# VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT

4567 Telephone Road Ventura, CA 93003 805/303-4005

# DRAFT

# PART 70 PERMIT

Number 01267

Permit Term: June 8, 2023 to March 31, 2027

Company Name / Address:
Trustees of CSU and CSUCI Site Authority
One University Drive
Camarillo, CA 93012

Facility Name / Address: Trustees of CSU and CSUCI Site Authority 1947 West Potrero Road Camarillo, CA 93012

<u>Responsible Official:</u> Mr. Thomas Hunt Assistant Vice President 805/437-3352 <u>Title V Contact:</u> Mr. Jeff Smith Plant Manager 805/437-3795

The Part 70 permit consists of this page and the tables, attachments and conditions listed in the attached table of contents. The Part 70 permit application is included for reference only and is not a part of the Part 70 permit.

Pursuant to Rule 33.1, the Part 70 permit shall also serve as a permit to operate issued to fulfill the requirements of Rule 10.B.

Alip Du

Air Pollution Control Officer

June 8, 2023

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Note: The Part 70 permit application is included for reference only and is not a part of the Part 70 permit.

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Application No.	Issue Date	Description / Category	Revised Permit Sections
01267-ADM1	01/26/00	Changed Responsible Official and Title V Contact, revised emission factors / Administrative Part 70 Permit Amendment	<ul> <li>Signature Cover Page</li> <li>Table of Contents</li> <li>Permit Revisions Table</li> <li>Table No. 4</li> </ul>
01267-131	09/11/02	Changed Responsible Official / Administrative Amendment	<ul><li>Signature Cover Page</li><li>Permit Revisions Table</li></ul>
01267-141	06/10/04	Permit Reissuance for Period: April 1, 2004 to March 31, 2009	See "Stationary Source Description"
01267-151 01267-161	03/29/05	Application No. 01267-151: Added Emergency Engine and ATCM Requirements / Minor Part 70 Permit Modification Application No. 01267-161: Administrative Amendment to change the Responsible Official	<ul> <li>Signature Cover Page</li> <li>Table of Contents</li> <li>Permit Revisions Table</li> <li>Stationary Source Description</li> <li>Periodic Monitoring Summary</li> <li>Table No. 2</li> <li>Table No. 3</li> <li>Table No. 4</li> <li>Insignificant Activities Table</li> <li>ATCM for In-Use Emergency Engines Attachment</li> </ul>
01267-171	08/13/07	Changed Responsible Official / Administrative Amendment	<ul><li>Signature Cover Page</li><li>Permit Revisions Table</li></ul>
01267-181	04/28/09	Permit Reissuance for Period Terminating March 31, 2014	See "Permit Summary and Statement of Basis"
01267-191	10/11/10	Transfer of Ownership / Administrative Amendment	<ul><li>Signature Cover Page</li><li>Permit Revisions Table</li></ul>

Application No.	Issue Date	Description/ Category	Revised Section
01267-201	07/26/11	Changed Responsible Official / Administrative Amendment	<ul><li>Signature Cover Page</li><li>Permit Revisions Table</li></ul>
01267-211	03/22/12	Changed Responsible Official / Administrative Amendment	<ul><li>Signature Cover Page</li><li>Permit Revisions Table</li></ul>
01267-221	07/25/14	Permit Reissuance for Period Terminating March 31, 2019	See "Permit Summary and Statement of Basis"
01267-231	06/08/23	Permit Reissuance for Period Terminating March 31, 2027.	See "Permit Summary and Statement of Basis"

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# 1.b. PERMIT SUMMARY AND STATEMENT OF BASIS

#### Stationary Source Description

This stationary source is a cogeneration facility which produces electricity for sale to the power grid; and steam and electricity for exportation to the nearby California State University Channel Islands (CSUCI) facility. This source has a Standard Industrial Classification (SIC) Code of 4931, Electric and Other Services Combined. The source operates a cogeneration unit which consists of a General Electric LM 2500-33 natural gas-fired turbine that drives a 21.5 MW electrical generator. The stationary source also operates two 31.0 MMBTU/Hr Babcock and Wilcox steam boilers as standby units to provide steam to the California State University facility during periods when the gas turbine is not in operation. The permit also includes a 755 HP emergency standby diesel engine. This stationary source is subject to the Part 70 permit program based upon the potential to emit nitrogen oxides (NOx). The greenhouse gas potential to emit also exceeds the Part 70 permit program threshold.

