



JUL 18 2014

Mr. George Davies
Walnut Energy Center Authority
PO Box 949
Turlock, CA 95381

Re: Notice of Preliminary Decision – Title V Permit Renewal
District Facility # N-7172
Project # N-1140656

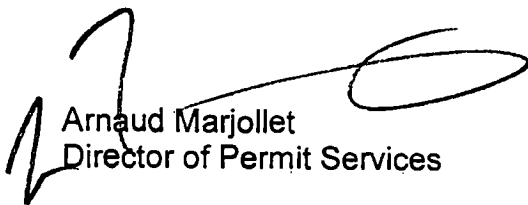
Dear Mr. Davies:

Enclosed for your review and comment is the District's analysis of the application to renew the Federally Mandated Operating Permit for Walnut Energy Center Authority at 600 South Washington Road, Turlock, California.

The notice of preliminary decision for this project will be published approximately three days from the date of this letter. After addressing all comments made during the 30-day public notice and the 45-day EPA comment periods, the District intends to issue the renewed Federally Mandated Operating Permit. Please submit your written comments on this project within the 30-day public comment period, as specified in the enclosed public notice.

Thank you for your cooperation in this matter. If you have any questions, please contact Mr. Rupi Gill, Permit Services Manager, at (209) 557-6400.

Sincerely,



Arnaud Marjollet
Director of Permit Services

Enclosures

cc: Mike Tollstrup, CARB (w/enclosure) via email
cc: Gerardo C. Rios, EPA (w/enclosure) via email

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**San Joaquin Valley
Air Pollution Control District**

**Proposed Title V Permit Renewal Evaluation
Walnut Energy Center Authority
N-7172**

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**TITLE V PERMIT RENEWAL EVALUATION
ELECTRICITY GENERATING FACILITY**

Engineer: Mark Schonhoff
Date: July 16, 2014

Facility Number: N-7172

Facility Name: Walnut Energy Center Authority

Mailing Address: PO Box 949
Turlock, CA 95381

Contact Name: George Davies
Telephone: (209) 883-3451

Responsible Official: George Davies

Project Number: N-1140656
Deemed Complete: April 2, 2014

I. PROPOSAL

The Title V permit for the Walnut Energy Center Authority was last renewed on September 30, 2009. As required by District Rule 2520, the applicant has applied to renew the permit. The existing Title V permit shall be reviewed and modified to reflect all applicable District and federal rules updated, removed, or added since the most recent renewal.

The purpose of this evaluation is to provide the legal and factual basis for all updated applicable requirements and to determine if the facility will comply with the updated requirements. It also specifically identifies all additions, deletions, and/or changes made to permit conditions or equipment descriptions.

II. FACILITY LOCATION

600 South Washington Road
Turlock, CA

III. POSTMODIFICATION EQUIPMENT LISTING

N-7172-1-4:

84 MW NOMINALLY RATED COMBINED-CYCLE POWER GENERATING SYSTEM #1 CONSISTING OF A 1,047 MMBTU/HR GENERAL ELECTRIC FRAME 7EA NATURAL GAS-FIRED COMBUSTION TURBINE

GENERATOR WITH DRY LOW NOX COMBUSTOR, AN INLET AIR FILTRATION AND EVAPORATIVE COOLING SYSTEM, A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM, AN OXIDATION CATALYST, HEAT RECOVERY STEAM GENERATOR #1 (HRSG) AND A 100 MW NOMINALLY RATED STEAM TURBINE SHARED WITH PERMIT UNIT N-7172-2

N-7172-2-4:

84 MW NOMINALLY RATED COMBINED-CYCLE POWER GENERATING SYSTEM #2 CONSISTING OF A 1,047 MMBTU/HR GENERAL ELECTRIC FRAME 7EA NATURAL GAS-FIRED COMBUSTION TURBINE GENERATOR WITH DRY LOW NOX COMBUSTOR, AN INLET AIR FILTRATION AND EVAPORATIVE COOLING SYSTEM, A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM, AN OXIDATION CATALYST, HEAT RECOVERY STEAM GENERATOR #2 (HRSG) AND A 100 MW NOMINALLY RATED STEAM TURBINE SHARED WITH PERMIT UNIT N-7172-1

N-7172-3-2:

68,500 GPM MECHANICAL DRAFT COOLING TOWER WITH 5 CELLS SERVED BY A HIGH EFFICIENCY DRIFT ELIMINATOR

N-7172-4-2:

300 HP JOHN DEERE COMPANY MODEL JW6H-UF40 DIESEL-FIRED EMERGENCY IC ENGINE POWERING A FIRE PUMP

IV. GENERAL PERMIT TEMPLATE USAGE

The applicant is requesting to use the following model general permit template:

A. Template SJV-UM-0-3 Facility Wide Umbrella

The applicant has requested to utilize template number SJV-UM-0-3, Facility Wide Umbrella. Based on the information submitted in the Template Qualification Form, the applicant qualifies for the use of this template.

V. SCOPE OF EPA AND PUBLIC REVIEW

Certain segments of the proposed renewed operating permit are based on model general permit templates that have been previously subjected to EPA and public review. The terms and conditions from the model general permit

templates are included in the proposed permit and are not subject to further EPA or public review.

For permit applications utilizing model general permit templates, public and agency comments on the District's proposed actions are limited to the applicant's eligibility for use of the model general permit template, applicable requirements not covered by the model general permit template, and the applicable procedural requirements for issuance of Title V Operating Permits.

The following permit conditions, including their underlying applicable requirements, originate from model general permit templates and are not subject to further EPA or public review.

Conditions 1 through 40 of the requirements for permit N-7172-0-2.

VI. FEDERALLY ENFORCEABLE REQUIREMENTS

A. RULES UPDATED

Below is a list of Rules that were updated since the last renewal date of September 30, 2009.

District Rule 2020, Exemptions

(amended March 21, 2002 ⇒ amended August 18, 2011)

District Rule 2201, New and Modified Stationary Source Review Rule

(amended December 19, 2002 ⇒ amended April 21, 2011)

District Rule 4601, Architectural Coatings

(amended October 31, 2001 ⇒ amended December 17, 2009)

District Rule 4702, Internal Combustion Engines

(amended January 18, 2007 ⇒ amended November 14, 2013)

40 CFR Part 60 Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (last amended June 28, 2011)

17 CCR Section 93115, Airborne Toxic Control Measure for Stationary Compression ignition Engines (amended May 19, 2011)

40 CFR Part 82 Subparts B and F, Stratospheric Ozone

(subpart B last amended August 11, 2011, subpart F last amended April 13, 2005)

40 CFR Part 61 Subpart M, National Emission Standard for Asbestos (last amended February 12, 2011)

B. RULES REMOVED

None

C. RULES ADDED

40 CFR Part 63 Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (last amended May 9, 2011)

D. RULES NOT UPDATED

District 1080, Stack Monitoring (amended December 17, 1992)

District 1081, Source Sampling (amended December 16, 1993)

District Rule 1100, Equipment Breakdown (amended December 17, 1992)

District Rule 2010, Permits Required (amended December 17, 1992)

District Rule 2031, Transfer of Permits (amended December 17, 1992)

District Rule 2040, Applications (amended December 17, 1992)

District Rule 2070, Standards for Granting Applications
(amended December 17, 1992)

District Rule 2080, Conditional Approval (amended December 17, 1992)

District Rule 2520, Federally Mandated Operating Permits
(amended June 21, 2001)

District Rule 4201, Particulate Matter Concentration
(amended December 17, 1992)

District Rule 4202, Particulate Matter Emission Rate
(amended December 17, 1992)

District Rule 4701, Internal Combustion Engines – Phase 1
(amended August 21, 2003)

District Rule 4703, Stationary Gas Turbines
(amended September 20, 2007)

District Rule 4801, Sulfur Compounds (amended November 18, 1992)

40 CFR Part 60 Subpart KKKK, Standards of Performance for Stationary Combustion Turbines (last amended March 20, 2009)

40 CFR Part 64, Compliance Assurance Monitoring (CAM)
(last amended October 22, 1997)

40 CFR Part 72, Permits Regulation
(last amended April 28, 2006)

40 CFR Part 73, Sulfur Dioxide Allowance System
(last amended May 12, 2005)

40 CFR Part 75, Continuous Emission Monitoring
(August 12, 2011)

40 CFR Part 77, Excess Emissions
(May 12, 2005)

VII. RULES NOT FEDERALLY ENFORCEABLE

A. RULES UPDATED

None

B. RULES REMOVED

None

C. RULES NOT UPDATED

District Rule 4102, Nuisance (amended December 17, 1992)

District Rule 7102, Hexavalent Chromium – Cooling Towers
(December 17, 1992)

D. Rules Added

None

VIII. Permit Requirements

In this section, the Federally enforceable and non-Federally enforceable requirements for the rules that were updated or added will be discussed. Clarification of equipment descriptions and the correction of typographical errors that do not change the meaning of an equipment description or condition will be made but not discussed.

General Permit Clean-up:

New Title V Permit #	Description	Title V Permit Condition Number		Change	Basis
		Current	New		
N-7172-1-4 N-7172-2-4	Natural Gas Fired Turbines	4	22 of N-7172-0-2	Redundant Condition. Remove because it is incorporated in to condition 22 of permit N-7172-0-2	N/A
		15	None	Redundant Condition. Remove because it was incorporated into condition 59 and not removed at that time	N/A
		60	None	Redundant condition. Remove because these requirements are incorporated into condition 9 of pre-renewal permit N-7170-0-1 (condition 9 of renewed permit N-7170-0-2)	N/A
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General Permit Clean-up - Continued:

New Title V Permit #	Description	Title V Permit Condition Number		Change	Basis
		Current	New		
N-7172-1-4 N-7172-2-4	Natural Gas Fired Turbines	62	None	Redundant Condition. Remove because it is a duplicate of condition 1 of permit N-7172-0-2	
		63	None	Redundant Condition. Remove because it is a duplicate of condition 2 of permit N-7172-0-2	
		None	16	Add CEMS breakdown requirements	Rule 1080, Section 10.0

District Rule 2020, Exemptions

(amended March 21, 2002 ⇒ amended August 18, 2011)

The changes to this rule do not affect any of the facility permits.

District Rule 2201, New and Modified Stationary Source Review Rule

(amended December 9, 2001 ⇒ April 12, 2011)

Although this rule has changed since the initial Title V permit was issued, it does not apply to a permit unit until such time as it is modified as defined in the rule. Therefore, any new Rule 2201 requirements to which the facility may have been subject were applied at the time of the applicable permitting action.

District Rule 2520, Federally Mandated Operating Permits

(amended June 21, 2001)

No changes to this rule have occurred since issuance of the TV permit; however, greenhouse gas emissions will be addressed under Rule 2520 during this renewal.

Greenhouse Gas Discussion

There are no federally applicable Greenhouse Gas (GHG) requirements for this source. It should be noted that the Mandatory Greenhouse Gas Reporting rule (40 CFR Part 98) is not included in the definition of an applicable requirement within Title V (per 40 CFR 71.2). Therefore, there will be no further discussion of GHG in this evaluation.

District Rule 4601, Architectural Coatings

(amended October 31, 2001 ⇒ amended December 17, 2009)

This rule is addressed by the applicable facility-wide umbrella general template (SJV-UM-0-3), which the facility operator will be utilizing. The requirements of general template SJV-UM-03 have been previously reviewed by, and approved by the U.S. EPA and have been public noticed. Therefore, the requirements of this rule have been fully addressed and need not be readdressed.

District Rule 4702, Internal Combustion Engines

(amended January 18, 2007 ⇒ amended November 14, 2013)

New Title V Permit #	Description	Title V Permit Condition Number		Change	Basis
		Current	New		
N-7172-4-2	300 bhp Diesel Fired Emergency Fire pump	8	14	Add requirement to record type of fuel used	Sect 6.2.3
		None	7	Properly operate and maintain engine	Sect 5.9.2
		None	9	Monitor operational characteristics	Sect 5.9.3
		8	14, 16	Split the record keeping duration requirement from the general record keeping requirements	Sect 6.2.3

40 CFR Part 60 Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (last amended June 28, 2011)

The unit is an emergency fire pump that was installed in 2006. Per section 60.4205(c), the unit must comply with the emission requirements of Table 4 of this subpart. The following table lists the emission limits, the engine emissions (from the current PTO) and whether or not the unit is compliant.

Pollutant	Emission Factors (g/bhp-hr)		Compliant
	Table 1 Limits	Engine Emissions	
NOx + VOC	7.8	5.35	Yes
CO	2.6	0.27	Yes
PM	0.4	0.09	Yes

New Title V Permit #	Description	Title V Permit Condition Number		Change	Basis
		Current	New		
N-7172-4-2	300 bhp Diesel Fired Emergency Fire pump	4, 5	5, 6	Reference 40 CFR Part 60.4205 as a basis for the NOx, VOC, CO and PM10 emission limits.	40 CFR Part 60.4205

17 CCR Section 93115, Airborne Toxic Control Measure for Stationary Compression Ignition Engines (amended May 19, 2011)

New Title V Permit #	Description	Title V Permit Condition Number		Change	Basis
		Current	New		
N-7172-4-2	300 bhp Diesel Fired Emergency Fire pump	7	4	Specify that the fuel sulfur content limit is 15 ppmw	93115.5(c)
		None	9	Monitor operational characteristics	93115.10(f)
		9	3	Add this rule as a basis for this condition (elapsed time meter requirement)	93115.10(d)

**40 CFR Part 82 Subparts B and F, Stratospheric Ozone
(subpart B last amended August 11, 2011, subpart F last amended April 13, 2005)**

This rule is addressed by the applicable facility-wide umbrella general template (SJV-UM-0-3), which the facility operator will be utilizing. The requirements of general template SJV-UM-03 have been previously reviewed by, and approved by the U.S. EPA and have been public noticed. Therefore, the requirements of this rule have been fully addressed and need not be readdressed.

**40 CFR Part 61 Subpart M, National Emission Standard for Asbestos
(last amended February 12, 2011)**

This rule is addressed by the applicable facility-wide umbrella general template (SJV-UM-0-3), which the facility operator will be utilizing. The requirements of general template SJV-UM-03 have been previously reviewed by, and approved by the U.S. EPA and have been public noticed. Therefore, the requirements of this rule have been fully addressed and need not be readdressed.

**District Rule 4703, Stationary Gas Turbines
(amended September 20, 2007)**

New Title V Permit #	Description	Title V Permit Condition Number		Change	Basis
		Current	New		
N-7172-1-4 N-7172-2-4	Natural Gas Fired Turbines	7	7	Reference Rule 4703 as a basis for the CEMS equipment	Sect 6.2
		25	26	Reference Rule 4703 as a basis for the CO limit	Sect 5.2, Table 5-4
		20	21	Reference Rule 4703 as a basis for the NOx limit	Sect 5.1.2, Table 5-2
		17	18	Reference Rule 4703 as a basis for the start-up/shutdown duration limit	Sect 5.3.3
		None	59	Add start-up and shutdown duration record keeping requirement	Sect 6.2.8
		None	58	Add requirement to keep records of the date, time and duration of each bypass transition period and each primary re-ignition period	Sect 6.2.11
		45	42	Add Rule 4703 as a basis for the annual source testing requirement	Sect 6.3.1

**District Rule 4801, Sulfur Compounds
(last amended November 18, 1992)**

This rule is applicable to units that emit sulfur compounds. The fuel fired equipment at this facility is expected to emit sulfur compounds. District Rule 4801 was last amended on December 17, 1992, and has been submitted to the EPA to replace Stanislaus County Rule 407 in the SIP. This District Rule is at least as stringent as the county rule, as demonstrated by the following comparison:

Comparison of District Rule 4801 and Stanislaus County Rule 407		
REQUIREMENT	Rule 4801	Rule 407
A person shall not discharge into the atmosphere sulfur compounds exceeding in concentration at the point of discharge 0.2 percent by volume calculated as sulfur dioxide on a dry basis averaged over 15 consecutive minutes.	✓	✓
EPA Method 8 and ARB Method 1-100 shall be used to determine such emissions.	✓	

New Title V Permit #	Description	Title V Permit Condition Number		Change	Basis
		Current	New		
N-7172-1-4 N-7172-2-4	Natural Gas Fired Turbines	5	4	No change. The permitted fuel type restriction will ensure compliance with this requirement	Sect 3.1
N-7172-4-2	300 bhp Diesel Fired Emergency Fire Pump Engine	7	4	No change. The permitted fuel type restriction will ensure compliance with this requirement	Sect 3.1

40 CFR Part 60 Subpart KKKK, Standards of Performance for Stationary Combustion Turbines (last amended March 20, 2009)

New Title V Permit #	Description	Title V Permit Condition Number		Change	Basis
		Current	New		
N-7172-1-4 N-7172-2-4	Natural Gas Fired Turbines	52	53	Reference 40 CFR Part 75, Appendix D as a basis for the fuel sulfur test methods condition	40 CFR Part 75, App. D
		20	21	Reference, 40 CFR Part 60.4320(a) as a bases for the NOx limit	40 CFR Part 60.4320(a) 40 CFR Part 60.4380(b)(1)
		59	62	Add 40 CFR Part 60.4375(a) and 60.4395 and 40 CFR Part 60.7(c-d) as bases for this condition.	40 CFR Part 60.4375(a) 40 CFR Part 60.4395
		7	7	Revise this condition to specify that the NOx and O ₂ CEMS be installed and certified in accordance with the requirements of 40 CFR Part 75 [this is an option allowed by 40 CFR Part 60.4345(a)] and to specify the monitor downtime reporting requirements of Part 75 No change to the CO CEMS requirements.	40 CFR Part 60.13(a) 40 CFR Part 60.4340(b) 40 CFR Part 60.4345(a) 40 CFR Part 60.4350(d)
		5	4	Add 40 CFR Parts 60.4330(a)(2), 60.4395 and 60.7 as bases for this condition.	40 CFR Part 60.4330(a)(2) 40 CFR Part 60.4395 40 CFR Part 60.7
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40 CFR Part 60 Subpart KKKK, Standards of Performance for Stationary Combustion Turbines - Continued (last amended March 20, 2009)

New Title V Permit #	Description	Title V Permit Condition Number		Change	Basis
		Current	New		
N-7172-1-4 N-7172-2-4	Natural Gas Fired Turbines	12	11	Remove 40 CFR Part 51, Subpart P requirements because they are not applicable. Replace with applicable data sampling, analyzing and recording requirements of 40 CFR Part 60.13 (as required by 40 CFR parts 60.4345 and 60.4350)	40 CFR Part 60.13(e)(2) 40 CFR Part 60.13(h)(2) 40 CFR Part 60.4345(b) 40 CFR Part 60.4350(a)
		13	14	Remove the requirement to notify the District prior to the completion of audits because 40 CFR Part 60 Subpart F does not require such notification. Add the requirement to include CEMS Out-of-Control episodes in the quarterly report to the District.	40 CFR Part 60 Subpart F (included in the 40 CFR Part 60 Subpart KKKK section because the CEMS is required by Subpart KKKK)
Continued – Next Page					

40 CFR Part 60 Subpart KKKK, Standards of Performance for Stationary Combustion Turbines - Continued (last amended March 20, 2009)

New Title V Permit #	Description	Title V Permit Condition Number		Change	Basis
		Current	New		
N-7172-1-4 N-7172-2-4	Natural Gas Fired Turbines	None	12	Add zero and span check requirements and excessive span drift requirements.	40 CFR Part 60.13(d)(1) (included in the 40 CFR Part 60 Subpart KKKK section because the CEMS is required by Subpart KKKK)
		None	13	Add CEMS Quality Assurance/Quality Control (QA/QC) Requirements	40 CFR Part 60 Appendix F (included in the 40 CFR Part 60 Subpart KKKK section because the CEMS is required by Subpart KKKK)

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

This subpart applies to each reciprocating internal combustion engine located at a Major or Area source of HAP emissions.

