CFR 60, Subpart IIII	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
40 CFR 63, Subpart ZZZZ	National Emission Stations for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
40 CFR 63, Subpart CCCCC	National Emission Stations for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities
40 CFR 64	Compliance Assurance Monitoring (CAM)
40 CFR 68	Chemical Accident Prevention Provisions
40 CFR 70	Federally Mandated Operating Permits
40 CFR 72	Acid Rain Permits Regulation
40 CFR 73	Acid Rain Sulfur Dioxide Allowance System
40 CFR 75	Acid Rain Continuous Emission Monitoring
40 CFR 82	Protection of Stratospheric Ozone
40 CFR 98	Mandatory Greenhouse Gas Reporting-Electricity Generation



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**Permit Requirements****STEP 3**

Read the standard requirements.

- (1) The designated representative of each affected source and each affected unit at the source shall:
- (i) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR part 72 in accordance with the deadlines specified in 40 CFR 72.30; and
  - (ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit;
- (2) The owners and operators of each affected source and each affected unit at the source shall:
- (i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and
  - (ii) Have an Acid Rain Permit.

**Monitoring Requirements**

- (1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the source or unit, as appropriate, with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
- (3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

**Sulfur Dioxide Requirements**

- (1) The owners and operators of each source and each affected unit at the source shall:
- (i) Hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under 40 CFR 73.34(c)), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the source; and
  - (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
- (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
- (3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
- (i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or
  - (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).

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**Sulfur Dioxide Requirements, Cont'd.**

STEP 3, Cont'd.

- (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

**Nitrogen Oxides Requirements**

The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

**Excess Emissions Requirements**

- (1) The designated representative of an affected source that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.
- (2) The owners and operators of an affected source that has excess emissions in any calendar year shall:
- Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
  - Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

**Recordkeeping and Reporting Requirements**

- (1) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:
- The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission

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of a new certificate of representation changing the designated representative;

**STEP 3, Cont'd. Recordkeeping and Reporting Requirements, Cont'd.**

- (ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.
  - (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,
  - (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
- (2) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

**Liability**

- (1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
- (2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
- (3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
- (4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.
- (5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.
- (6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit.
- (7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

**Effect on Other Authorities**

No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 shall be construed as:

- (1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with

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any other provision of the Act, including the provisions of title I of the Act relating

STEP 3, Cont'd.

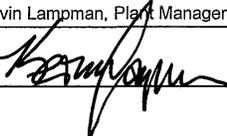
**Effect on Other Authorities, Cont'd.**

- to applicable National Ambient Air Quality Standards or State Implementation Plans;
- (2) Limiting the number of allowances a source can hold; *provided*, that the number of allowances held by the source shall not affect the source's obligation to comply with any other provisions of the Act;
- (3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;
- (4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
- (5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

STEP 4  
Read the certification statement, sign, and date.

**Certification**

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name Kevin Lamoman, Plant Manager	
Signature 	Date 6.8.2015