As discussed in more detail throughout this Permit Summary and Statement of Basis, this permit applies to emissions units that are required to have a permit to operate pursuant to District Rule 10, "Permits Required", and District Rule 23, "Exemptions from Permit". These emissions units are listed in Table No. 2 in Section No. 2 of this permit. However, as discussed below, some equipment that is exempt from permit pursuant to District Rule 23, "Exemptions from Permit", may be subject to District rules such as District Rules 50, "Opacity" and 55, "Fugitive Dust". This includes "Insignificant Activities" as listed in Section No. 5 of the permit. In addition, "Short Term Activities" as listed in Section No. 9 of the permit are subject to certain rules and regulations. This permit does not regulate or restrict the use of motor vehicles and mobile equipment such as cars, trucks, bulldozers, and forklifts, however, any smoke or dust emissions generated from the use of such equipment is subject to District Rules 50, "Opacity" and 55, "Fugitive Dust". This permit does not shield the permittee from complying with any Federal, State, or District rule or regulation that is not specifically addressed in the permit or any rule or regulation that may come into effect during the term of the permit.

### Stationary Source Emissions

In Ventura County, the Part 70 permit thresholds are 50 tons per year for ROC and NOx and 100 tons per year for PM, SOx, and CO, pursuant to Rule 33.B.2 and Ventura County's "Serious" nonattainment classification with the federal ozone standard. As shown in Table No. 4, "Permitted Emissions", of the permit, none of the permitted emissions exceed these thresholds; however, the nitrogen oxides (NOx) potential to emit, when the emergency use of the emergency engine is included, the NOx threshold may be exceeded. The purpose of Table No. 4 is to document the permitted emissions of the criteria pollutants ROC, NOx, PM, SOx, and CO for this stationary source. Permitted Emissions of ammonia are also included in Table 4 for the turbine. District Rule 29, "Conditions on Permits", requires permitted emissions to be included on each Permit to Operate. District Rule 29 requires that annual permitted emissions be based on a 12 calendar month rolling period and be expressed in units of tons per year. Hourly permitted emissions for a

stationary source are required to be determined by aggregating the permitted emissions for each emissions unit at the stationary source.

Criteria pollutant emissions (ROC, NOx, PM, SOx, and CO) result from the combustion of natural gas in the turbine (can also burn fuel oil) and boilers and the combustion of diesel fuel in the emergency standby engine.

This stationary source is not a major source of federal Hazardous Air Pollutants (HAPs). The source is well below the HAP major source levels of 10 tons per year of a single HAP or 25 tons per year of combined HAPs. The Part 70 Permit re-issuance application includes a summary (in the units of pounds per year and pounds per hour) of pollutants that are subject to the State of California AB2588 Air Toxics "Hot Spot" Program. The goal of the Air Toxics "Hot Spots" Information and Assessment Act of 1987 (California Health and Safety Code Section 44300) is to collect air toxics emission data, to identify facilities having localized adverse health impacts, to ascertain health risks, to notify nearby workers and residents of significant risks, and to reduce significant risks if they exist. Under state law, motor vehicles (on-road and off-road) are not subject to the "Hot Spots" program. This facility has been subject to the "Hot Spots" program since the program's inception. Based on the quantity of toxic air contaminants released from the facility as determined by source testing, material balance calculations, and other engineering estimates, the potency and toxicity of materials released, and the proximity to sensitive receptors, this facility has been classified at the "intermediate" level. As an intermediate level facility, the stationary source is required to provide a toxics report every four years. The most recent submittal was received in 2021. This report stated that no changes had been made to the facility since the 2017 reporting year in which an extensive toxics report was conducted.

The United States EPA has added greenhouse gases (GHGs) to the list of regulated air pollutants. As of January 2, 2011, EPA has required that GHGs be calculated for each Title V stationary source and included in the Part 70 Permit. However, in a Federal Register notice dated August 19, 2015, EPA ruled that GHG emissions alone cannot be used to determine Title V applicability. This ruling was based on the U.S. Supreme Court decision of June 23, 2015. Greenhouse gases are defined as the aggregate group of six greenhouse gases: carbon dioxide, nitrous oxide, methane, hydrofluorocarbons (by category), perfluorocarbons (by category), and sulfur hexafluoride. Carbon dioxide equivalent emissions ( $CO_{2e}$ ) is the amount of greenhouse gases emitted relative to the global warming potential of each pollutant.