The tables that follow summarize the requirements and map the Title V permit conditions.

New Title V Permit #	Description	Title V Permit Condition #		Requirement	Basis
		Current	New		
N-7172-4-2	300 bhp Diesel Fired Emergency Fire Pump Engine			Require compliance with the requirements of Table 2d:	Sect 63.6603(a)
		None	10	Change oil and filter every 500 hours of operation or annually, whichever comes first	Table 2d (Category 4a)
		None	11	Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary	Table 2d (Category 4b)
		None	12	Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary	Table 2d (Category 4c)
		None	10, 11, 12	If one of these deadlines passes while the unit is operating for an emergency, the maintenance or inspection may be delayed until the emergency is over	Footnote 2 of Table 2d
		None	10	(This source has the option to utilize an oil analysis program as described in § 63.6625(i) in order to extend the specified oil change requirement in Table 2d of this subpart)	Footnote 1 of Table 2d and 63.6625(i)
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**40 CFR Part 63 Subpart ZZZZ, National Emission Standards for
Hazardous Air Pollutants for Stationary Reciprocating Internal
Combustion Engines - Continued**

New Title V Permit #	Description	Title V Permit Condition Number		Requirement	Basis
		Current	New		
N-7172-4-2	300 bhp Diesel Fired Emergency Fire Pump Engine	N/A	N/A	Fuel Requirements: This requirement does not come into effect until 1/1/2015	Sect 63.6604(b)
		None	7	Operate the unit in a manner consistent with safety and good air pollution control practices for minimizing emissions	Sect 63.6605(b)
		None	7	Require that engines and after-treatment control devices (if any) be operated and maintained in accordance with manufacturer's emission related written instructions. Alternatively, a facility may develop their own maintenance plan that provides maintenance that is consistent with good air pollution control practice for minimizing emissions.	Sect 63.6625(e)(3) Sect 63.6640 (a) & Table 6 (category 9)
		9	3	Add 40 CFR Section 63.6625(f) as basis for this requirement (hour meter)	Sect 63.6625(f)
		6	8	Add 40 CFR Section 63.6640(f) as basis for this requirement	Sect 63.6640(f)
		None	15	Maintenance records	Sect 63.6655(e)(2)
		None	10, 11, 12	Reporting	Footnote 2 of Table 2d
		8	14	Add 40 CFR Section 63.6655(f) as basis for this requirement	Sect 63.6655(f)
		None	13	Idle Minimization	Sect 63.6625(h)

40 CFR Part 64, Compliance Assurance Monitoring (CAM)

General CAM Applicability:

For a unit to be subject to CAM, all of the following must be true:

1. The facility must be a Major Source or otherwise subject to Title V permitting
2. The unit must have an emission limit that is complied with utilizing a control device
3. The uncontrolled emissions from the emission unit must be in excess of the Major Source threshold.

N-7172-1 and N-7172-2 (Combined Cycle Combustion Turbine Generators):

The facility is a Major Source for NO_x, CO, VOC, SO_x and PM₁₀ and each unit is subject to a NO_x, CO, VOC, SO_x and PM₁₀ emission limit. However, the units are equipped with emission control devices for only NO_x, CO and VOC. Therefore, per 40 CFR Part 64.2(a), each unit is subject to CAM for NO_x, CO and VOC unless it is exempt.

NO_x and CO:

The units are equipped with Continuous Emission Monitoring (CEM) systems for each of these pollutants. Therefore, they are exempt from CAM for NO_x and CO per 40 CFR Part 64.2(b)(vi).

VOC:

As shown in Appendix D of this document, neither unit has the potential to emit of VOC in excess of the Major Source threshold of 20,000 lb/yr. Therefore, CAM applicability requirement number 3 is not triggered and CAM is not required.

N-7172-3 (Cooling Tower):

As shown in Appendix D of this document, the potential to emit of PM₁₀ will not be in excess of the Major Source threshold of 140,000 lb/yr. Therefore, CAM applicability requirement number 3 is not triggered and CAM is not required.

N-7172-4 (Diesel Fired Emergency Engine):

The emission limits are not complied with utilizing an emission control device. Therefore, CAM applicability requirement number 2 is not triggered and CAM is not required.

IX. Permit Shields

A permit shield legally protects a facility from enforcement of the shielded regulations when a source is in compliance with the terms and conditions of the Title V permit. Compliance with the terms and conditions of the Permit to Operate is considered compliance with all applicable requirements upon which those conditions are based.

A. Requirements addressed by Model General Permit Templates

1. Model General Permit Template SJV-UM-03

The facility submitted a Title V General Permit Template Qualification form for the use of Facility-Wide Umbrella General Permit Template SJV-UM-0-3. Therefore, the permit shields granted in General Permit Template SJV-UM-03 are included as conditions 39 and 40 of permit N-7172-0-2.

B. Requirements Not Addressed by Model General Permit Templates

None

X. Permit Conditions

See Appendix A – Draft Renewed Title V Operating Permit.

XI. Appendices

Appendix A: Draft Renewed Title V Operating Permit
Appendix B: Previous Title V Operating Permit
Appendix C: CAM Applicability Determination
Appendix D: Major HAP Source Determination
Appendix E: Detailed Facility List
Appendix F: Title V Compliance Certification Form

Appendix A
Draft Renewed Title V Operating Permit

San Joaquin Valley Air Pollution Control District

FACILITY: N-7172-0-2

EXPIRATION DATE: 09/30/2014

FACILITY-WIDE REQUIREMENTS

1. {4362} The owner or operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, 6.1; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit
2. {4363} The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit
3. {4364} The owner or operator of any stationary source operation that emits more than 25 tons per year of nitrogen oxides or reactive organic compounds, shall provide the District annually with a written statement in such form and at such time as the District prescribes, showing actual emissions of nitrogen oxides and reactive organic compounds from that source. [District Rule 1160, 5.0] Federally Enforceable Through Title V Permit
4. {4365} Any person building, altering or replacing any operation, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, shall first obtain an Authority to Construct (ATC) from the District unless exempted by District Rule 2020 (12/20/07). [District Rule 2010, 3.0 and 4.0; and 2020] Federally Enforceable Through Title V Permit
5. {4366} The permittee must comply with all conditions of the permit including permit revisions originated by the District. All terms and conditions of a permit that are required pursuant to the Clean Air Act (CAA), including provisions to limit potential to emit, are enforceable by the EPA and Citizens under the CAA. Any permit noncompliance constitutes a violation of the CAA and the District Rules and Regulations, and is grounds for enforcement action, for permit termination, revocation, reopening and reissuance, or modification; or for denial of a permit renewal application. [District Rules 2070, 7.0; 2080; and 2520, 9.9.1 and 9.13.1] Federally Enforceable Through Title V Permit
6. {4367} A Permit to Operate or an Authority to Construct shall not be transferred unless a new application is filed with and approved by the District. [District Rule 2031] Federally Enforceable Through Title V Permit
7. {4368} Every application for a permit required under Rule 2010 (12/17/92) shall be filed in a manner and form prescribed by the District. [District Rule 2040] Federally Enforceable Through Title V Permit
8. {4369} The operator shall maintain records of required monitoring that include: 1) the date, place, and time of sampling or measurement; 2) the date(s) analyses were performed; 3) the company or entity that performed the analysis; 4) the analytical techniques or methods used; 5) the results of such analysis; and 6) the operating conditions at the time of sampling or measurement. [District Rule 2520, 9.4.1] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate. Any amendments to these Facility-wide Requirements that affect specific Permit Units may constitute modification of those Permit Units.

Facility Name: WALNUT ENERGY CENTER AUTHORITY
Location: 600 S WASHINGTON ROAD, TURLOCK, CA
N-7172-0-2 Jun 23 2014 8:17AM - SCHONHOM

9. {4370} The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit and, for continuous monitoring instrumentation, all calibration and maintenance records and all original strip-chart recordings. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. {4371} The operator shall submit reports of any required monitoring at least every six months unless a different frequency is required by an applicable requirement. All instances of deviations from permit requirements must be clearly identified in such reports. [District Rule 2520, 9.5.1] Federally Enforceable Through Title V Permit
11. {4372} Deviations from permit conditions must be promptly reported, including deviations attributable to upset conditions, as defined in the permit. For the purpose of this condition, promptly means as soon as reasonably possible, but no later than 10 days after detection. The report shall include the probable cause of such deviations, and any corrective actions or preventive measures taken. All required reports must be certified by a responsible official consistent with section 10.0 of District Rule 2520 (6/21/01). [District Rules 2520, 9.5.2 and 1100, 7.0] Federally Enforceable Through Title V Permit
12. {4373} If for any reason a permit requirement or condition is being challenged for its constitutionality or validity by a court of competent jurisdiction, the outcome of such challenge shall not affect or invalidate the remainder of the conditions or requirements in that permit. [District Rule 2520, 9.7] Federally Enforceable Through Title V Permit
13. {4374} It shall not be a defense for a permittee 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 the permit. [District Rule 2520, 9.8.2] Federally Enforceable Through Title V Permit
14. {4375} The permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [District Rule 2520, 9.8.3] Federally Enforceable Through Title V Permit
15. {4376} The permit does not convey any property rights of any sort, or any exclusive privilege. [District Rule 2520, 9.8.4] Federally Enforceable Through Title V Permit
16. {4377} The Permittee shall furnish to the District, within a reasonable time, any information that the District may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the District 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 EPA along with a claim of confidentiality. [District Rule 2520, 9.8.5] Federally Enforceable Through Title V Permit
17. {4378} The permittee shall pay annual permit fees and other applicable fees as prescribed in Regulation III of the District Rules and Regulations. [District Rule 2520, 9.9] Federally Enforceable Through Title V Permit
18. {4379} Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to enter the permittee's premises where a permitted source is located or emissions related activity is conducted, or where records must be kept under condition of the permit. [District Rule 2520, 9.13.2.1] Federally Enforceable Through Title V Permit
19. {4380} Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit. [District Rule 2520, 9.13.2.2] Federally Enforceable Through Title V Permit
20. {4381} Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to inspect at reasonable times any facilities, equipment, practices, or operations regulated or required under the permit. [District Rule 2520, 9.13.2.3] Federally Enforceable Through Title V Permit
21. {4382} Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. [District Rule 2520, 9.13.2.4] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

22. {4383} No air contaminants shall be discharged into the atmosphere for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker than Ringelmann #1 or equivalent to 20% opacity and greater, unless specifically exempted by District Rule 4101 (02/17/05). If the equipment or operation is subject to a more stringent visible emission standard as prescribed in a permit condition, the more stringent visible emission limit shall supersede this condition. [District Rule 4101, and County Rules 401 (in all eight counties in the San Joaquin Valley)] Federally Enforceable Through Title V Permit
23. {4384} No person shall manufacture, blend, repackage, supply, sell, solicit or apply any architectural coating with a VOC content in excess of the corresponding limit specified in Table of Standards 1 effective until 12/30/10 or Table of Standards 2 effective on and after 1/1/11 of District Rule 4601 (12/17/09) for use or sale within the District. [District Rule 4601, 5.1] Federally Enforceable Through Title V Permit
24. {4385} All VOC-containing materials subject to Rule 4601 (12/17/09) shall be stored in closed containers when not in use. [District Rule 4601, 5.4] Federally Enforceable Through Title V Permit
25. {4386} The permittee shall comply with all the Labeling and Test Methods requirements outlined in Rule 4601 sections 6.1 and 6.3 (12/17/09). [District Rule 4601, 6.1 and 6.3] Federally Enforceable Through Title V Permit
26. {4387} With each report or document submitted under a permit requirement or a request for information by the District or EPA, the permittee shall include a certification of truth, accuracy, and completeness by a responsible official. [District Rule 2520, 9.13.1 and 10.0] Federally Enforceable Through Title V Permit
27. {4388} If the permittee performs maintenance on, or services, repairs, or disposes of appliances, the permittee shall comply with the standards for Recycling and Emissions Reduction pursuant to 40 CFR Part 82, Subpart F. [40 CFR 82 Subpart F] Federally Enforceable Through Title V Permit
28. {4389} If the permittee performs service on motor vehicles when this service involves the ozone-depleting refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the standards for Servicing of Motor Vehicle Air Conditioners pursuant to all the applicable requirements as specified in 40 CFR Part 82, Subpart B. [40 CFR Part 82, Subpart B] Federally Enforceable Through Title V Permit
29. {4390} Disturbances of soil related to any construction, demolition, excavation, extraction, or other earthmoving activities shall comply with the requirements for fugitive dust control in District Rule 8021 unless specifically exempted under Section 4.0 of Rule 8021 (8/19/2004) or Rule 8011 (8/19/2004). [District Rule 8021 and 8011] Federally Enforceable Through Title V Permit
30. {4391} Outdoor handling, storage and transport of any bulk material which emits dust shall comply with the requirements of District Rule 8031, unless specifically exempted under Section 4.0 of Rule 8031 (8/19/2004) or Rule 8011 (8/19/2004). [District Rule 8031 and 8011] Federally Enforceable Through Title V Permit
31. {4392} An owner/operator shall prevent or cleanup any carryout or trackout in accordance with the requirements of District Rule 8041 Section 5.0, unless specifically exempted under Section 4.0 of Rule 8041 (8/19/2004) or Rule 8011 (8/19/2004). [District Rule 8041 and 8011] Federally Enforceable Through Title V Permit
32. {4393} Whenever open areas are disturbed, or vehicles are used in open areas, the facility shall comply with the requirements of Section 5.0 of District Rule 8051, unless specifically exempted under Section 4.0 of Rule 8051 (8/19/2004) or Rule 8011 (8/19/2004). [District Rule 8051 and 8011] Federally Enforceable Through Title V Permit
33. {4394} Any paved road or unpaved road shall comply with the requirements of District Rule 8061 unless specifically exempted under Section 4.0 of Rule 8061 (8/19/2004) or Rule 8011 (8/19/2004). [District Rule 8061 and Rule 8011] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

34. {4395} Any unpaved vehicle/equipment area that anticipates more than 50 Average annual daily Trips (AADT) shall comply with the requirements of Section 5.1.1 of District Rule 8071. Any unpaved vehicle/equipment area that anticipates more than 150 vehicle trips per day (VDT) shall comply with the requirements of Section 5.1.2 of District Rule 8071. On each day that 25 or more VDT with 3 or more axles will occur on an unpaved vehicle/equipment traffic area, the owner/operator shall comply with the requirements of Section 5.1.3 of District Rule 8071. On each day when a special event will result in 1,000 or more vehicles that will travel/park on an unpaved area, the owner/operator shall comply with the requirements of Section 5.1.4 of District Rule 8071. All sources shall comply with the requirements of Section 5.0 of District Rule 8071 unless specifically exempted under Section 4.0 of Rule 8071 (9/16/2004) or Rule 8011 (8/19/2004). [District Rule 8071 and Rule 8011] Federally Enforceable Through Title V Permit
35. {4396} Any owner or operator of a demolition or renovation activity, as defined in 40 CFR 61.141, shall comply with the applicable inspection, notification, removal, and disposal procedures for asbestos containing materials as specified in 40 CFR 61.145 (Standard for Demolition and Renovation). [40 CFR 61 Subpart M] Federally Enforceable Through Title V Permit
36. {4397} The permittee shall submit certifications of compliance with the terms and standards contained in Title V permits, including emission limits, standards and work practices, to the District and the EPA annually (or more frequently as specified in an applicable requirement or as specified by the District). The certification shall include the identification of each permit term or condition, the compliance status, whether compliance was continuous or intermittent, the methods used for determining the compliance status, and any other facts required by the District to determine the compliance status of the source. [District Rule 2520, 9.16] Federally Enforceable Through Title V Permit
37. {4398} The permittee shall submit an application for Title V permit renewal to the District at least six months, but not greater than 18 months, prior to the permit expiration date. [District Rule 2520, 5.2] Federally Enforceable Through Title V Permit
38. {4399} When a term is not defined in a Title V permit condition, the definition in the rule cited as the origin and authority for the condition in a Title V permits shall apply. [District Rule 2520, 9.1.1] Federally Enforceable Through Title V Permit
39. {4400} Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: Rule 401 (Madera, Fresno, Kern, Kings, San Joaquin, Stanislaus, Tulare and Merced), Rule 110 (Fresno, Stanislaus, San Joaquin), Rule 109 (Merced), Rule 113 (Madera), Rule 111 (Kern, Tulare, Kings), and Rule 202 (Fresno, Kern, Tulare, Kings, Madera, Stanislaus, Merced, San Joaquin). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
40. {4401} Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rules 1100, sections 6.1 and 7.0 (12/17/92); 2010, sections 3.0 and 4.0 (12/17/92); 2031 (12/17/92); 2040 (12/17/92); 2070, section 7.0 (12/17/92); 2080 (12/17/92); 4101 (2/17/05); 4601 (12/17/09); 8021 (8/19/2004); 8031 (8/19/2004); 8041 (8/19/2004); 8051 (8/19/2004); 8061 (8/19/2004); and 8071 (9/16/2004). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
41. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report beginning every November 1, unless alternative dates are approved by the District Compliance Division. These reports are due within 30 days after the end of the reporting period. [District Rule 2520] Federally Enforceable Through Title V Permit
42. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
43. Facilities N-2246 and N-7172 are included in the same stationary source. [District Rule 2201] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-7172-1-4