The CO<sub>2</sub> potential to emit for this stationary source has been calculated to be 151,437 tons per year. This potential to emit is based on the permitted annual combustion limits listed in Table No. 3 of the permit. The District has used an emission factors of 53.02 kg CO<sub>2</sub>/MMBTU natural gas (116.78 lb CO<sub>2</sub>/MMBTU natural gas) and 10.14 kg CO<sub>2</sub>/gallon distillate fuel (22.33 lb CO<sub>2</sub>/gal) from the *Regulation For The Mandatory Reporting of Greenhouse Gas Emissions*, California Code of Regulations, title 17, Subchapter 10, Article 2, sections 95100 to 95133; Appendix A, Table 4. The emission factor is only based on a carbon dioxide (CO<sub>2</sub>) emission factor and does not include a nitrous dioxide (N<sub>2</sub>O) or methane (CH<sub>4</sub>) component. For this purpose, the N<sub>2</sub>O and CH<sub>4</sub> components are negligible as compared to the CO<sub>2</sub> emissions. The calculations assume a natural gas heating value of 1,050 BTU per cubic foot and an engine efficiency of 10,000 BTU per BHP-hr. This CO<sub>2</sub> potential to emit does not include insignificant

activities or equipment exempt from permit pursuant to Rule 23, "Exemptions From Permit". Note that the emissions of greenhouse gases are not subject to Rule 42, "Permit Fees".

Starting in 2012, major GHG-emitting sources, such as electricity generation, and large stationary sources that emit more than 25,000 metric tons of carbon dioxide equivalent (MTCO<sub>2</sub>e) per year were required to comply with the California Air Resources Board GHG Capand-Trade Program. This program is regulated and implemented by the California Air Resources Board (CARB), and not the District. A list of these GHG Cap-and-Trade sources can be found on CARB's website.

# Compliance History

Upon reissuance of this Part 70 permit, the facility was determined to be in compliance with all applicable requirements. For the time period from January 1, 2013 to December 2, 2022, the facility received one (1) Notice of Violation (NOV) from the VCAPCD Compliance Division. See the "NOV by Facility" report for Facility 01267 at the end of this section for additional details.

# Equipment Description and Applicable Requirements - General

Applicable requirements for this stationary source are listed throughout the permit. The Table of Contents in the front of the permit summarizes the applicable requirements including the equipment specific requirements, the general applicable requirements, and the applicable requirements for short-term activities. Table No. 2 in Section No. 2 of this Permit to Operate details the applicable requirements for specific emissions units at the facility. Permit conditions that enforce these requirements are listed in Section No. 6, "Specific Applicable Requirements" and Section No. 7, "Permit Specific Conditions" of this permit.

In addition to the emission unit specific requirements in Section No. 6 and Section No. 7, there are additional general requirements that may apply to the emissions units listed in this table, or to the stationary source as a whole. Furthermore, some general requirements may apply to emissions units or short-term activities not required to be specifically listed on the permit. These general requirements are contained in the following sections of the Permit: Section No. 8, "General Applicable Requirements"; Section No. 9, "General Requirements for Short-Term Activities"; Section No. 10, "General Permit Conditions"; and Section No. 11, "Miscellaneous Federal Program Conditions". A detailed applicability discussion and additional legal basis for the permit condition(s) is included with each attachment or set of permit conditions.

# Equipment Description and Applicable Requirements - Specific

Construction on this facility was initiated in 1986 and therefore the cogeneration unit was subject to the best available control technology requirements of Rule 26, "New Source Review". In addition, the cogeneration unit is subject to Rule 74.23, "Stationary Gas Turbines", and 40 CFR Part 60 Subpart GG, "Standards of Performance for Stationary Gas Turbines". In order to comply with these requirements, the cogeneration unit is controlled by selective catalytic reduction (SCR) and water injection. Rule 74.23 was revised on November 12, 2019 and

includes revised emissions limits that are more stringent than the current emission limits that were based on BACT in 1986. The new limits become effective on January 1, 2024.