EXPIRATION DATE: 09/30/2014

EQUIPMENT DESCRIPTION:

84 MW NOMINALLY RATED COMBINED-CYCLE POWER GENERATING SYSTEM #1 CONSISTING OF A 1,047 MMBTU/HR GENERAL ELECTRIC FRAME 7EA NATURAL GAS-FIRED COMBUSTION TURBINE GENERATOR WITH DRY LOW NOX COMBUSTOR, AN INLET AIR FILTRATION AND EVAPORATIVE COOLING SYSTEM, A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM, AN OXIDATION CATALYST, HEAT RECOVERY STEAM GENERATOR #1 (HRSG) AND A 100 MW NOMINALLY RATED STEAM TURBINE SHARED WITH PERMIT UNIT N-7172-2

PERMIT UNIT REQUIREMENTS

1. The gas turbine engine and generator lube oil vents shall be equipped with mist eliminators. Visible emissions from lube oil vents shall not exhibit opacity of 5% or greater except for up to three minutes in any hour. [District Rule 2201] Federally Enforceable Through Title V Permit
2. All equipment shall be maintained in proper operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
4. The gas turbine engine shall be fired exclusively on natural gas with a sulfur content of no greater than 0.36 grain of sulfur compounds (as S) per 100 dry scf of natural gas. [District Rules 2201 and 4801 and 40 CFR Part 60.4330(a)(2), 40 CFR Part 60.4395 and 40 CFR Part 60.7)] Federally Enforceable Through Title V Permit
5. Testing to demonstrate compliance with the fuel sulfur content limit of this permit shall be conducted weekly. Once eight consecutive weekly tests show compliance, the fuel sulfur content testing frequency may be reduced to once every calendar quarter. If a quarterly test shows a violation of the sulfur content limit of this permit then weekly testing shall resume and continue until eight consecutive tests show compliance. Once compliance is shown on eight consecutive weekly tests then testing may return to quarterly. [District Rules 2201] Federally Enforceable Through Title V Permit
6. The permittee shall monitor and record the fuel flow rate to the turbine, NOx emission rate, the CO emission rate, the ammonia injection rate, the exhaust temperature both prior to and after the SCR unit, the exhaust oxygen content, and the exhaust flow rate. [District Rules 2201, 4001, and 4703] Federally Enforceable Through Title V Permit
7. The exhaust stack shall be equipped with a continuous emissions monitor (CEM) for NOx, CO, and O2. The CO CEM shall meet the requirements of 40 CFR parts 60 and the NOx and O2 CEMS shall be installed and certified in accordance with the requirements of 40 CFR Part 75. The CEMS shall be capable of monitoring emissions during startups and shutdowns as well as during normal operating conditions. Periods where the missing data substitution procedures in Part 75 Subpart D are applied shall be reported as monitor downtime in the District Quarterly CEMS Report. [District Rules 1080, 2201 and 4703 and 40 CFR Part 60.13(a), 40 CFR Part 60.4340(b), 40 CFR Part 60.4345(a) and 40 CFR Part 60.4350(d)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

8. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NO_x, CO, and O₂ analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Source Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit
9. The facility shall install and maintain equipment, facilities, and systems compatible with the District's CEM data polling software system and shall make CEM data available to the District's automated polling system on a daily basis. [District Rule 1080] Federally Enforceable Through Title V Permit
10. Upon notice by the District that the facility's CEM system is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEM data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
11. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing and data recording) for each successive 15-minute period or shall meet equivalent specifications established by mutual agreement of the District, the ARB and the EPA. For partial unit operating hours, at least one valid data point must be obtained for each quadrant of the hour in which the unit operates. For unit operating hours in which required quality assurance and maintenance activities are performed on the CEMS, a minimum of two valid data points (one in each of two quadrants) are required to validate the hour. [District Rule 1080, 40 CFR Part 60.13(e)(2), 40 CFR Part 60.13(h)(2), 40 CFR Part 60.4345(b) and 40 CFR Part 60.4350(a)] Federally Enforceable Through Title V Permit
12. Owners and operators of a CEMS installed in accordance with the provisions of 40 CFR Part 60 must check zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span must at a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceed two times the limit of the applicable performance specification in Appendix B of 40 CFR Part 60. The system must allow the amount of excess zero and span drift to be recorded and quantified whenever specified. [40 CFR 60.13(d)(1)] Federally Enforceable Through Title V Permit
13. Owners and operators must develop and implement a Quality Control (QC) program. As a minimum, each QC program shall include written procedures that describe in detail, complete, step-by-step procedures and operations for calibration of CEMS, calibration drift determination and adjustment, CEMS preventative maintenance, data recording/calculations/reporting, accuracy audit procedures, and corrective action for malfunctioning CEMS. Whenever excessive inaccuracies occur for two consecutive quarters, the source owner or operator must revise the current written procedures or modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies. These written procedures shall be kept on record and shall be made available for inspection by the enforcement agency. [40 CFR Part 60, Appendix F] Federally Enforceable Through Title V Permit
14. In accordance with 40 CFR, Part 60, Appendix F, 5.1, cylinder gas audits (CGA) or relative accuracy audits (RAA) of continuous emission monitors shall be conducted quarterly, except during quarters in which a relative accuracy test audit (RATA) is performed. Audit reports and an Out-of-Control Detail Report, pursuant to 40 CFR Part 60 Subpart F, shall be submitted along with quarterly compliance reports to the District. [District Rule 1080 and 40 CFR Part 60 Appendix F] Federally Enforceable Through Title V Permit
15. The owner/operator shall perform a relative accuracy test audit (RATA) as specified by 40 CFR Part 60, Appendix F, 5.11, at least once every four calendar quarters. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080] Federally Enforceable Through Title V Permit
16. In the event of a breakdown of monitoring equipment, the owner shall notify the District as soon as reasonably possible, but no later than 8 hours after its detection, unless the owner or operator demonstrates to the satisfaction of the APCO that a longer reporting period was necessary, and shall initiate repairs. The owner shall inform the District of the intent to shutdown any monitoring equipment at least 24 hours prior to the event. [District Rule 1080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

17. Startup is defined as the period beginning with turbine initial firing until the unit meets the ppmvd emission limits for steady state operation. Shutdown is defined as the period beginning with initiation of turbine shutdown sequence and ending with cessation of firing of the gas turbine engine. Startup and shutdown events shall not exceed 296 hours per calendar year. Startup emissions must be counted toward each applicable emission limit (lb/day and lb/yr). [District Rule 2201] Federally Enforceable Through Title V Permit
18. The combined startup and shutdown period duration shall not exceed five hours in any one day, commencing at midnight. Emissions during startup and shutdown periods must be counted toward the applicable daily emission limitations. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
19. The unit shall comply with the New Source Review based NO_x and CO limits of this permit within 5 hours after initial start-up. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
20. The NO_x emissions during start-up and shutdown periods shall not exceed 119.0 lb/hour. [District Rule 2201] Federally Enforceable Through Title V Permit
21. The NO_x emissions during steady state operation shall not exceed 2.0 ppmvd @ 15% O₂ over a 1 hour average (clock hour basis). Steady-state period refers to any periods that is not a start-up or shut down period. A clock hour in a one hour average will commence at the top of the hour. [District Rules 2201 and 4703, 40 CFR Part 60.4320(a) and 40 CFR Part 60.4380(b)(1)] Federally Enforceable Through Title V Permit
22. The combined total NO_x emissions from start-up, shut down, and steady state operation shall not exceed 444.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Compliance with NO_x emission limitations during steady state operation shall not be required during short-term excursions limited to a cumulative total of 10 hours per rolling 12-month period. Short-term excursions are defined as 15 minute periods designated by the owner/operator (and approved by the APCO) that are the direct result of transient load conditions, not to exceed four consecutive 15-minute periods, when the 15-minute average NO_x concentration exceeds 2.0 ppmvd @ 15% O₂. The maximum 1-hour average NO_x concentration for periods that include short-term excursions shall not exceed 30 ppmvd @ 15% O₂. [District Rule 2201] Federally Enforceable Through Title V Permit
24. Examples of transient load conditions include, but are not limited to the following: (1) Initiation/shutdown of combustion turbine inlet air cooling and (2) Rapid combustion turbine load changes. All emissions during short-term excursions shall accrue towards the hourly, daily, and annual emissions limitations of this permit and shall be included in all calculations of hourly, daily, and annual mass emission rates as required by this permit. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
25. The CO emissions during start-up and shutdown periods shall not exceed 129.0 lb/hour. [District Rule 2201] Federally Enforceable Through Title V Permit
26. The CO emissions during steady state operation shall not exceed 4.0 ppmvd @ 15% O₂ over a 3 hour rolling average. Steady-state period refers to any periods that is not a start-up or shut down period. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
27. The combined total CO emissions from start-up, shut down, and steady state operation shall not exceed 558.8 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
28. The VOC emissions during start-up and shutdown periods shall not exceed 16.0 lb/hour. [District Rule 2201] Federally Enforceable Through Title V Permit
29. The VOC emissions during steady state operation shall not exceed 1.4 ppmvd @ 15% O₂ over a 3 hour rolling average. Steady-state period refers to any periods that is not a start-up or shut down period. [District Rule 2201] Federally Enforceable Through Title V Permit
30. The combined total VOC emissions from start-up, shut down, and steady state operation shall not exceed 83.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
31. The PM₁₀ emissions rate shall not exceed 7.0 lb/hour and 168.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

32. The SO_x emission rate shall not exceed 1.05 lb/hour and 25.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
33. Ammonia (NH₃) emissions shall not exceed 10 ppmvd @ 15% O₂ over a 24 hour rolling average. [District Rule 2201] Federally Enforceable Through Title V Permit
34. Compliance with ammonia emission limit shall be demonstrated utilizing one of the following procedures: 1) calculate the daily ammonia emissions using the following equation: $(\text{ppmvd @ 15\% O}_2) = ((a - (b \times c / 1,000,000)) \times (1,000,000 / b)) \times d$, where a = ammonia injection rate (lb/hr) / (17 lb/lb mol), b = dry exhaust flow rate (lb/hr) / (29 lb/lb mol), c = change in measured NO_x concentration ppmvd @ 15% O₂ across the catalyst, and d = correction factor. The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip; 2.) utilize another District-approved calculation method using measured surrogate parameters to determine the daily ammonia emissions in ppmvd @ 15% O₂. If this option is chosen, the permittee shall submit a detailed calculation protocol for District approval at least 60 days prior to commencement of operation; 3.) Alternatively, the permittee may utilize a continuous in-stack ammonia monitor to verify compliance with the ammonia emissions limit. If this option is chosen, the permittee shall submit a monitoring plan for District approval at least 60 days prior to commencement of operation. [District Rule 4102]
35. The annual emissions from this unit shall not exceed 99,991 lb/year for CO and 17,404 lb/year for VOC. [District Rule 2201] Federally Enforceable Through Title V Permit
36. The combined quarterly NO_x emissions from permit units N-7172-1 and N-7172-2 shall not exceed 35,000 lb/quarter. [District Rule 2201] Federally Enforceable Through Title V Permit
37. The combined annual NO_x emissions from permit units N-7172-1 and N-7172-2 shall not exceed 140,000 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
38. The combined quarterly CO emissions from permit units N-7172-1 and N-7172-2 shall not exceed 49,996 lb/quarter. [District Rule 2201] Federally Enforceable Through Title V Permit
39. The combined annual CO emissions from permit units N-7172-1 and N-7172-2 shall not exceed 199,982 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
40. Each one hour period shall commence on the hour. Each one hour period in a three hour rolling average will commence on the hour. The three hour average will be compiled from the three most recent one hour periods. Each one hour period in a twenty-four hour average for ammonia slip will commence on the hour. The twenty-four hour average will be calculated starting and ending at twelve-midnight. [District Rule 2201] Federally Enforceable Through Title V Permit
41. Daily emissions will be compiled for a twenty-four hour period starting and ending at twelve-midnight. Each calendar month in a twelve consecutive month rolling emissions total will commence at the beginning of the first day of the month. The twelve consecutive month rolling emissions total to determine compliance with annual emission limit will be compiled from the twelve most recent calendar months. [District Rule 2201] Federally Enforceable Through Title V Permit
42. Source testing to demonstrate compliance with the NO_x (ppmvd), CO (ppmvd), VOC (ppmvd), PM₁₀ (lb/hour), and NH₃ (ppmvd) emission limits shall be conducted at least once every twelve months. [District Rule 2201, 4001 and 4703] Federally Enforceable Through Title V Permit
43. Source testing to measure startup NO_x, CO, and VOC mass emission rates shall be conducted for one of the gas turbines (N-7172-1 or N-7172-2) at least once every seven years. CEM relative accuracy shall be determined during startup source testing in accordance with 40 CFR Part 60, Appendix B. If CEM data is not certified to determine compliance with NO_x and CO startup emission limits, then source testing to measure startup NO_x and CO mass emission rates shall be conducted at least once every 12 months. [District Rule 2201 and 4001] Federally Enforceable Through Title V Permit
44. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

45. Source testing shall be witnessed or authorized by District personnel. [District Rule 1081] Federally Enforceable Through Title V Permit
46. The results of each source test shall be received by the District no later than 60 days after the source test date. [District Rule 1081] Federally Enforceable Through Title V Permit
47. NOx emissions (referenced as NO2) shall be determined using EPA Method 7E, EPA Method 20, or CARB method 20. The test results shall be corrected to ISO standard conditions as defined in 40 CFR Part 60 Subpart GG Section 60.335. [District Rules 1081, 2201, 4001, and 4703] Federally Enforceable Through Title V Permit
48. VOC emissions (referenced as methane) shall be determined using EPA method 18 or EPA method 25. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
49. CO emissions shall be determined using EPA method 10 or EPA method 10B. [District Rules 1081, 2201, and 4703] Federally Enforceable Through Title V Permit
50. Source testing to measure concentrations of PM10 shall be conducted using EPA methods 201 and 202, or EPA methods 201A and 202, or CARB method 501 in conjunction with CARB method 5. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
51. Ammonia (NH3) emissions shall be determined using BAAQMD Method ST-1B. [District Rules 1081 and 4102]
52. Oxygen content of the exhaust gas shall be determined by using EPA method 3, EPA method 3A, or EPA method 20. [District Rules 1081, 2201, and 4703] Federally Enforceable Through Title V Permit
53. If necessary, testing for fuel sulfur content shall be conducted utilizing ASTM Method D 3246, ASTM Method D1072, ASTM Method D4468, ASTM Method D5504 or ASTM Method D3246. [District Rules 1081, 4001 and 40 CFR Part 75, Subpart D] Federally Enforceable Through Title V Permit
54. EPA approved alternative source testing methods will be allowed, upon District approval, provided it does not result in a relaxation of emission limitations. The request to utilize EPA approved alternative source testing methods must be submitted in writing and written approval received from the District prior to the submission of the source test plan. [District Rule 1081 and 4001] Federally Enforceable Through Title V Permit
55. A violation of NOx and CO emission standards measured and recorded by the CEMs shall be reported by the operator to the APCO within 96 hours. [District Rule 1080, 9.0] Federally Enforceable Through Title V Permit
56. The permittee shall maintain the following records: the date, time and duration of any malfunction of the continuous monitoring equipment; dates of performance testing; dates of evaluations, calibrations, checks, and adjustments of the continuous monitoring equipment; date and time period which a continuous monitoring system or monitoring device was inoperative, maintenance of CEM's, and emission measurements. [District Rules 2201, 4703, 1080, 7.3 and 40 CFR Part 60 Subpart KKKK] Federally Enforceable Through Title V Permit
57. The permittee shall maintain a daily record that includes the actual turbine start-up and stop times (local time), total hours of operation, and the quantity and type of fuel used. [District Rule 4703] Federally Enforceable Through Title V Permit
58. The permittee shall maintain records of the date, time and duration of each bypass transition period and each primary re-ignition period. [District Rule 4703] Federally Enforceable Through Title V Permit
59. The permittee shall maintain records of the date and duration of each start-up and shutdown period. [District Rule 4703] Federally Enforceable Through Title V Permit
60. The permittee shall retain records of the cumulative annual NOx, CO, and VOC emissions. The record shall be updated monthly. [District Rule 2201] Federally Enforceable Through Title V Permit
61. The permittee shall maintain hourly records of NOx, CO and ammonia concentrations (ppmv @ 15% O2). [District Rules 2201 and 4201] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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62. The permittee shall submit a written report for each calendar quarter to the APCO. The report shall be received by the District within 30 days of the end of the quarter and shall include: time intervals and the magnitude of excess emissions, the nature and cause of excess emissions (if known), corrective actions taken and preventive measures adopted; averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard for the pollutant/source category in question; time and date of each period during which a continuous monitoring system was inoperative except for zero and span checks and the nature of system repairs and adjustments; a negative declaration when no excess emissions occurred. [District Rule 1080 and 40 CFR Part 60.4375(a), 40 CFR Part 60.4395 and 40 CFR Part 60.7(c-d)] Federally Enforceable Through Title V Permit
63. All records required to be maintained by this permit shall be maintained for a period of five years and shall be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
64. 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 superceding Acid Rain permit issued by the permitting authority; and (ii) Have an Acid Rain permit. [40 CFR Part 72] Federally Enforceable Through Title V Permit
65. 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. [40 CFR Part 75] Federally Enforceable Through Title V Permit
66. The emissions measurements recorded and reported in accordance with 40 CFR Part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program. [40 CFR Part 75] Federally Enforceable Through Title V Permit
67. 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 unit's compliance subaccount (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 unit; and (ii) comply with the applicable Acid Rain emissions limitations for sulfur dioxide. [40 CFR Part 73] Federally Enforceable Through Title V Permit
68. 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. [40 CFR Part 77] Federally Enforceable Through Title V Permit
69. An affected unit shall be subject to the sulfur dioxide requirements starting on the later of January 1, 2000, or the deadline for monitoring certification under 40 CFR Part 75, an affected unit under 40 CFR Part 72.6(a)(3) that is not a substitution or compensating unit. [40 CFR Part 72 and 40 CFR Part 75] Federally Enforceable Through Title V Permit
70. Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program. [40 CFR Part 72] Federally Enforceable Through Title V Permit
71. An allowance shall not be deducted in order to comply with the requirements under 40 CFR Part 73, prior to the calendar year for which the allowance was allocated. [40 CFR Part 73] Federally Enforceable Through Title V Permit
72. 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 the written exemption under 40 CFR Parts 72.7 and 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization. [40 CFR Part 72] Federally Enforceable Through Title V Permit
73. The owners and operators of an affected unit that has excess emissions in any calendar year shall: (i) pay without demand the penalty required, and pay up on demand the interest on that penalty; and (ii) comply with the terms of an approved offset plan, as required by 40 CFR part 77. [40 CFR Part 77] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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74. The owners and operators of the each affected unit at the source shall keep on site the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or permitting authority: (i) The certificate of representation for the designated representative for the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR Part 72.24; provided that the certificate and documents shall be retained on site beyond such five-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative. [40 CFR Part 72] Federally Enforceable Through Title V Permit
75. The owners and operators of each affected unit at the source shall keep on site each of the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or permitting authority; (ii) All emissions monitoring information, in accordance with 40 CFR part 75; (iii) Copies of all reports, compliance certifications and other submissions and all records made or required under the Acid Rain Program; (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission that demonstrates compliance with the requirements of the Acid Rain Program. [40 CFR Part 75] Federally Enforceable Through Title V Permit
76. 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 75 Subpart I. [40 CFR Part 75] Federally Enforceable Through Title V Permit

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-7172-2-4

EXPIRATION DATE: 09/30/2014

EQUIPMENT DESCRIPTION:

84 MW NOMINALLY RATED COMBINED-CYCLE POWER GENERATING SYSTEM #2 CONSISTING OF A 1,047 MMBTU/HR GENERAL ELECTRIC FRAME 7EA NATURAL GAS-FIRED COMBUSTION TURBINE GENERATOR WITH DRY LOW NOX COMBUSTOR, AN INLET AIR FILTRATION AND EVAPORATIVE COOLING SYSTEM, A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM, AN OXIDATION CATALYST, HEAT RECOVERY STEAM GENERATOR #2 (HRSG) AND A 100 MW NOMINALLY RATED STEAM TURBINE SHARED WITH PERMIT UNIT N-7172-1

PERMIT UNIT REQUIREMENTS

1. The gas turbine engine and generator lube oil vents shall be equipped with mist eliminators. Visible emissions from lube oil vents shall not exhibit opacity of 5% or greater except for up to three minutes in any hour. [District Rule 2201] Federally Enforceable Through Title V Permit
2. All equipment shall be maintained in proper operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
4. The gas turbine engine shall be fired exclusively on natural gas with a sulfur content of no greater than 0.36 grain of sulfur compounds (as S) per 100 dry scf of natural gas. [District Rules 2201 and 4801 and 40 CFR Part 60.4330(a)(2), 40 CFR Part 60.4395 and 40 CFR Part 60.7)] Federally Enforceable Through Title V Permit
5. Testing to demonstrate compliance with the fuel sulfur content limit of this permit shall be conducted weekly. Once eight consecutive weekly tests show compliance, the fuel sulfur content testing frequency may be reduced to once every calendar quarter. If a quarterly test shows a violation of the sulfur content limit of this permit then weekly testing shall resume and continue until eight consecutive tests show compliance. Once compliance is shown on eight consecutive weekly tests then testing may return to quarterly. [District Rules 2201] Federally Enforceable Through Title V Permit
6. The permittee shall monitor and record the fuel flow rate to the turbine, NO_x emission rate, the CO emission rate, the ammonia injection rate, the exhaust temperature both prior to and after the SCR unit, the exhaust oxygen content, and the exhaust flow rate. [District Rules 2201, 4001, and 4703] Federally Enforceable Through Title V Permit
7. The exhaust stack shall be equipped with a continuous emissions monitor (CEM) for NO_x, CO, and O₂. The CO CEM shall meet the requirements of 40 CFR parts 60 and the NO_x and O₂ CEMS shall be installed and certified in accordance with the requirements of 40 CFR Part 75. The CEMS shall be capable of monitoring emissions during startups and shutdowns as well as during normal operating conditions. Periods where the missing data substitution procedures in Part 75 Subpart D are applied shall be reported as monitor downtime in the District Quarterly CEMS Report. [District Rules 1080, 2201 and 4703 and 40 CFR Part 60.13(a), 40 CFR Part 60.4340(b), 40 CFR Part 60.4345(a) and 40 CFR Part 60.4350(d)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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8. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NOx, CO, and O2 analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Source Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit
9. The facility shall install and maintain equipment, facilities, and systems compatible with the District's CEM data polling software system and shall make CEM data available to the District's automated polling system on a daily basis. [District Rule 1080] Federally Enforceable Through Title V Permit
10. Upon notice by the District that the facility's CEM system is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEM data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
11. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing and data recording) for each successive 15-minute period or shall meet equivalent specifications established by mutual agreement of the District, the ARB and the EPA. For partial unit operating hours, at least one valid data point must be obtained for each quadrant of the hour in which the unit operates. For unit operating hours in which required quality assurance and maintenance activities are performed on the CEMS, a minimum of two valid data points (one in each of two quadrants) are required to validate the hour. [District Rule 1080, 40 CFR Part 60.13(e)(2), 40 CFR Part 60.13(h)(2), 40 CFR Part 60.4345(b) and 40 CFR Part 60.4350(a)] Federally Enforceable Through Title V Permit
12. Owners and operators of a CEMS installed in accordance with the provisions of 40 CFR Part 60 must check zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span must at a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceed two times the limit of the applicable performance specification in Appendix B of 40 CFR Part 60. The system must allow the amount of excess zero and span drift to be recorded and quantified whenever specified. [40 CFR 60.13(d)(1)] Federally Enforceable Through Title V Permit
13. Owners and operators must develop and implement a Quality Control (QC) program. As a minimum, each QC program shall include written procedures that describe in detail, complete, step-by-step procedures and operations for calibration of CEMS, calibration drift determination and adjustment, CEMS preventative maintenance, data recording/calculations/reporting, accuracy audit procedures, and corrective action for malfunctioning CEMS. Whenever excessive inaccuracies occur for two consecutive quarters, the source owner or operator must revise the current written procedures or modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies. These written procedures shall be kept on record and shall be made available for inspection by the enforcement agency. [40 CFR Part 60, Appendix F] Federally Enforceable Through Title V Permit
14. In accordance with 40 CFR, Part 60, Appendix F, 5.1, cylinder gas audits (CGA) or relative accuracy audits (RAA) of continuous emission monitors shall be conducted quarterly, except during quarters in which a relative accuracy test audit (RATA) is performed. Audit reports and an Out-of-Control Detail Report, pursuant to 40 CFR Part 60 Subpart F, shall be submitted along with quarterly compliance reports to the District. [District Rule 1080 and 40 CFR Part 60 Appendix F] Federally Enforceable Through Title V Permit
15. The owner/operator shall perform a relative accuracy test audit (RATA) as specified by 40 CFR Part 60, Appendix F, 5.11, at least once every four calendar quarters. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080] Federally Enforceable Through Title V Permit
16. In the event of a breakdown of monitoring equipment, the owner shall notify the District as soon as reasonably possible, but no later than 8 hours after its detection, unless the owner or operator demonstrates to the satisfaction of the APCO that a longer reporting period was necessary, and shall initiate repairs. The owner shall inform the District of the intent to shutdown any monitoring equipment at least 24 hours prior to the event. [District Rule 1080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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17. Startup is defined as the period beginning with turbine initial firing until the unit meets the ppmvd emission limits for steady state operation. Shutdown is defined as the period beginning with initiation of turbine shutdown sequence and ending with cessation of firing of the gas turbine engine. Startup and shutdown events shall not exceed 296 hours per calendar year. Startup emissions must be counted toward each applicable emission limit (lb/day and lb/yr). [District Rule 2201] Federally Enforceable Through Title V Permit
18. The combined startup and shutdown period duration shall not exceed five hours in any one day, commencing at midnight. Emissions during startup and shutdown periods must be counted toward the applicable daily emission limitations. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
19. The unit shall comply with the New Source Review based NO_x and CO limits of this permit within 5 hours after initial start-up. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
20. The NO_x emissions during start-up and shutdown periods shall not exceed 119.0 lb/hour. [District Rule 2201] Federally Enforceable Through Title V Permit
21. The NO_x emissions during steady state operation shall not exceed 2.0 ppmvd @ 15% O₂ over a 1 hour average (clock hour basis). Steady-state period refers to any periods that is not a start-up or shut down period. A clock hour in a one hour average will commence at the top of the hour. [District Rules 2201 and 4703, 40 CFR Part 60.4320(a) and 40 CFR Part 60.4380(b)(1)] Federally Enforceable Through Title V Permit
22. The combined total NO_x emissions from start-up, shut down, and steady state operation shall not exceed 444.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Compliance with NO_x emission limitations during steady state operation shall not be required during short-term excursions limited to a cumulative total of 10 hours per rolling 12-month period. Short-term excursions are defined as 15 minute periods designated by the owner/operator (and approved by the APCO) that are the direct result of transient load conditions, not to exceed four consecutive 15-minute periods, when the 15-minute average NO_x concentration exceeds 2.0 ppmvd @15% O₂. The maximum 1-hour average NO_x concentration for periods that include short-term excursions shall not exceed 30 ppmvd @ 15% O₂. [District Rule 2201] Federally Enforceable Through Title V Permit
24. Examples of transient load conditions include, but are not limited to the following: (1) Initiation/shutdown of combustion turbine inlet air cooling and (2) Rapid combustion turbine load changes. All emissions during short-term excursions shall accrue towards the hourly, daily, and annual emissions limitations of this permit and shall be included in all calculations of hourly, daily, and annual mass emission rates as required by this permit. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
25. The CO emissions during start-up and shutdown periods shall not exceed 129.0 lb/hour. [District Rule 2201] Federally Enforceable Through Title V Permit
26. The CO emissions during steady state operation shall not exceed 4.0 ppmvd @ 15% O₂ over a 3 hour rolling average. Steady-state period refers to any periods that is not a start-up or shut down period. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
27. The combined total CO emissions from start-up, shut down, and steady state operation shall not exceed 558.8 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
28. The VOC emissions during start-up and shutdown periods shall not exceed 16.0 lb/hour. [District Rule 2201] Federally Enforceable Through Title V Permit
29. The VOC emissions during steady state operation shall not exceed 1.4 ppmvd @ 15% O₂ over a 3 hour rolling average. Steady-state period refers to any periods that is not a start-up or shut down period. [District Rule 2201] Federally Enforceable Through Title V Permit
30. The combined total VOC emissions from start-up, shut down, and steady state operation shall not exceed 83.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
31. The PM₁₀ emissions rate shall not exceed 7.0 lb/hour and 168.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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32. The SO_x emission rate shall not exceed 1.05 lb/hour and 25.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
33. Ammonia (NH₃) emissions shall not exceed 10 ppmvd @ 15% O₂ over a 24 hour rolling average. [District Rule 2201] Federally Enforceable Through Title V Permit
34. Compliance with ammonia emission limit shall be demonstrated utilizing one of the following procedures: 1) calculate the daily ammonia emissions using the following equation: $(\text{ppmvd @ 15\% O}_2) = ((a - (b \times c / 1,000,000)) \times (1,000,000 / b)) \times d$, where a = ammonia injection rate (lb/hr) / (17 lb/lb mol), b = dry exhaust flow rate (lb/hr) / (29 lb/lb mol), c = change in measured NO_x concentration ppmvd @ 15% O₂ across the catalyst, and d = correction factor. The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip; 2.) utilize another District-approved calculation method using measured surrogate parameters to determine the daily ammonia emissions in ppmvd @ 15% O₂. If this option is chosen, the permittee shall submit a detailed calculation protocol for District approval at least 60 days prior to commencement of operation; 3.) Alternatively, the permittee may utilize a continuous in-stack ammonia monitor to verify compliance with the ammonia emissions limit. If this option is chosen, the permittee shall submit a monitoring plan for District approval at least 60 days prior to commencement of operation. [District Rule 4102]
35. The annual emissions from this unit shall not exceed 99,991 lb/year for CO and 17,404 lb/year for VOC. [District Rule 2201] Federally Enforceable Through Title V Permit
36. The combined quarterly NO_x emissions from permit units N-7172-1 and N-7172-2 shall not exceed 35,000 lb/quarter. [District Rule 2201] Federally Enforceable Through Title V Permit
37. The combined annual NO_x emissions from permit units N-7172-1 and N-7172-2 shall not exceed 140,000 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
38. The combined quarterly CO emissions from permit units N-7172-1 and N-7172-2 shall not exceed 49,996 lb/quarter. [District Rule 2201] Federally Enforceable Through Title V Permit
39. The combined annual CO emissions from permit units N-7172-1 and N-7172-2 shall not exceed 199,982 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
40. Each one hour period shall commence on the hour. Each one hour period in a three hour rolling average will commence on the hour. The three hour average will be compiled from the three most recent one hour periods. Each one hour period in a twenty-four hour average for ammonia slip will commence on the hour. The twenty-four hour average will be calculated starting and ending at twelve-midnight. [District Rule 2201] Federally Enforceable Through Title V Permit
41. Daily emissions will be compiled for a twenty-four hour period starting and ending at twelve-midnight. Each calendar month in a twelve consecutive month rolling emissions total will commence at the beginning of the first day of the month. The twelve consecutive month rolling emissions total to determine compliance with annual emission limit will be compiled from the twelve most recent calendar months. [District Rule 2201] Federally Enforceable Through Title V Permit
42. Source testing to demonstrate compliance with the NO_x (ppmvd), CO (ppmvd), VOC (ppmvd), PM₁₀ (lb/hour), and NH₃ (ppmvd) emission limits shall be conducted at least once every twelve months. [District Rule 2201, 4001 and 4703] Federally Enforceable Through Title V Permit
43. Source testing to measure startup NO_x, CO, and VOC mass emission rates shall be conducted for one of the gas turbines (N-7172-1 or N-7172-2) at least once every seven years. CEM relative accuracy shall be determined during startup source testing in accordance with 40 CFR Part 60, Appendix B. If CEM data is not certified to determine compliance with NO_x and CO startup emission limits, then source testing to measure startup NO_x and CO mass emission rates shall be conducted at least once every 12 months. [District Rule 2201 and 4001] Federally Enforceable Through Title V Permit
44. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

45. Source testing shall be witnessed or authorized by District personnel. [District Rule 1081] Federally Enforceable Through Title V Permit
46. The results of each source test shall be received by the District no later than 60 days after the source test date. [District Rule 1081] Federally Enforceable Through Title V Permit
47. NOx emissions (referenced as NO2) shall be determined using EPA Method 7E, EPA Method 20, or CARB method 20. The test results shall be corrected to ISO standard conditions as defined in 40 CFR Part 60 Subpart GG Section 60.335. [District Rules 1081, 2201, 4001, and 4703] Federally Enforceable Through Title V Permit
48. VOC emissions (referenced as methane) shall be determined using EPA method 18 or EPA method 25. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
49. CO emissions shall be determined using EPA method 10 or EPA method 10B. [District Rules 1081, 2201, and 4703] Federally Enforceable Through Title V Permit
50. Source testing to measure concentrations of PM10 shall be conducted using EPA methods 201 and 202, or EPA methods 201A and 202, or CARB method 501 in conjunction with CARB method 5. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
51. Ammonia (NH3) emissions shall be determined using BAAQMD Method ST-1B. [District Rules 1081 and 4102]
52. Oxygen content of the exhaust gas shall be determined by using EPA method 3, EPA method 3A, or EPA method 20. [District Rules 1081, 2201, and 4703] Federally Enforceable Through Title V Permit
53. If necessary, testing for fuel sulfur content shall be conducted utilizing ASTM Method D 3246, ASTM Method D1072, ASTM Method D4468, ASTM Method D5504 or ASTM Method D3246. [District Rules 1081, 4001 and 40 CFR Part 75, Subpart D] Federally Enforceable Through Title V Permit
54. EPA approved alternative source testing methods will be allowed, upon District approval, provided it does not result in a relaxation of emission limitations. The request to utilize EPA approved alternative source testing methods must be submitted in writing and written approval received from the District prior to the submission of the source test plan. [District Rule 1081 and 4001] Federally Enforceable Through Title V Permit
55. A violation of NOx and CO emission standards measured and recorded by the CEMs shall be reported by the operator to the APCO within 96 hours. [District Rule 1080, 9.0] Federally Enforceable Through Title V Permit
56. The permittee shall maintain the following records: the date, time and duration of any malfunction of the continuous monitoring equipment; dates of performance testing; dates of evaluations, calibrations, checks, and adjustments of the continuous monitoring equipment; date and time period which a continuous monitoring system or monitoring device was inoperative, maintenance of CEM's, and emission measurements. [District Rules 2201, 4703, 1080, 7.3 and 40 CFR Part 60 Subpart KKKK] Federally Enforceable Through Title V Permit
57. The permittee shall maintain a daily record that includes the actual turbine start-up and stop times (local time), total hours of operation, and the quantity and type of fuel used. [District Rule 4703] Federally Enforceable Through Title V Permit
58. The permittee shall maintain records of the date, time and duration of each bypass transition period and each primary re-ignition period. [District Rule 4703] Federally Enforceable Through Title V Permit
59. The permittee shall maintain records of the date and duration of each start-up and shutdown period. [District Rule 4703] Federally Enforceable Through Title V Permit
60. The permittee shall retain records of the cumulative annual NOx, CO, and VOC emissions. The record shall be updated monthly. [District Rule 2201] Federally Enforceable Through Title V Permit
61. The permittee shall maintain hourly records of NOx, CO and ammonia concentrations (ppmv @ 15% O2). [District Rules 2201 and 4201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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62. The permittee shall submit a written report for each calendar quarter to the APCO. The report shall be received by the District within 30 days of the end of the quarter and shall include: time intervals and the magnitude of excess emissions, the nature and cause of excess emissions (if known), corrective actions taken and preventive measures adopted; averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard for the pollutant/source category in question; time and date of each period during which a continuous monitoring system was inoperative except for zero and span checks and the nature of system repairs and adjustments; a negative declaration when no excess emissions occurred. [District Rule 1080 and 40 CFR Part 60.4375(a), 40 CFR Part 60.4395 and 40 CFR Part 60.7(c-d)] Federally Enforceable Through Title V Permit
63. All records required to be maintained by this permit shall be maintained for a period of five years and shall be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
64. 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 superceding Acid Rain permit issued by the permitting authority; and (ii) Have an Acid Rain permit. [40 CFR Part 72] Federally Enforceable Through Title V Permit
65. 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. [40 CFR Part 75] Federally Enforceable Through Title V Permit
66. The emissions measurements recorded and reported in accordance with 40 CFR Part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program. [40 CFR Part 75] Federally Enforceable Through Title V Permit
67. 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 unit's compliance subaccount (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 unit; and (ii) comply with the applicable Acid Rain emissions limitations for sulfur dioxide. [40 CFR Part 73] Federally Enforceable Through Title V Permit
68. 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. [40 CFR Part 77] Federally Enforceable Through Title V Permit
69. An affected unit shall be subject to the sulfur dioxide requirements starting on the later of January 1, 2000, or the deadline for monitoring certification under 40 CFR Part 75, an affected unit under 40 CFR Part 72.6(a)(3) that is not a substitution or compensating unit. [40 CFR Part 72 and 40 CFR Part 75] Federally Enforceable Through Title V Permit
70. Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program. [40 CFR Part 72] Federally Enforceable Through Title V Permit
71. An allowance shall not be deducted in order to comply with the requirements under 40 CFR Part 73, prior to the calendar year for which the allowance was allocated. [40 CFR Part 73] Federally Enforceable Through Title V Permit
72. 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 the written exemption under 40 CFR Parts 72.7 and 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization. [40 CFR Part 72] Federally Enforceable Through Title V Permit
73. The owners and operators of an affected unit that has excess emissions in any calendar year shall: (i) pay without demand the penalty required, and pay up on demand the interest on that penalty; and (ii) comply with the terms of an approved offset plan, as required by 40 CFR part 77. [40 CFR Part 77] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