The facility operates a continuous emissions monitoring system (CEMS) at the cogeneration unit which continuously monitors control system operating parameters, as well as emissions of  $NO_x$  from the gas turbine. The two 31.0 MMBTU/Hr Babcock and Wilcox steam boilers are equipped with low NOx burners to comply with Rule 74.15, "Boilers, Steam Generators, and Process Heaters". The cogeneration unit and boilers are permitted to burn natural gas as the primary fuel and are permitted to burn distillate fuel oil during periods of natural gas curtailment.

The turbine based cogeneration unit is not subject to 40 CFR, Part 60, Subpart KKKK, "Standards of Performance for Stationary Combustion Turbines", because construction of the turbine commenced prior to February 18, 2005 and no modification or reconstruction has taken place since that date. The turbine has been permitted with the District since December 28, 1989. No changes have been made to the turbine since it has been permitted with the Title V permit program (April 1, 1999). The permit includes a permit shield for 40 CFR Part 60, Subpart KKKK.

The turbine based cogeneration unit is not subject to 40 CFR, Part 63, Subpart YYYY, "National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines" (Turbine MACT) because the stationary source is not a major source of HAPs (Hazardous Air Pollutants). Also, the turbine is classified in the MACT as an "existing stationary combustion turbine"; and therefore, would not be required to meet the requirements of Subpart YYYY or Subpart A, including the initial notification requirements, even if the facility was a major source of HAPs.

The permit also includes permit shields for the boilers from 40 CFR Part 60, Subpart Dc, "Standards of Performance for Small Industrial – Commercial – Institutional Steam Generating Units", and 40 CFR Part 63, Subpart JJJJJJ, "National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources". The Subpart Dc does not apply to the two 31 MMBTU/hr boilers since they were constructed prior to June 9, 1989. The Subpart JJJJJJ does not apply to the two 31 MMBTU/hr boilers since they are natural gas fired units.

The turbine based cogeneration unit is not subject to 40 CFR, Part 64, "Compliance Assurance Monitoring" (CAM). The turbine based cogeneration unit is not subject to CAM because it is already equipped with continuous emission monitors to comply with the NOx emission limits of Rule 26 and Rule 74.23. The two 31.0 MMBTU/Hr Babcock and Wilcox steam boilers are not subject to CAM as they are not equipped with an emission control device to comply with the NOx limits of Rule 26 and Rule 74.15.

The stationary source is not subject to the requirements of 40 CFR Part 68, "List of Regulated Substances and Thresholds for Accidental Release Prevention". The stationary source does utilize a regulated substance, anhydrous ammonia (NH<sub>3</sub>); however, the stored amount is less than the 10,000 pound threshold per 40 CFR Part 68.130.

This stationary source is not by definition an "affected unit" under 40 CFR Part 72 Subpart A, and is therefore not subject to the acid rain program requirements of 40 CFR Parts 72 through 78. In addition, this facility has a permit shield from the individual applicable requirements which have been incorporated into a turbine streamline table. Therefore, demonstrating compliance with the streamlined requirements assures compliance with the individual turbine and duct burner requirements.

This facility also operates a diesel emergency electricity generating engine. The engine is subject to the California Air Toxic Control Measure for Stationary Compression Ignition Engines. The ATCM includes fuel and recordkeeping requirements for emergency diesel engines. The engine is also subject to the maintenance requirements of the federal National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE MACT). The emergency engine is exempt from Rule 74.9, "Stationary Internal Combustion Engines".

# Permit Revisions Summary

The Permit Revisions Table (located in Section No. 1 of the permit) is a list of all permit revisions since Part 70 Permit No. 01267 was initially issued on April 1, 1999. A portion of the permit revisions are described in further detail below. The District's Engineering Analysis for each application can also be consulted for further details.