74. The owners and operators of the each affected unit at the source shall keep on site the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or permitting authority: (i) The certificate of representation for the designated representative for the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR Part 72.24; provided that the certificate and documents shall be retained on site beyond such five-year period until such documents are superceded because of the submission of a new certificate of representation changing the designated representative. [40 CFR Part 72] Federally Enforceable Through Title V Permit
75. The owners and operators of each affected unit at the source shall keep on site each of the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or permitting authority; (ii) All emissions monitoring information, in accordance with 40 CFR part 75; (iii) Copies of all reports, compliance certifications and other submissions and all records made or required under the Acid Rain Program; (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission that demonstrates compliance with the requirements of the Acid Rain Program. [40 CFR Part 75] Federally Enforceable Through Title V Permit
76. 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 75 Subpart I. [40 CFR Part 75] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-7172-3-2

EXPIRATION DATE: 09/30/2014

EQUIPMENT DESCRIPTION:

68,500 GPM MECHANICAL DRAFT COOLING TOWER WITH 5 CELLS SERVED BY A HIGH EFFICIENCY DRIFT ELIMINATOR

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
3. No hexavalent chromium containing compounds shall be added to cooling tower circulating water. [District Rule 7012] Federally Enforceable Through Title V Permit
4. Drift eliminator drift rate shall not exceed 0.0005%. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The PM10 emissions shall not exceed 30.8 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Compliance with the PM10 emission limit shall be demonstrated as follows: $PM10 \text{ lb/day} = \text{Circulating Water Recirculation rate (gal/day)} \times 8.34 \text{ lb/gal} \times \text{Total Dissolved Solids Concentration in the blowdown water (ppm)} \times \text{Design Drift Rate (\%)}$. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Compliance with PM10 emission limit shall be determined by blowdown water sample analysis by independent laboratory every calendar quarter. [District Rule 1081] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-7172-4-2

EXPIRATION DATE: 09/30/2014

EQUIPMENT DESCRIPTION:

300 HP JOHN DEERE COMPANY MODEL JW6H-UF40 DIESEL-FIRED EMERGENCY IC ENGINE POWERING A FIRE PUMP

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PERMIT UNIT REQUIREMENTS

1. The exhaust stack shall not be fitted with a rain cap, or any other similar device, that impedes upward vertical exhaust flow. [District Rule 4102] Federally Enforceable Through Title V Permit
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
3. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 17 CCR 93115 and 40 CFR Part 63.6625(f)] Federally Enforceable Through Title V Permit
4. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight shall be used. [District Rules 2201 and 4801, San Joaquin County Rule 407 and 17 CCR 93115] Federally Enforceable Through Title V Permit
5. The emissions from the engine shall not exceed any of the following: 5.2 grams NO_x/hp-hr, 0.27 grams CO/hp-hr, or 0.15 grams VOC/hp-hr. [District Rule 2201 and 40 CFR Part 60.4205] Federally Enforceable Through Title V Permit
6. The PM₁₀ emissions from the engine shall not exceed 0.09 grams/hp-hr based on U.S EPA certification testing using test procedure ISO 8178. [District Rules 2201 and 4102, 17 CCR 93115 and 40 CFR Part 60.4205] Federally Enforceable Through Title V Permit
7. The engine shall be operated and maintained in accordance with manufacturer's emission related written instructions and in a manner consistent with safety and good air pollution control practice for minimizing emissions. Alternatively, the facility may develop a plan that provides maintenance that is consistent with good air pollution control practice for minimizing emissions. [District Rule 4702, 40 CFR Part 63.6605(b), 40 CFR Part 63.6625(e)(3), 40 CFR Part 63.6640(a) and 40 CFR Part 63 Subpart ZZZZ Table 6] Federally Enforceable Through Title V Permit
8. This engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. For testing purposes, the engine shall only be operated the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 - "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems", 1998 edition. Total hours of operation for all maintenance, testing, and required regulatory purposes shall not exceed 100 hours per calendar year. [District Rules 2201, 4701, 4702, 17 CCR 93115 and 40 CFR Part 63.6640(f)] Federally Enforceable Through Title V Permit
9. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

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10. The motor oil and the oil filter shall be changed at least every 500 hours of operation or annually, whichever comes first. Sources have the option to utilize an oil analysis program as described in § 63.6625(i) or (j) in order to extend the specified oil change requirement specified in Table 2d of this subpart. If this deadline passes while the unit is operating for an emergency, the maintenance or inspection may be delayed until the emergency is over. The facility operator shall report any failure to perform this management practice on the schedule required. The report shall include the federal, state or local law under which the risk was deemed unacceptable. [40 CFR Part 63 Subpart ZZZZ - Table 2d] Federally Enforceable Through Title V Permit
11. The air cleaner shall be inspected at least every 1,000 hours of operation or annually, whichever comes first. The air filter shall be replaced as necessary. If this deadline passes while the unit is operating for an emergency, the maintenance or inspection may be delayed until the emergency is over. The facility operator shall report any failure to perform this management practice on the schedule required. The report shall include the federal, state or local law under which the risk was deemed unacceptable. [District Rule 40 CFR Part 63 Subpart ZZZZ - Table 2d] Federally Enforceable Through Title V Permit
12. All belts and hoses shall be inspected at least once every 500 hours of operation or annually, whichever comes first. The belts and hoses shall be replaced as necessary. If this deadline passes while the unit is operating for an emergency, the maintenance or inspection may be delayed until the emergency is over. The facility operator shall report any failure to perform this management practice on the schedule required. The report shall include the federal, state or local law under which the risk was deemed unacceptable. [District Rule 40 CFR Part 63 Subpart ZZZZ - Table 2d] Federally Enforceable Through Title V Permit
13. The permittee shall minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time, the emission standards applicable to all times other than startup in tables 1a, 2a, 2c and 2d of this subpart apply. [40 CFR Part 63.6625(h)] Federally Enforceable Through Title V Permit
14. The permittee shall maintain monthly records of emergency and non-emergency operation and of the type of fuel used. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operation, the purpose of the operation (for example: weekly testing, etc.) and records of operational characteristics monitoring. [District Rule 4702, 17 CCR 93115 and 40 CFR Part 63.6655(f)] Federally Enforceable Through Title V Permit
15. The facility shall maintain records of all inspections and maintenance of the engine. [40 CFR Part 63.6655(e)(2)] Federally Enforceable Through Title V Permit
16. All records shall be maintained for a period of at least 5 years and shall be made available to the District, EPA or CARB upon request. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

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Appendix B
Previous Title V Operating Permit

San Joaquin Valley Air Pollution Control District

FACILITY: N-7172-0-1

EXPIRATION DATE: 09/30/2014

FACILITY-WIDE REQUIREMENTS

1. The owner or operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, 6.1; Stanislaus County Rule 110] Federally Enforceable Through Title V Permit
2. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0; Stanislaus County Rule 110] Federally Enforceable Through Title V Permit
3. The owner or operator of any stationary source operation that emits more than 25 tons per year of nitrogen oxides or reactive organic compounds, shall provide the District annually with a written statement in such form and at such time as the District prescribes, showing actual emissions of nitrogen oxides and reactive organic compounds from that source. [District Rule 1160, 5.0] Federally Enforceable Through Title V Permit
4. Any person building, altering or replacing any operation, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, shall first obtain an Authority to Construct (ATC) from the District unless exempted by District Rule 2020 (3/21/02). [District Rule 2010, 3.0 and 4.0; and 2020] Federally Enforceable Through Title V Permit
5. The permittee must comply with all conditions of the permit including permit revisions originated by the District. All terms and conditions of a permit that are required pursuant to the Clean Air Act (CAA), including provisions to limit potential to emit, are enforceable by the EPA and Citizens under the CAA. Any permit noncompliance constitutes a violation of the CAA and the District Rules and Regulations, and is grounds for enforcement action, for permit termination, revocation, reopening and reissuance, or modification; or for denial of a permit renewal application. [District Rules 2070, 7.0; 2080; and 2520, 9.8.1 and 9.12.1] Federally Enforceable Through Title V Permit
6. A Permit to Operate or an Authority to Construct shall not be transferred unless a new application is filed with and approved by the District. [District Rule 2031] Federally Enforceable Through Title V Permit
7. Every application for a permit required under Rule 2010 (12/17/92) shall be filed in a manner and form prescribed by the District. [District Rule 2040] Federally Enforceable Through Title V Permit
8. The operator shall maintain records of required monitoring that include: 1) the date, place, and time of sampling or measurement; 2) the date(s) analyses were performed; 3) the company or entity that performed the analysis; 4) the analytical techniques or methods used; 5) the results of such analysis; and 6) the operating conditions at the time of sampling or measurement. [District Rule 2520, 9.4.1] Federally Enforceable Through Title V Permit
9. The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit and, for continuous monitoring instrumentation, all calibration and maintenance records and all original strip-chart recordings. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate. Any amendments to these Facility-wide Requirements that affect specific Permit Units may constitute modification of those Permit Units.

Facility Name: WALNUT ENERGY CENTER AUTHORITY
Location: 800 S WASHINGTON ROAD, TURLOCK, CA
N-7172-0-1 Jun 23 2014 10:10AM - SCHONHOM

10. The operator shall submit reports of any required monitoring at least every six months unless a different frequency is required by an applicable requirement. All instances of deviations from permit requirements must be clearly identified in such reports. [District Rule 2520, 9.5.1] Federally Enforceable Through Title V Permit
11. Deviations from permit conditions must be promptly reported, including deviations attributable to upset conditions, as defined in the permit. For the purpose of this condition, promptly means as soon as reasonably possible, but no later than 10 days after detection. The report shall include the probable cause of such deviations, and any corrective actions or preventive measures taken. All required reports must be certified by a responsible official consistent with section 10.0 of District Rule 2520 (6/21/01). [District Rules 2520, 9.5.2 and 1100, 7.0] Federally Enforceable Through Title V Permit
12. If for any reason a permit requirement or condition is being challenged for its constitutionality or validity by a court of competent jurisdiction, the outcome of such challenge shall not affect or invalidate the remainder of the conditions or requirements in that permit. [District Rule 2520, 9.7] Federally Enforceable Through Title V Permit
13. It shall not be a defense for a permittee 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 the permit. [District Rule 2520, 9.8.2] Federally Enforceable Through Title V Permit
14. The permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [District Rule 2520, 9.8.3] Federally Enforceable Through Title V Permit
15. The permit does not convey any property rights of any sort, or any exclusive privilege. [District Rule 2520, 9.8.4] Federally Enforceable Through Title V Permit
16. The Permittee shall furnish to the District, within a reasonable time, any information that the District may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the District 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 EPA along with a claim of confidentiality. [District Rule 2520, 9.8.5] Federally Enforceable Through Title V Permit
17. The permittee shall pay annual permit fees and other applicable fees as prescribed in Regulation III of the District Rules and Regulations. [District Rule 2520, 9.9] Federally Enforceable Through Title V Permit
18. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to enter the permittee's premises where a permitted source is located or emissions related activity is conducted, or where records must be kept under condition of the permit. [District Rule 2520, 9.13.2.1] Federally Enforceable Through Title V Permit
19. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit. [District Rule 2520, 9.13.2.2] Federally Enforceable Through Title V Permit
20. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to inspect at reasonable times any facilities, equipment, practices, or operations regulated or required under the permit. [District Rule 2520, 9.13.2.3] Federally Enforceable Through Title V Permit
21. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. [District Rule 2520, 9.13.2.4] Federally Enforceable Through Title V Permit
22. No air contaminants shall be discharged into the atmosphere for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker than Ringelmann #1 or equivalent to 20% opacity and greater, unless specifically exempted by District Rule 4101 (11/15/01). If the equipment or operation is subject to a more stringent visible emission standard as prescribed in a permit condition, the more stringent visible emission limit shall supersede this condition. [District Rule 4101; Stanislaus County Rule 401] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

23. No person shall manufacture, blend, repackage, supply, sell, solicit or apply any architectural coating with a VOC content in excess of the corresponding limit specified in the Table of Standards of District Rule 4601 (10/31/01) for use or sale within the District. [District Rule 4601, 5.1] Federally Enforceable Through Title V Permit
24. All VOC-containing materials for architectural coatings subject to Rule 4601 (10/31/01) shall be stored in closed containers when not in use. [District Rule 4601, 5.4] Federally Enforceable Through Title V Permit
25. The permittee shall comply with all the Labeling and Test Methods requirements outlined in Rule 4601 sections 6.1 and 6.3 (10/31/01). [District Rule 4601, 6.1 and 6.3] Federally Enforceable Through Title V Permit
26. With each report or document submitted under a permit requirement or a request for information by the District or EPA, the permittee shall include a certification of truth, accuracy, and completeness by a responsible official. [District Rule 2520, 9.13.1 and 10.0] Federally Enforceable Through Title V Permit
27. If the permittee performs maintenance on, or services, repairs, or disposes of appliances, the permittee shall comply with the standards for Recycling and Emissions Reduction pursuant to 40 CFR 82, Subpart F. [40 CFR 82 Subpart F] Federally Enforceable Through Title V Permit
28. If the permittee performs service on motor vehicles when this service involves the ozone-depleting refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the standards for Servicing of Motor Vehicle Air Conditioners pursuant to all the applicable requirements as specified in 40 CFR 82, Subpart B. [40 CFR 82, Subpart B] Federally Enforceable Through Title V Permit
29. Disturbances of soil related to any construction, demolition, excavation, extraction, or other earthmoving activities shall comply with the requirements for fugitive dust control in District Rule 8021 unless specifically exempted under Section 4.0 of Rule 8021 (11/15/01) or Rule 8011 (11/15/01). [District Rule 8021 and 8011] Federally Enforceable Through Title V Permit
30. Outdoor handling, storage and transport of any bulk material which emits dust shall comply with the requirements of District Rule 8031, unless specifically exempted under Section 4.0 of Rule 8031 (11/15/01) or Rule 8011 (11/15/01). [District Rule 8031 and 8011] Federally Enforceable Through Title V Permit
31. An owner/operator shall prevent or cleanup any carryout or trackout in accordance with the requirements of District Rule 8041 Section 5.0, unless specifically exempted under Section 4.0 of Rule 8041 (11/15/01) or Rule 8011 (11/15/01). [District Rule 8041 and 8011] Federally Enforceable Through Title V Permit
32. Whenever open areas are disturbed or vehicles are used in open areas, the facility shall comply with the requirements of Section 5.0 of District Rule 8051, unless specifically exempted under Section 4.0 of Rule 8051 (11/15/01) or Rule 8011 (11/15/01). [District Rule 8051 and 8011] Federally Enforceable Through Title V Permit
33. Any paved road or unpaved road shall comply with the requirements of District Rule 8061 unless specifically exempted under Section 4.0 of Rule 8061 (11/15/01) or Rule 8011 (11/15/01). [District Rule 8061 and Rule 8011] Federally Enforceable Through Title V Permit
34. Any unpaved vehicle/equipment area that anticipates more than 75 vehicle trips per day shall comply with the requirements of Section 5.1.1 of District Rule 8071. Any unpaved vehicle/equipment area that anticipates more than 100 vehicle trips per day shall comply with the requirements of Section 5.1.2 of District Rule 8071. All sources shall comply with the requirements of Section 5.0 of District Rule 8071 unless specifically exempted under Section 4.0 of Rule 8071 (11/15/01) or Rule 8011 (11/15/01). [District Rule 8071 and Rule 8011] Federally Enforceable Through Title V Permit
35. Any owner or operator of a demolition or renovation activity, as defined in 40 CFR 61.141, shall comply with the applicable inspection, notification, removal, and disposal procedures for asbestos containing materials as specified in 40 CFR 61.145 (Standard for Demolition and Renovation). [40 CFR 61 Subpart M] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

36. The permittee shall submit certifications of compliance with the terms and standards contained in Title V permits, including emission limits, standards and work practices, to the District and the EPA annually (or more frequently as specified in an applicable requirement or as specified by the District). The certification shall include the identification of each permit term or condition, the compliance status, whether compliance was continuous or intermittent, the methods used for determining the compliance status, and any other facts required by the District to determine the compliance status of the source. [District Rule 2520, 9.16] Federally Enforceable Through Title V Permit
37. The permittee shall submit an application for Title V permit renewal to the District at least six months, but not greater than 18 months, prior to the permit expiration date. [District Rule 2520, 5.2] Federally Enforceable Through Title V Permit
38. When a term is not defined in a Title V permit condition, the definition in the rule cited as the origin and authority for the condition in a Title V permits shall apply. [District Rule 2520, 9.1.1] Federally Enforceable Through Title V Permit
39. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: Stanislaus Rules 401 and 110. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
40. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rules 1100, sections 6.1 and 7.0 (12/17/92); 2010, sections 3.0 and 4.0 (12/17/92); 2031 (12/17/92); 2040 (12/17/92); 2070, section 7.0 (12/17/92); 2080 (12/17/92); 4101 (11/15/01); 4601, sections 5.1, 5.2, 5.3, 5.8 and 8.0 (10/31/01); 8021 (11/15/01); 8031 (11/15/01); 8041 (11/15/01); 8051 (11/15/01); 8061 (11/15/01); and 8071 (11/15/01). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
41. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report beginning every November 1, unless alternative dates are approved by the District Compliance Division. These reports are due within 30 days after the end of the reporting period. [District Rule 2520] Federally Enforceable Through Title V Permit
42. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
43. Facilities N-2246 and N-7172 are included in the same stationary source. [District Rule 2201]

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-7172-1-1

EXPIRATION DATE: 09/30/2014

EQUIPMENT DESCRIPTION:

84 MW NOMINALLY RATED COMBINED-CYCLE POWER GENERATING SYSTEM #1 CONSISTING OF A 1,047 MMBTU/HR GENERAL ELECTRIC FRAME 7EA NATURAL GAS-FIRED COMBUSTION TURBINE GENERATOR WITH DRY LOW NOX COMBUSTOR, AN INLET AIR FILTRATION AND EVAPORATIVE COOLING SYSTEM, A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM, AN OXIDATION CATALYST, HEAT RECOVERY STEAM GENERATOR #1 (HRSG) AND A 100 MW NOMINALLY RATED STEAM TURBINE SHARED WITH N-7172-2

PERMIT UNIT REQUIREMENTS

1. The gas turbine engine and generator lube oil vents shall be equipped with mist eliminators. Visible emissions from lube oil vents shall not exhibit opacity of 5% or greater except for up to three minutes in any hour. [District Rule 2201] Federally Enforceable Through Title V Permit
2. All equipment shall be maintained in proper operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
4. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
5. The gas turbine engine shall be fired exclusively on natural gas with a sulfur content of no greater than 0.36 grain of sulfur compounds (as S) per 100 dry scf of natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Testing to demonstrate compliance with the fuel sulfur content limit of this permit shall be conducted weekly. Once eight consecutive weekly tests show compliance, the fuel sulfur content testing frequency may be reduced to once every calendar quarter. If a quarterly test shows a violation of the sulfur content limit of this permit then weekly testing shall resume and continue until eight consecutive tests show compliance. Once compliance is shown on eight consecutive weekly tests then testing may return to quarterly. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The exhaust stack shall be equipped with a continuous emissions monitor (CEM) for NO_x, CO, and O₂. The CEM shall meet the requirements of 40 CFR parts 60 and 75 and shall be capable of monitoring emissions during startups and shutdowns as well as during normal operating conditions. [District Rules 2201 and 1080] Federally Enforceable Through Title V Permit
8. The permittee shall monitor and record the fuel flow rate to the turbine, NO_x emission rate, the CO emission rate, the ammonia injection rate, the exhaust temperature both prior to and after the SCR unit, the exhaust oxygen content, and the exhaust flow rate. [District Rules 2201, 4001, and 4703] Federally Enforceable Through Title V Permit
9. The facility shall install and maintain equipment, facilities, and systems compatible with the District's CEM data polling software system and shall make CEM data available to the District's automated polling system on a daily basis. [District Rule 1080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

10. Upon notice by the District that the facility's CEM system is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEM data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
11. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NOx, CO, and O2 analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Source Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit
12. Results of continuous emissions monitoring shall be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080] Federally Enforceable Through Title V Permit
13. In accordance with 40 CFR, Part 60, Appendix F, 5.1, cylinder gas audits (CGA) or relative accuracy audits (RAA) of continuous emission monitors shall be conducted quarterly, except during quarters in which a relative accuracy test audit (RATA) is performed. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
14. The owner/operator shall perform a relative accuracy test audit (RATA) as specified by 40 CFR Part 60, Appendix F, 5.11, at least once every four calendar quarters. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080] Federally Enforceable Through Title V Permit
15. The permittee shall submit a written report to the APCO for each calendar quarter, within 30 days of the end of the quarter, including: time intervals, data and magnitude of excess emissions, nature and cause of excess emissions (if known), corrective actions taken and preventive measures adopted; averaging period used for data reporting shall correspond to the averaging period for each respective emission standard; applicable time and date of each period during which the CEM was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; and a negative declaration when no excess emissions occurred. [District Rule 1080] Federally Enforceable Through Title V Permit
16. Startup is defined as the period beginning with turbine initial firing until the unit meets the ppmvd emission limits for steady state operation. Shutdown is defined as the period beginning with initiation of turbine shutdown sequence and ending with cessation of firing of the gas turbine engine. Startup and shutdown events shall not exceed 296 hours per calendar year. Startup emissions must be counted toward each applicable emission limit (lb/day and lb/yr). [District Rule 2201] Federally Enforceable Through Title V Permit
17. The cumulative startup and shutdown period duration shall not exceed five hours in any one day, commencing at midnight. Emissions during startup and shutdown periods must be counted toward the applicable daily emission limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
18. The unit shall comply with the New Source Review based NOx and CO limits of this permit within 5 hours after initial start-up. [District Rule 2201]
19. The NOx emissions during start-up and shutdown periods shall not exceed 119.0 lb/hour. [District Rule 2201] Federally Enforceable Through Title V Permit
20. The NOx emissions concentration during steady state operation shall not exceed 2.0 ppmvd @ 15% O2 over a 1 hour average (clock hour basis). Steady-state period refers to any periods that is not a start-up or shut down period. A clock hour in a one hour average will commence at the top of the hour. [District Rule 2201] Federally Enforceable Through Title V Permit
21. The combined total NOx emissions from start-up, shut down, and steady state operation shall not exceed 444.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

22. Compliance with NO_x emission limitations during steady state operation shall not be required during short-term excursions limited to a cumulative total of 10 hours per rolling 12-month period. Short-term excursions are defined as 15 minute periods designated by the owner/operator (and approved by the APCO) that are the direct result of transient load conditions, not to exceed four consecutive 15-minute periods, when the 15-minute average NO_x concentration exceeds 2.0 ppmvd @ 15% O₂. The maximum 1-hour average NO_x concentration for periods that include short-term excursions shall not exceed 30 ppmvd @ 15% O₂. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Examples of transient load conditions include, but are not limited to the following: (1) Initiation/shutdown of combustion turbine inlet air cooling and (2) Rapid combustion turbine load changes. All emissions during short-term excursions shall accrue towards the hourly, daily, and annual emissions limitations of this permit and shall be included in all calculations of hourly, daily, and annual mass emission rates as required by this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
24. The CO emissions during start-up and shutdown periods shall not exceed 129.0 lb/hour. [District Rule 2201] Federally Enforceable Through Title V Permit
25. The CO emissions concentration during steady state operation shall not exceed 4.0 ppmvd @ 15% O₂ over a 3 hour rolling average. Steady-state period refers to any periods that is not a start-up or shut down period. [District Rule 2201] Federally Enforceable Through Title V Permit
26. The combined total CO emissions from start-up, shut down, and steady state operation shall not exceed 558.8 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
27. The VOC emissions during start-up and shutdown periods shall not exceed 16.0 lb/hour. [District Rule 2201] Federally Enforceable Through Title V Permit
28. The VOC emissions concentration during steady state operation shall not exceed 1.4 ppmvd @ 15% O₂ over a 3 hour rolling average. Steady-state period refers to any periods that is not a start-up or shut down period. [District Rule 2201] Federally Enforceable Through Title V Permit
29. The combined total VOC emissions from start-up, shut down, and steady state operation shall not exceed 83.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
30. The PM₁₀ emissions rate shall not exceed 7.0 lb/hour and 168.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
31. The SO_x emission rate shall not exceed 1.05 lb/hour and 25.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
32. Ammonia (NH₃) emissions concentration shall not exceed 10 ppmvd @ 15% O₂ over a 24 hour rolling average. [District Rule 2201] Federally Enforceable Through Title V Permit
33. Compliance with ammonia emission limit shall be demonstrated utilizing one of the following procedures: 1) calculate the daily ammonia emissions using the following equation: $(\text{ppmvd @ 15\% O}_2) = ((a - (b \times c / 1,000,000)) \times (1,000,000 / b)) \times d$, where a = ammonia injection rate (lb/hr) / (17 lb/lb mol), b = dry exhaust flow rate (lb/hr) / (29 lb/lb mol), c = change in measured NO_x concentration ppmvd @ 15% O₂ across the catalyst, and d = correction factor. The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip; 2.) utilize another District-approved calculation method using measured surrogate parameters to determine the daily ammonia emissions in ppmvd @ 15% O₂. If this option is chosen, the permittee shall submit a detailed calculation protocol for District approval at least 60 days prior to commencement of operation; 3.) Alternatively, the permittee may utilize a continuous in-stack ammonia monitor to verify compliance with the ammonia emissions limit. If this option is chosen, the permittee shall submit a monitoring plan for District approval at least 60 days prior to commencement of operation. [District Rule 4102]
34. The cumulative annual emissions shall not exceed 99,991 lb/year for CO and 17,404 lb/year for VOC. [District Rule 2201] Federally Enforceable Through Title V Permit
35. The cumulative quarterly NO_x emissions from permit units N-7172-1 and N-7172-2 shall not exceed 35,000 lb/quarter. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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36. The cumulative annual NOx emissions from permit units N-7172-1 and N-7172-2 shall not exceed 140,000 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
37. The cumulative quarterly CO emissions from permit units N-7172-1 and N-7172-2 shall not exceed 49,996 lb/quarter. [District Rule 2201] Federally Enforceable Through Title V Permit
38. The cumulative annual CO emissions from permit units N-7172-1 and N-7172-2 shall not exceed 199,982 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
39. Each one hour period shall commence on the hour. Each one hour period in a three hour rolling average will commence on the hour. The three hour average will be compiled from the three most recent one hour periods. Each one hour period in a twenty-four hour average for ammonia slip will commence on the hour. The twenty-four hour average will be calculated starting and ending at twelve-midnight. [District Rule 2201] Federally Enforceable Through Title V Permit
40. Daily emissions will be compiled for a twenty-four hour period starting and ending at twelve-midnight. Each calendar month in a twelve consecutive month rolling emissions total will commence at the beginning of the first day of the month. The twelve consecutive month rolling emissions total to determine compliance with annual emission limit will be compiled from the twelve most recent calendar months. [District Rule 2201] Federally Enforceable Through Title V Permit
41. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
42. Source testing shall be witnessed or authorized by District personnel. [District Rule 1081] Federally Enforceable Through Title V Permit
43. The results of each source test shall be received by the District no later than 60 days after the source test date. [District Rule 1081] Federally Enforceable Through Title V Permit
44. Source testing to measure startup NOx, CO, and VOC mass emission rates shall be conducted for one of the gas turbines (N-7172-1 or N-7172-2) at least once every seven years. CEM relative accuracy shall be determined during startup source testing in accordance with 40 CFR Part 60, Appendix B. If CEM data is not certified to determine compliance with NOx and CO startup emission limits, then source testing to measure startup NOx and CO mass emission rates shall be conducted at least once every 12 months. [District Rule 2201 and 4001] Federally Enforceable Through Title V Permit
45. Source testing to demonstrate compliance with the NOx (ppmvd), CO (ppmvd), VOC (ppmvd), PM10 (lb/hour), and NH3 (ppmvd) emission limits shall be conducted at least once every twelve months. [District Rule 2201 and 4001] Federally Enforceable Through Title V Permit
46. NOx emissions (referenced as NO2) shall be determined using EPA Method 7E, EPA Method 20, or CARB method 20. The test results shall be corrected to ISO standard conditions as defined in 40 CFR Part 60 Subpart GG Section 60.335. [District Rules 1081, 2201, 4001, and 4703] Federally Enforceable Through Title V Permit
47. VOC emissions (referenced as methane) shall be determined using EPA method 18 or EPA method 25. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
48. CO emissions shall be determined using EPA method 10 or EPA method 10B. [District Rules 1081, 2201, and 4703] Federally Enforceable Through Title V Permit
49. Source testing to measure concentrations of PM10 shall be conducted using EPA methods 201 and 202, or EPA methods 201A and 202, or CARB method 501 in conjunction with CARB method 5. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
50. Ammonia (NH3) emissions shall be determined using BAAQMD Method ST-1B. [District Rules 1081 and 4102]
51. Oxygen content of the exhaust gas shall be determined by using EPA method 3, EPA method 3A, or EPA method 20. [District Rules 1081, 2201, and 4703] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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52. If necessary, testing for fuel sulfur content shall be conducted utilizing ASTM Method D 3246, ASTM Method D1072, ASTM Method D4468, ASTM Method D5504 or ASTM Method D3246. [District Rules 1081 and 4001] Federally Enforceable Through Title V Permit
53. EPA approved alternative source testing methods will be allowed, upon District approval, provided it does not result in a relaxation of emission limitations. The request to utilize EPA approved alternative source testing methods must be submitted in writing and written approval received from the District prior to the submission of the source test plan. [District Rule 1081 and 4001] Federally Enforceable Through Title V Permit
54. The permittee shall maintain the following records: the date, time and duration of any malfunction of the continuous monitoring equipment; dates of performance testing; dates of evaluations, calibrations, checks, and adjustments of the continuous monitoring equipment; date and time period which a continuous monitoring system or monitoring device was inoperative, maintenance of CEM's, and emission measurements. [District Rules 2201, 4703, 1080, 7.3] Federally Enforceable Through Title V Permit
55. A violation of NO_x and CO emission standards measured and recorded by the CEMs shall be reported by the operator to the APCO within 96 hours. [District Rule 1080, 9.0] Federally Enforceable Through Title V Permit
56. The permittee shall maintain a daily record that includes the actual turbine start-up and stop times (local time), total hours of operation, and the quantity and type of fuel used. [District Rule 4703] Federally Enforceable Through Title V Permit
57. The permittee shall retain records of the cumulative annual NO_x, CO, and VOC emissions. The record shall be updated monthly. [District Rule 2201] Federally Enforceable Through Title V Permit
58. The permittee shall maintain hourly records of NO_x, CO and ammonia concentrations (ppmv @ 15% O₂). [District Rules 2201 and 4201] Federally Enforceable Through Title V Permit
59. The permittee shall submit a written report for each calendar quarter to the APCO. The report shall be received by the District within 30 days of the end of the quarter and shall include: time intervals and the magnitude of excess emissions, the nature and cause of excess emissions (if known), corrective actions taken and preventive measures adopted; averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard for the pollutant/source category in question; time and date of each period during which a continuous monitoring system was inoperative except for zero and span checks and the nature of system repairs and adjustments; a negative declaration when no excess emissions occurred. [District Rule 1080] Federally Enforceable Through Title V Permit
60. The permittee shall provide notification and record keeping as required under 40 CFR, Part 60, Subpart A, 60.7. [District Rule 4001] Federally Enforceable Through Title V Permit
61. All records required to be maintained by this permit shall be maintained for a period of five years and shall be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
62. Permittee shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100] Federally Enforceable Through Title V Permit
63. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100] Federally Enforceable Through Title V Permit
64. 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 superceding Acid Rain permit issued by the permitting authority; and (ii) Have an Acid Rain permit. [40 CFR 72] Federally Enforceable Through Title V Permit
65. 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. [40 CFR 75] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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66. The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program. [40 CFR 75] Federally Enforceable Through Title V Permit
67. 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 unit's compliance subaccount (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 unit; and (ii) comply with the applicable Acid Rain emissions limitations for sulfur dioxide. [40 CFR 73] Federally Enforceable Through Title V Permit
68. 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. [40 CFR 77] Federally Enforceable Through Title V Permit
69. An affected unit shall be subject to the sulfur dioxide requirements starting on the later of January 1, 2000, or the deadline for monitoring certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3) that is not a substitution or compensating unit. [40 CFR 72, 40 CFR 75] Federally Enforceable Through Title V Permit
70. Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program. [40 CFR 72] Federally Enforceable Through Title V Permit
71. An allowance shall not be deducted in order to comply with the requirements under 40 CFR part 73, prior to the calendar year for which the allowance was allocated. [40 CFR 73] Federally Enforceable Through Title V Permit
72. 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 the written exemption under 40 CFR 72.7 and 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization. [40 CFR 72] Federally Enforceable Through Title V Permit
73. The owners and operators of an affected unit that has excess emissions in any calendar year shall: (i) pay without demand the penalty required, and pay up on demand the interest on that penalty; and (ii) comply with the terms of an approved offset plan, as required by 40 CFR part 77. [40 CFR 77] Federally Enforceable Through Title V Permit
74. The owners and operators of the each affected unit at the source shall keep on site the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or permitting authority: (i) The certificate of representation for the designated representative for 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 beyond such five-year period until such documents are superceded because of the submission of a new certificate of representation changing the designated representative. [40 CFR 72] Federally Enforceable Through Title V Permit
75. The owners and operators of each affected unit at the source shall keep on site each of the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or permitting authority; (ii) All emissions monitoring information, in accordance with 40 CFR part 75; (iii) Copies of all reports, compliance certifications and other submissions and all records made or required under the Acid Rain Program; (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission that demonstrates compliance with the requirements of the Acid Rain Program. [40 CFR 75] Federally Enforceable Through Title V Permit
76. 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 75 Subpart I. [40 CFR 75] Federally Enforceable Through Title V Permit