<u>Application No. 01267-141</u>: Application No. 01267-141 is for the reissuance of Part 70 Permit No. 01267 for the period April 1, 2004 to March 31, 2009. The following items summarize the changes from the initial Part 70 Permit No. 01267 (April 1, 1999 to March 31, 2004):

- All references to the three boilers located at California State University Channel Islands and previously permitted on VCAPCD Permit No. 00238 have been removed from the permit. The boilers have been permanently shut down. Permit Attachment PO01267PC2 Condition Nos. 2, 8, and 9 have been updated to reflect this change.
- The five-gallon unheated parts cleaner and all compliance requirements (i.e. Rule 74.6.1, "Cold Cleaners") have been removed from the permit.
- A permit attachment detailing the applicable requirements of Rule 74.11.1, "Large Water Heaters and Small Boilers", has been added to the permit.
- The Part 68 Permit Attachment has been updated to reflect that the facility has submitted a federal Risk Management Plan pursuant to section 112(r).
- The following rules have been revised and/or revisions of the rule have been adopted into the State Implementation Plan (SIP) since the initial issuance of the permit:
  - a) Rule 54, "Sulfur Compounds"
  - b) Rule 57, "Combustion Contaminants Specific"
  - c) Rule 64, "Sulfur Content of Fuels"
  - d) Rule 68, "Carbon Monoxide"
  - e) Rule 74.1, "Abrasive Blasting"
  - f) Rule 74.2, "Architectural Coatings"

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- g) Rule 74.6, "Surface Cleaning and Degreasing"
- h) Rule 74.6.1 "Cold Cleaners"
- i) Rule 74.9, "Stationary Internal Combustion Engines"
- j) Rule 74.15.1, "Boilers, Steam Generators, and Process Heaters"
- k) Rule 74.23, "Stationary Gas Turbines"
- 1) Rule 103, "Continuous Monitoring Systems"

<u>Application No. 01267-181</u>: Application No. 01267-181 is for the reissuance of Part 70 Permit No. 01267 for the five-year period terminating on March 31, 2014. The following items summarize the changes due to this reissuance application:

- Attachment PO01267PC1, Condition No. 2 has been revised to reflect Rule 23 changes regarding solvent use.
- Revisions have been made to the Insignificant Activities Table
- The Rule 52 Attachment has been removed from the permit based on the April 13, 2004 revision to the rule which exempted most combustion sources from the rule.
- The Rule 68 Attachment has been removed from the permit based on the April 13, 2004 revision to the rule which exempted most combustion sources from the rule.
- An attachment for Rule 55, "Fugitive Dust" has been added to the permit.
- Permit Shields for 40 CFR Part 60, Subpart KKKK and 40 CFR Part 63, Subpart YYYY have been added to the permit.
- The following District rules have been adopted, revised and/or revisions of the rule have been adopted into the State Implementation Plan (SIP) since the April 1, 2004 to March 31, 2009 reissuance:
  - a) Rule 23, "Exemptions From Permit"
  - b) Rule 50, "Opacity"
  - c) Rule 57.1, "Particulate Matter Emissions From Fuel Burning Equipment"
  - d) Rule 74.6, "Surface Cleaning and Degreasing"
  - e) Rule 74.9, "Stationary Internal Combustion Engines"
  - f) Rule 74.29, "Soil Decontamination Operations"
  - g) California Airborne Toxic Control Measure (ATCM) For Stationary Compression Ignition Engines

<u>Application No. 01267-221</u>: Application No. 01267-221 is for the reissuance of Part 70 Permit No. 01267 for the five-year period terminating on March 31, 2019. The following items summarize the changes due to this reissuance application:

 Attachment 40CFR63ZZZZN3 has been added to Section No. 6 of the permit. As of May 3, 2013, the existing emergency diesel engine has been required to comply with the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE MACT). The NESHAP includes maintenance requirements for the engine.

- The permit attachment for 40 CFR Part 68, "List of Regulated Substances and Thresholds for Accidental Release Prevention", has been revised to reflect that the stationary source is no longer subject to the requirements of 40 CFR Part 68. The application states that the facility no longer stores ammonia quantities exceeding the Part 68 threshold; and the stationary source has de-registered from the EPA program.
- A permit shield has been added to the permit for 40 CFR Part 63 Subpart JJJJJJ, "National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources"
- The following rules have been adopted, revised and/or revisions of the rule have been adopted into the State Implementation Plan (SIP) since the previous permit reissuance:
  - a) Rule 54, "Sulfur Compounds"
  - b) Rule 74.2, "Architectural Coatings"
  - c) Rule 74.11.1, "Large Water Heaters and Small Boilers"
  - d) California Airborne Toxic Control Measure (ATCM) For Stationary Compression Ignition Engines