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-7172-2-1

EXPIRATION DATE: 09/30/2014

EQUIPMENT DESCRIPTION:

84 MW NOMINALLY RATED COMBINED-CYCLE POWER GENERATING SYSTEM #2 CONSISTING OF A 1,047 MMBTU/HR GENERAL ELECTRIC FRAME 7EA NATURAL GAS-FIRED COMBUSTION TURBINE GENERATOR WITH DRY LOW NOX COMBUSTOR, AN INLET AIR FILTRATION AND EVAPORATIVE COOLING SYSTEM, A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM, AN OXIDATION CATALYST, HEAT RECOVERY STEAM GENERATOR #2 (HRSG) AND A 100 MW NOMINALLY RATED STEAM TURBINE SHARED WITH N-7172-1

PERMIT UNIT REQUIREMENTS

1. The gas turbine engine and generator lube oil vents shall be equipped with mist eliminators. Visible emissions from lube oil vents shall not exhibit opacity of 5% or greater except for up to three minutes in any hour. [District Rule 2201] Federally Enforceable Through Title V Permit
2. All equipment shall be maintained in proper operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
4. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
5. The gas turbine engine shall be fired exclusively on natural gas with a sulfur content of no greater than 0.36 grain of sulfur compounds (as S) per 100 dry scf of natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Testing to demonstrate compliance with the fuel sulfur content limit of this permit shall be conducted weekly. Once eight consecutive weekly tests show compliance, the fuel sulfur content testing frequency may be reduced to once every calendar quarter. If a quarterly test shows a violation of the sulfur content limit of this permit then weekly testing shall resume and continue until eight consecutive tests show compliance. Once compliance is shown on eight consecutive weekly tests then testing may return to quarterly. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The exhaust stack shall be equipped with a continuous emissions monitor (CEM) for NO_x, CO, and O₂. The CEM shall meet the requirements of 40 CFR parts 60 and 75 and shall be capable of monitoring emissions during startups and shutdowns as well as during normal operating conditions. [District Rules 2201 and 1080] Federally Enforceable Through Title V Permit
8. The permittee shall monitor and record the fuel flow rate to the turbine, NO_x emission rate, the CO emission rate, the ammonia injection rate, the exhaust temperature both prior to and after the SCR unit, the exhaust oxygen content, and the exhaust flow rate. [District Rules 2201, 4001, and 4703] Federally Enforceable Through Title V Permit
9. The facility shall install and maintain equipment, facilities, and systems compatible with the District's CEM data polling software system and shall make CEM data available to the District's automated polling system on a daily basis. [District Rule 1080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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10. Upon notice by the District that the facility's CEM system is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEM data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
11. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NOx, CO, and O2 analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Source Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit
12. Results of continuous emissions monitoring shall be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080] Federally Enforceable Through Title V Permit
13. In accordance with 40 CFR, Part 60, Appendix F, 5.1, cylinder gas audits (CGA) or relative accuracy audits (RAA) of continuous emission monitors shall be conducted quarterly, except during quarters in which a relative accuracy test audit (RATA) is performed. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
14. The owner/operator shall perform a relative accuracy test audit (RATA) as specified by 40 CFR Part 60, Appendix F, 5.11, at least once every four calendar quarters. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080] Federally Enforceable Through Title V Permit
15. The permittee shall submit a written report to the APCO for each calendar quarter, within 30 days of the end of the quarter, including: time intervals, data and magnitude of excess emissions, nature and cause of excess emissions (if known), corrective actions taken and preventive measures adopted; averaging period used for data reporting shall correspond to the averaging period for each respective emission standard; applicable time and date of each period during which the CEM was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; and a negative declaration when no excess emissions occurred. [District Rule 1080] Federally Enforceable Through Title V Permit
16. Startup is defined as the period beginning with turbine initial firing until the unit meets the ppmvd emission limits for steady state operation. Shutdown is defined as the period beginning with initiation of turbine shutdown sequence and ending with cessation of firing of the gas turbine engine. Startup and shutdown events shall not exceed 296 hours per calendar year. Startup emissions must be counted toward each applicable emission limit (lb/day and lb/yr). [District Rule 2201] Federally Enforceable Through Title V Permit
17. The cumulative startup and shutdown period duration shall not exceed five hours in any one day, commencing at midnight. Emissions during startup and shutdown periods must be counted toward the applicable daily emission limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
18. The unit shall comply with the New Source Review based NOx and CO limits of this permit within 5 hours after initial start-up. [District Rule 2201]
19. The NOx emissions during start-up and shutdown periods shall not exceed 119.0 lb/hour. [District Rule 2201] Federally Enforceable Through Title V Permit
20. The NOx emissions concentration during steady state operation shall not exceed 2.0 ppmvd @ 15% O2 over a 1 hour average (clock hour basis). Steady-state period refers to any periods that is not a start-up or shut down period. A clock hour in a one hour average will commence at the top of the hour. [District Rule 2201] Federally Enforceable Through Title V Permit
21. The combined total NOx emissions from start-up, shut down, and steady state operation shall not exceed 444.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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22. Compliance with NOx emission limitations during steady state operation shall not be required during short-term excursions limited to a cumulative total of 10 hours per rolling 12-month period. Short-term excursions are defined as 15 minute periods designated by the owner/operator (and approved by the APCO) that are the direct result of transient load conditions, not to exceed four consecutive 15-minute periods, when the 15-minute average NOx concentration exceeds 2.0 ppmvd @ 15% O2. The maximum 1-hour average NOx concentration for periods that include short-term excursions shall not exceed 30 ppmvd @ 15% O2. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Examples of transient load conditions include, but are not limited to the following: (1) Initiation/shutdown of combustion turbine inlet air cooling and (2) Rapid combustion turbine load changes. All emissions during short-term excursions shall accrue towards the hourly, daily, and annual emissions limitations of this permit and shall be included in all calculations of hourly, daily, and annual mass emission rates as required by this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
24. The CO emissions during start-up and shutdown periods shall not exceed 129.0 lb/hour. [District Rule 2201] Federally Enforceable Through Title V Permit
25. The CO emissions concentration during steady state operation shall not exceed 4.0 ppmvd @ 15% O2 over a 3 hour rolling average. Steady-state period refers to any periods that is not a start-up or shut down period. [District Rule 2201] Federally Enforceable Through Title V Permit
26. The combined total CO emissions from start-up, shut down, and steady state operation shall not exceed 558.8 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
27. The VOC emissions during start-up and shutdown periods shall not exceed 16.0 lb/hour. [District Rule 2201] Federally Enforceable Through Title V Permit
28. The VOC emissions concentration during steady state operation shall not exceed 1.4 ppmvd @ 15% O2 over a 3 hour rolling average. Steady-state period refers to any periods that is not a start-up or shut down period. [District Rule 2201] Federally Enforceable Through Title V Permit
29. The combined total VOC emissions from start-up, shut down, and steady state operation shall not exceed 83.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
30. The PM10 emissions rate shall not exceed 7.0 lb/hour and 168.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
31. The SOx emission rate shall not exceed 1.05 lb/hour and 25.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
32. Ammonia (NH3) emissions concentration shall not exceed 10 ppmvd @ 15% O2 over a 24 hour rolling average. [District Rule 2201] Federally Enforceable Through Title V Permit
33. Compliance with ammonia emission limit shall be demonstrated utilizing one of the following procedures: 1) calculate the daily ammonia emissions using the following equation: $(\text{ppmvd @ 15\% O}_2) = ((a - (b \times c / 1,000,000)) \times (1,000,000 / b)) \times d$, where a = ammonia injection rate (lb/hr) / (17 lb/lb mol), b = dry exhaust flow rate (lb/hr) / (29 lb/lb mol), c = change in measured NOx concentration ppmvd @ 15% O2 across the catalyst, and d = correction factor. The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip; 2.) utilize another District-approved calculation method using measured surrogate parameters to determine the daily ammonia emissions in ppmvd @ 15% O2. If this option is chosen, the permittee shall submit a detailed calculation protocol for District approval at least 60 days prior to commencement of operation; 3.) Alternatively, the permittee may utilize a continuous in-stack ammonia monitor to verify compliance with the ammonia emissions limit. If this option is chosen, the permittee shall submit a monitoring plan for District approval at least 60 days prior to commencement of operation. [District Rule 4102]
34. The cumulative annual emissions shall not exceed 99,991 lb/year for CO and 17,404 lb/year for VOC. [District Rule 2201] Federally Enforceable Through Title V Permit
35. The cumulative quarterly NOx emissions from permit units N-7172-1 and N-7172-2 shall not exceed 35,000 lb/quarter. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

36. The cumulative annual NOx emissions from permit units N-7172-1 and N-7172-2 shall not exceed 140,000 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
37. The cumulative quarterly CO emissions from permit units N-7172-1 and N-7172-2 shall not exceed 49,996 lb/quarter. [District Rule 2201] Federally Enforceable Through Title V Permit
38. The cumulative annual CO emissions from permit units N-7172-1 and N-7172-2 shall not exceed 199,982 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
39. Each one hour period shall commence on the hour. Each one hour period in a three hour rolling average will commence on the hour. The three hour average will be compiled from the three most recent one hour periods. Each one hour period in a twenty-four hour average for ammonia slip will commence on the hour. The twenty-four hour average will be calculated starting and ending at twelve-midnight. [District Rule 2201] Federally Enforceable Through Title V Permit
40. Daily emissions will be compiled for a twenty-four hour period starting and ending at twelve-midnight. Each calendar month in a twelve consecutive month rolling emissions total will commence at the beginning of the first day of the month. The twelve consecutive month rolling emissions total to determine compliance with annual emission limit will be compiled from the twelve most recent calendar months. [District Rule 2201] Federally Enforceable Through Title V Permit
41. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
42. Source testing shall be witnessed or authorized by District personnel. [District Rule 1081] Federally Enforceable Through Title V Permit
43. The results of each source test shall be received by the District no later than 60 days after the source test date. [District Rule 1081] Federally Enforceable Through Title V Permit
44. Source testing to measure startup NOx, CO, and VOC mass emission rates shall be conducted for one of the gas turbines (N-7172-1 or N-7172-2) at least once every seven years. CEM relative accuracy shall be determined during startup source testing in accordance with 40 CFR Part 60, Appendix B. If CEM data is not certified to determine compliance with NOx and CO startup emission limits, then source testing to measure startup NOx and CO mass emission rates shall be conducted at least once every 12 months. [District Rule 2201 and 4001] Federally Enforceable Through Title V Permit
45. Source testing to demonstrate compliance with the NOx (ppmvd), CO (ppmvd), VOC (ppmvd), PM10 (lb/hour), and NH3 (ppmvd) emission limits shall be conducted at least once every twelve months. [District Rule 2201 and 4001] Federally Enforceable Through Title V Permit
46. NOx emissions (referenced as NO2) shall be determined using EPA Method 7E, EPA Method 20, or CARB method 20. The test results shall be corrected to ISO standard conditions as defined in 40 CFR Part 60 Subpart GG Section 60.335. [District Rules 1081, 2201, 4001, and 4703] Federally Enforceable Through Title V Permit
47. VOC emissions (referenced as methane) shall be determined using EPA method 18 or EPA method 25. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
48. CO emissions shall be determined using EPA method 10 or EPA method 10B. [District Rules 1081, 2201, and 4703] Federally Enforceable Through Title V Permit
49. Source testing to measure concentrations of PM10 shall be conducted using EPA methods 201 and 202, or EPA methods 201A and 202, or CARB method 501 in conjunction with CARB method 5. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
50. Ammonia (NH3) emissions shall be determined using BAAQMD Method ST-1B. [District Rules 1081 and 4102]
51. Oxygen content of the exhaust gas shall be determined by using EPA method 3, EPA method 3A, or EPA method 20. [District Rules 1081, 2201, and 4703] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

52. If necessary, testing for fuel sulfur content shall be conducted utilizing ASTM Method D 3246, ASTM Method D1072, ASTM Method D4468, ASTM Method D5504 or ASTM Method D3246. [District Rules 1081 and 4001] Federally Enforceable Through Title V Permit
53. EPA approved alternative source testing methods will be allowed, upon District approval, provided it does not result in a relaxation of emission limitations. The request to utilize EPA approved alternative source testing methods must be submitted in writing and written approval received from the District prior to the submission of the source test plan. [District Rule 1081 and 4001] Federally Enforceable Through Title V Permit
54. The permittee shall maintain the following records: the date, time and duration of any malfunction of the continuous monitoring equipment; dates of performance testing; dates of evaluations, calibrations, checks, and adjustments of the continuous monitoring equipment; date and time period which a continuous monitoring system or monitoring device was inoperative, maintenance of CEM's, and emission measurements. [District Rules 2201, 4703, 1080, 7.3] Federally Enforceable Through Title V Permit
55. A violation of NOx and CO emission standards measured and recorded by the CEMs shall be reported by the operator to the APCO within 96 hours. [District Rule 1080, 9.0] Federally Enforceable Through Title V Permit
56. The permittee shall maintain a daily record that includes the actual turbine start-up and stop times (local time), total hours of operation, and the quantity and type of fuel used. [District Rule 4703] Federally Enforceable Through Title V Permit
57. The permittee shall retain records of the cumulative annual NOx, CO, and VOC emissions. The record shall be updated monthly. [District Rule 2201] Federally Enforceable Through Title V Permit
58. The permittee shall maintain hourly records of NOx, CO and ammonia concentrations (ppmv @ 15% O2). [District Rules 2201 and 4201] Federally Enforceable Through Title V Permit
59. The permittee shall submit a written report for each calendar quarter to the APCO. The report shall be received by the District within 30 days of the end of the quarter and shall include: time intervals and the magnitude of excess emissions, the nature and cause of excess emissions (if known), corrective actions taken and preventive measures adopted; averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard for the pollutant/source category in question; time and date of each period during which a continuous monitoring system was inoperative except for zero and span checks and the nature of system repairs and adjustments; a negative declaration when no excess emissions occurred. [District Rule 1080] Federally Enforceable Through Title V Permit
60. The permittee shall provide notification and record keeping as required under 40 CFR, Part 60, Subpart A, 60.7. [District Rule 4001] Federally Enforceable Through Title V Permit
61. All records required to be maintained by this permit shall be maintained for a period of five years and shall be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
62. Permittee shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100] Federally Enforceable Through Title V Permit
63. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100] Federally Enforceable Through Title V Permit
64. 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 superceding Acid Rain permit issued by the permitting authority; and (ii) Have an Acid Rain permit. [40 CFR 72] Federally Enforceable Through Title V Permit
65. 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. [40 CFR 75] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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66. The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program. [40 CFR 75] Federally Enforceable Through Title V Permit
67. 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 unit's compliance subaccount (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 unit; and (ii) comply with the applicable Acid Rain emissions limitations for sulfur dioxide. [40 CFR 73] Federally Enforceable Through Title V Permit
68. 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. [40 CFR 77] Federally Enforceable Through Title V Permit
69. An affected unit shall be subject to the sulfur dioxide requirements starting on the later of January 1, 2000, or the deadline for monitoring certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3) that is not a substitution or compensating unit. [40 CFR 72, 40 CFR 75] Federally Enforceable Through Title V Permit
70. Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program. [40 CFR 72] Federally Enforceable Through Title V Permit
71. An allowance shall not be deducted in order to comply with the requirements under 40 CFR part 73, prior to the calendar year for which the allowance was allocated. [40 CFR 73] Federally Enforceable Through Title V Permit
72. 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 the written exemption under 40 CFR 72.7 and 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization. [40 CFR 72] Federally Enforceable Through Title V Permit
73. The owners and operators of an affected unit that has excess emissions in any calendar year shall: (i) pay without demand the penalty required, and pay up on demand the interest on that penalty; and (ii) comply with the terms of an approved offset plan, as required by 40 CFR part 77. [40 CFR 77] Federally Enforceable Through Title V Permit
74. The owners and operators of the each affected unit at the source shall keep on site the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or permitting authority: (i) The certificate of representation for the designated representative for 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 beyond such five-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative. [40 CFR 72] Federally Enforceable Through Title V Permit
75. The owners and operators of each affected unit at the source shall keep on site each of the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or permitting authority; (ii) All emissions monitoring information, in accordance with 40 CFR part 75; (iii) Copies of all reports, compliance certifications and other submissions and all records made or required under the Acid Rain Program; (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission that demonstrates compliance with the requirements of the Acid Rain Program. [40 CFR 75] Federally Enforceable Through Title V Permit
76. 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 75 Subpart I. [40 CFR 75] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-7172-3-1

EXPIRATION DATE: 09/30/2014

EQUIPMENT DESCRIPTION:

68,500 GPM MECHANICAL DRAFT COOLING TOWER WITH 5 CELLS SERVED BY A HIGH EFFICIENCY DRIFT ELIMINATOR

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
3. No hexavalent chromium containing compounds shall be added to cooling tower circulating water. [District Rule 7012] Federally Enforceable Through Title V Permit
4. Drift eliminator drift rate shall not exceed 0.0005%. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The PM10 emissions shall not exceed 30.8 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Compliance with the PM10 emission limit shall be demonstrated as follows: $PM10 \text{ lb/day} = \text{Circulating Water Recirculation rate (gal/day)} \times 8.34 \text{ lb/gal} \times \text{Total Dissolved Solids Concentration in the blowdown water (ppm)} \times \text{Design Drift Rate (\%)}$. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Compliance with PM10 emission limit shall be determined by blowdown water sample analysis by independent laboratory every calendar quarter. [District Rule 1081] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-7172-4-1

EXPIRATION DATE: 09/30/2014

EQUIPMENT DESCRIPTION:

300 HP JOHN DEERE COMPANY MODEL JW6H-UF40 DIESEL-FIRED EMERGENCY IC ENGINE POWERING A FIRE PUMP

PERMIT UNIT REQUIREMENTS

1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
3. The exhaust stack shall not be fitted with a rain cap, or any other similar device, that impedes upward vertical exhaust flow. [District Rule 4102] Federally Enforceable Through Title V Permit
4. The emissions from the engine shall not exceed any of the following: 5.2 grams NO_x/hp-hr, 0.27 grams CO/hp-hr, or 0.15 grams VOC/hp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The PM₁₀ emissions from the engine shall not exceed 0.09 grams/hp-hr based on U.S EPA certification testing using test procedure ISO 8178. [District Rules 2201, 4102, 13 CCR 2423, and 17 CCR 93115] Federally Enforceable Through Title V Permit
6. This engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. For testing purposes, the engine shall only be operated the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 - "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems", 1998 edition. Total hours of operation for all maintenance, testing, and required regulatory purposes shall not exceed 100 hours per calendar year. [District Rules 2201, 4701, 4702, and 17 CCR 93115] Federally Enforceable Through Title V Permit
7. Only CARB certified diesel fuel is to be used. [District Rules 2201, 4801, and 17 CCR 93115] Federally Enforceable Through Title V Permit
8. The permittee shall maintain records of hours of emergency and non-emergency operation. Records shall include the date, the number of hours of operation, the purpose of the operation (e.g., load testing, weekly testing, rolling blackout, general area power outage, etc.), the type of fuel used, and records of operational characteristics monitoring. Such records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
9. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

Appendix C

CAM Applicability Determination

For a unit to be subject to CAM, all of the following must be true:

1. The facility must be a Major Source or otherwise subject to Title V permitting
2. The unit must have an emission limit that is complied with utilizing a control device
3. The uncontrolled emissions from the emission unit must be in excess of the Major Source threshold.

Assurance Monitoring (CAM) Applicability Analysis for the Combined Cycle Combustion Turbine Generators (N-7172-1 and N-7172-2):

The facility is a Major Source for NO_x, CO, VOC, SO_x and PM₁₀ and each unit is subject to a NO_x, CO, VOC, SO_x and PM₁₀ emission limit. However, the units are equipped with emission control devices for only NO_x, CO and VOC. Therefore, per 40 CFR Part 64.2(a), each unit is subject to CAM for NO_x, CO and VOC unless it is exempt.

NO_x and CO:

The units are equipped with Continuous Emission Monitoring (CEM) systems for each of these pollutants. Therefore, they are exempt from CAM for NO_x and CO per 40 CFR Part 64.2(b)(vi).

VOC:

To be subject to CAM, all three of the criteria above must be met. Requirement 3 (uncontrolled emissions from the turbine unit must be in excess of the Major Source threshold) will be tested first.

There are two scenarios under which the unit may operate:

1. Steady-state operation for 8,760 hours per year.
2. Start-up and shutdown episodes with periods of steady-state operation.

Scenario 1 (Steady-State Operation for 8,760 hours per year):

The above data was provided by General Electric Company.

Emission Guarantee:	1.4 ppmvw (uncorrected)
Stack O ₂ @ 1.4 ppmvw uncorrected:	13.85% by volume
Stack Moisture @ 1.4 ppmvw:	7.13% by volume

Emission Guarantee (corrected to dry conditions @ 15% O₂):

$$\text{VOC} = (1.4 \text{ ppmvw}) \left[\frac{(20.95 - 13.85)}{(20.95 - 15)} \right] (1 - 0.0713) \\ = 1.55 \text{ ppmvd @ } 15\% \text{ O}_2$$

Fuel Usage Capacity:

The permitted rating of the unit is 1,047 MMBtu/hr, however, it can operate at that level only when the ambient temperature is at or below 32 degrees F, with the fuel burning capacity dropping as the ambient temperature increases. General Electric Company submitted information stating that the average annual rating would be 989.1 MMBtu/hr at an ambient temperature of 61 degrees F. Since the purpose of this calculation is to determine an annual emission rate, the rating based on the average annual temperature will be utilized. Since the ambient temperature in this area is actually about 77 degrees F, the capacity at 61 degree F is conservatively high.

Uncontrolled Potential to Emit:

The following equation will be utilized to determine the uncontrolled Potential to Emit (PE) of VOC.

$$PE = (\text{ppm})(\text{MW})(2.63 \times 10^{-9})(\text{ff})(\text{C})(20.95/(20.95 - \%O_2)) \text{ lb/hr}$$

Where:

- Uncontrolled VOC emission concentration
VOC = 1.55 ppmvd (@ 15% O₂)
- MW is the molecular wt. of the pollutant
VOC = 16
- 2.63 X 10⁻⁹ is a constant (at 61 degrees F)
- ff is the f-factor of natural gas (8,578 dscf/MMBtu at 61 degrees F)
- C is the annual average capacity of the equipment, in MMBtu/hr
- % O₂ is the oxygen content to which the stack exhaust is corrected (15%)

Average Annual Rating: 989.1 MMBtu/hr (@ 61 degrees F)

Op. Schedule (This Scenario): 8,760 hr/yr

$$PE_{\text{VOC}} (\text{Uncontrolled}) = [(1.55)(16)(2.63 \times 10^{-9})(8578)(989.1)(20.95/(20.95-15)) \times (8,760 \text{ hr/yr}) = 17,069 \text{ lb/yr}$$

The uncontrolled potential to emit of VOC while operating under this scenario is less than the Major Source threshold of 20,000 lb/yr. Therefore, applicability requirement 3 from above is not met while operating under this scenario.

Scenario 2 (Start-up and shutdown episodes with periods of steady-state operation)

Start-up/Shutdown Hour Limit: 296 hr/yr (Current Permits to Operate)
Start-up/Shutdown Emission Limit: 16 lb/hr (Current Permits to Operate)

Steady State Hour Limit: 7,280 hours/yr – see below

Each unit is limited by its Permit to Operate to an annual VOC emission rate of 17,404 pounds. This limit was arrived at assuming that the unit would utilize its entire start-up/shutdown allowance of 296 hr/yr and then only operate at steady-state conditions for 7,280 hr/yr in order to remain under the 17,404 lb/yr VOC emission limit. This operating hour scenario will be utilized in this calculation because it represents the scenario under, which the emission limit was determined.

Uncontrolled Potential to Emit:

$$\begin{aligned} PE_{VOC} \text{ (Uncontrolled)} &= (296 \text{ hr/yr})(16 \text{ lb/hr}) \\ &+ [(1.55)(16)(2.63 \times 10^{-9})(8578)(989.1)(20.95/(20.95-15))(7,280 \text{ hr/yr})] \\ &= 18,921 \text{ lb/yr} \end{aligned}$$

The uncontrolled potential to emit of VOC while operating under this scenario is less than the Major Source threshold of 20,000 lb/yr. Therefore, applicability requirement 3 from above is not met while operating under this scenario.

CAM Summary:

NOx and CO:

As shown above, the units currently under consideration are exempt from CAM for NOx and CO.

VOC:

The uncontrolled potential to emit of VOC is less than the Major Source threshold of 20,000 lb/yr for each operating scenario. Therefore, applicability requirement 3 from above is not met and CAM is not required for VOC.

Compliance Assurance Monitoring (CAM) Analysis for the Cooling Tower (N-7172-3):

The facility is a Major Source for NO_x, CO, VOC, SO_x and PM₁₀ and the cooling tower is subject to a PM₁₀ emission limit that is met by the use of an emission control device (drift eliminator). Therefore, per 40 CFR Part 64.2(a), the unit is subject to CAM for PM₁₀ unless it is exempt.

To be subject to CAM, all three of the criteria above must be met. Requirement 3 (uncontrolled emissions from the cooling tower must be in excess of the Major Source threshold) will be tested first.

Emission Limit:	30.8 lb PM ₁₀ /day
Cooling Tower Rating:	68,500 gal/min
EF _{PM} (Uncontrolled):	0.019 lb/1,000 gal (AP-42, table 13.4-1)
PM ₁₀ Fraction:	0.149 lb PM ₁₀ /lb PM

The PM₁₀ fraction is from a report titled Calculating Realistic PM₁₀ Emissions from Cooling towers, Joel Reisman and Gordon Frisbie

$$PE_{PM} \text{ (controlled)} = (0.019 \text{ lb/1,000 gal})(68,500 \text{ gal/min})(1,440 \text{ min/day}) \\ = 1,874 \text{ lb/day}$$

$$\text{Control Efficiency} = [(1,874 \text{ lb/day})(0.149) - 30.8 \text{ lb/day}] \\ / [(1,874 \text{ lb/day})(0.149)] = 89\%$$

$$PE_{PM10} \text{ (Uncontrolled)} = (30.8 \text{ lb/day})(365 \text{ days/yr}) / (1-0.89) \\ = 102,200 \text{ lb/yr}$$

The uncontrolled potential to emit of PM₁₀ is less than the Major Source threshold of 140,000 lb/yr. Therefore, applicability requirement 3 from above is not met and CAM is not required for PM₁₀.

Appendix D
Major HAP Source Determination

To determine whether the facility is a Major Air Toxics Source, the facility-wide hazardous air pollutant (HAP) emissions will be compared to the Major Air Toxics Source thresholds. Those thresholds are 10 tons/yr of any single HAP or combined HAP emissions of 25 tons/yr.

This facility includes 4 permit units that emit HAPS:

- N-7172-1 (1,047 MMBtu/hr Natural Gas Fired Turbine)
- N-7172-2 (1,047 MMBtu/hr Natural Gas Fired Turbine)
- N-7172-3 (68,500 GPM Cooling Tower)
- N-7172-4 (300 BHP Diesel Fired Emergency Fire Pump)

N-71721 and N-7172-2 (Natural Gas fired Turbines):

The following list is from the Application Review document for project N-1021521 and is the combined amount for both turbines. That list was modified to include only the pollutants listed in Section 112 of the Federal Clean Air Act.

Hazardous Air Pollutant (HAP)	Combined Potential to Emit (Tons/yr)
Acetaldehyde	0.3
Acrolein	0.3
Benzene	0.03
1, 3 Butadiene	0.004
Ethyl Benzene	0.3
Formaldehyde	1.4
Hexane	2.2
Napthalene	0.01
Propylene Oxide	0.3
Toluene	1.1
Xylenes	0.6

N-7172-3 (68,500 GPM Cooling Tower):

The following list is from the Application Review document for project N-1021521 and is the combined amount for both turbines. That list was modified to include only the pollutants listed in Section 112 of the Federal Clean Air Act.

Hazardous Air Pollutant (HAP)	Combined Potential to Emit (Tons/yr)
Arsenic	2.0×10^{-5}
Cadmium	3.8×10^{-6}
Chromium	8.3×10^{-6}
Lead	2.5×10^{-6}
Manganese	9.7×10^{-5}
Nickel	2.0×10^{-5}
Selenium	2.0×10^{-5}

N-7172-4 (300 BHP Diesel Fired Emergency Fire Pump):

The emission factors in the table below are from the CATEF Database.

Fuel Use Capacity: 14.5 gal/hr (original application)
Operating Limit: 100 hr/yr (current PTO)

$$\text{Annual Fuel Use} = (14.5 \text{ gal/hr})(100 \text{ hr/yr}) = 1,450 \text{ gal/yr}$$

Compound	Emission Factor (lb/10 ³ gal)	Potential to Emit (tons/yr)
Acetaldehyde	0.00646	4.7×10^{-6}
Acrolein	0.00179	1.3×10^{-6}
Benzene	0.104	7.5×10^{-5}
Ethylbenzene	0.00803	5.8×10^{-6}
Formaldehyde	0.176	1.3×10^{-4}
Hexane	0.00147	1.1×10^{-6}
Toluene	0.111	8.1×10^{-5}
Xylene (total)	0.0206	1.5×10^{-5}

Facility-Wide HAP Emissions:

Hazardous Air Pollutant (HAP)	Potential to Emit (Tons/yr)			
	N-7172-1 and N-7172-2 (combined)	N-7172-3	N-7172-4	Total
Acetaldehyde	0.3	---	4.7×10^{-6}	0.3
Acrolein	0.3	---	1.3×10^{-6}	0.3
Arsenic	---	2.0×10^{-5}	---	2.0×10^{-5}
Benzene	0.03	---	7.5×10^{-5}	0.03
1, 3 Butadiene	0.004	---	---	0.004
Cadmium	---	3.8×10^{-6}	---	3.8×10^{-6}
Chromium	---	8.3×10^{-6}	---	8.3×10^{-6}
Ethyl Benzene	0.3	---	5.8×10^{-6}	0.3
Formaldehyde	1.4	---	1.3×10^{-4}	1.4
Hexane	2.2	---	1.1×10^{-6}	2.2
Lead	---	2.5×10^{-6}	---	2.5×10^{-6}
Manganese	---	9.7×10^{-5}	---	9.7×10^{-5}
Napthalene	0.01	---	--	0.01
Nickel	---	2.0×10^{-5}	---	2.0×10^{-5}
Propylene Oxide	0.3	---	---	0.3
Selenium	---	2.0×10^{-5}	---	2.0×10^{-5}
Toluene	1.1	---	8.1×10^{-5}	8.1×10^{-5}
Xylenes	0.6	---	1.5×10^{-5}	1.5×10^{-5}
Total				4.8

Major HAP Source Determination:

As can be seen, the potential to emit of no single HAP will equal or exceed 10 tons/yr and the combined HAP emissions will not equal or exceed 25 tons/yr. Therefore, the facility is not a major source of HAP emissions.

Appendix E

Detailed Facility List

Detailed Facility Report

For Facility=7172

Sorted by Facility Name and Permit Number

WALNUT ENERGY CENTER AUTHORITY 600 S WASHINGTON ROAD TURLOCK, CA		FAC # STATUS: TELEPHONE:	N 7172 A	TYPE: TOXIC ID:	TitleV	EXPIRE ON: AREA: INSP. DATE:	09/30/2014 15/ 06/14
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PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
N-7172-1-1	134,000 KW	3020-08B H	1	13,208.00	13,208.00	A	84 MW NOMINALLY RATED COMBINED-CYCLE POWER GENERATING SYSTEM #1 CONSISTING OF A 1,047 MMBTU/HR GENERAL ELECTRIC FRAME 7EA NATURAL GAS-FIRED COMBUSTION TURBINE GENERATOR WITH DRY LOW NOX COMBUSTOR, AN INLET AIR FILTRATION AND EVAPORATIVE COOLING SYSTEM, A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM, AN OXIDATION CATALYST, HEAT RECOVERY STEAM GENERATOR #1 (HRSG) AND A 100 MW NOMINALLY RATED STEAM TURBINE SHARED WITH N-7172-2
N-7172-2-1	134,000 KW	3020-08B H	1	13,208.00	13,208.00	A	84 MW NOMINALLY RATED COMBINED-CYCLE POWER GENERATING SYSTEM #2 CONSISTING OF A 1,047 MMBTU/HR GENERAL ELECTRIC FRAME 7EA NATURAL GAS-FIRED COMBUSTION TURBINE GENERATOR WITH DRY LOW NOX COMBUSTOR, AN INLET AIR FILTRATION AND EVAPORATIVE COOLING SYSTEM, A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM, AN OXIDATION CATALYST, HEAT RECOVERY STEAM GENERATOR #2 (HRSG) AND A 100 MW NOMINALLY RATED STEAM TURBINE SHARED WITH N-7172-1
N-7172-3-1	Electric Generation Component	999-99	1	0.00	0.00	A	68,500 GPM MECHANICAL DRAFT COOLING TOWER WITH 5 CELLS SERVED BY A HIGH EFFICIENCY DRIFT ELIMINATOR
N-7172-4-1	Electric Generation Component	3020-10 C	1	240.00	240.00	A	300 HP JOHN DEERE COMPANY MODEL JW6H-UF40 DIESEL-FIRED EMERGENCY IC ENGINE POWERING A FIRE PUMP

Number of Facilities Reported: 1

Appendix F
Title V Compliance Determination Form

San Joaquin Valley Air Pollution Control District

TITLE V COMPLIANCE CERTIFICATION FORM

I. TYPE OF PERMIT ACTION (Check appropriate box)

INITIAL TITLE V PERMIT

PERMIT RENEWAL

NEW TITLE V PERMIT

COMPANY NAME: Walnut Energy Center Authority	FACILITY ID: N - 7172
1. Type of Organization: <input type="checkbox"/> Corporation <input type="checkbox"/> Sole Ownership <input checked="" type="checkbox"/> Government <input type="checkbox"/> Partnership <input checked="" type="checkbox"/> Utility	
2. Owner's Name: Walnut Energy Center Authority	
3. Agent to the Owner:	
4. Compliance Certifications will be submitted on: year 1: <u>8 / 30 / 2015</u> year 2: <u>8 / 30 / 2016</u> year 3: <u>8 / 30 / 2017</u> year 4: <u>8 / 30 / 2018</u> year 5: <u>8 / 30 / 2019</u> Other dates if required by regulations or compliance schedule. _____	

II. COMPLIANCE CERTIFICATION (Read each statement carefully and initial each circle for confirmation):

- Based on information and belief formed after reasonable inquiry, the source identified in this application will continue to comply with the applicable federal requirement(s) which the source is in compliance as identified in the Compliance Plan.
- Based on information and belief formed after reasonable inquiry, the source identified in this application will comply with applicable federal requirement(s) that will become effective during the permit term as identified in the Compliance Plan, on a timely basis.
- Based on information and belief formed after reasonable inquiry, the source identified in this application is not in compliance at the time of permit issuance with the applicable federal requirement(s), as identified in the Compliance Plan, and I have attached a compliance schedule.
- Corrected information will be provided to the District when I become aware that incorrect or incomplete information has been submitted.
- Based on information and belief formed after reasonable inquiry, information and statements in the submitted application package, including all accompanying reports, and required certifications are true accurate and complete.

I declare, under penalty of perjury under the laws of the state of California, that the foregoing is correct and true:

George A. Davies, IV
Signature of Responsible Official

2/11/2014
Date

George A. Davies, IV

Name of Responsible Official (please print)

Combustion Turbine Department Manager

Title of Responsible Official (please print)