<u>Application No. 01267-231</u>: Application No. 01267-231 is for the reissuance of Part 70 Permit No. 01267 for the five-year period terminating on March 31, 2027. The following items summarize the changes due to this reissuance application:

- The Responsible Official for Part 70 Permit No. 01267 has been changed.
- The Insignificant Activities Table has been revised.
- Attachment "STRMLN12167LM2500-NO<sub>x</sub>NH<sub>3</sub>" has been revised to reflect the future effective requirements of revised Rule 74.23, "Stationary Gas Turbines."
- Permit condition attachments for Rule 50, "Opacity," and Rule 74.1, "Abrasive Blasting," have been revised. The phrase "routine surveillance" has been removed.
- The following rules have been adopted, revised and/or revisions of the rule have been adopted into the State Implementation Plan (SIP) since the previous permit reissuance:
  - a) Rule 54, "Sulfur Compounds"
  - b) Rule 74.2, "Architectural Coatings"
  - c) Rule 74.6, "Surface Cleaning and Degreasing
  - d) Rule 74.15, "Boilers, Steam Generators, and Process Heaters"
  - e) 40 CFR Part 63, Subpart ZZZZ, NESHAPS for Stationary Reciprocating Internal Combustion Engines (RICE MACT)
  - f) 40 CFR Part 82, "Protection of Stratospheric Ozone"

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# Facility No01267Trustees of CSU & CSUCI Site Auth.

NOV Date NOV No	Rule Number	Comment	Settlement	Date Closed
11/15/2016 21194	074.15.B.1	ICIS #CAVCAA65240 Failure To Meet Boiler Emissions - Boiler	\$1,000.00	12/27/2016
for 1 NOVs			\$1,000.00	

Friday, December 2, 2022

# 1.c. PERIODIC MONITORING SUMMARY

This periodic monitoring summary is intended to aid the permittee in quickly identifying key monitoring, recordkeeping, and reporting requirements. It is not intended to be used as a "stand alone" monitoring guidance document that completely satisfies the requirements specifically applicable to this facility. The following tables are included in the periodic monitoring summary:

- Table 1.c.1 Specific Applicable Requirements
- Table 1.c.2 Permit-Specific Conditions
- Table 1.c.3 General Applicable Requirements
- Table 1.c.4 General Requirements for Short-Term Activities

### 1.c.1. Specific Applicable Requirements

The Specific Applicable Requirements Table includes a summary of the monitoring requirements, recordkeeping requirements, reporting requirements, and test methods associated with the attachments contained in Section No. 6 of this permit.

Attachment No./	Applicable Rule or	Monitoring	Recordkeeping	Semi-annual Reports	Test Methods	Comments
Condition No.	Requirement					
74.9N7	Rule 74.9.D.3	<ul> <li>Annual compliance certification</li> <li>Records of operating hours and reasons for operation along with applicable engine identification</li> </ul>	•Records of operating hours and reasons for operation along with applicable engine identification	None		Rule 74.9 exemption for emergency engines
ATCM Engine N2	ATCM for Stationary Compression Ignition Engines	<ul> <li>Hours of operation records for maintenance and testing</li> <li>Fuel type records</li> </ul>	<ul> <li>Hours of operation records for maintenance and testing</li> <li>Fuel type records</li> </ul>	None	None	Not Federally Enforceable
40CFR63ZZZZN3	RICE MACT for emergency diesel engines – oil change and inspections	•Maintenance records •Annual compliance certification	<ul><li>Maintenance records</li><li>Hours of operation records</li></ul>	None	None	
74.15N1	Rule 74.15.B.1	<ul> <li>Annual compliance certification</li> <li>Biennial Source Test (NO<sub>x</sub>, CO)</li> </ul>	<ul> <li>Records of source tests</li> <li>Daily records of alternate fuel consumption</li> </ul>	None	•NO <sub>x</sub> -ARB Method 100 •CO-ARB Method 100	These boilers are used only when the gas turbine is not operating

Attachment No./	Applicable Rule or	Monitoring	Recordkeeping	Semi-annual Reports	Test Methods	Comments
Condition No.	Requirement	C C				
STRMLN1267- LM-2500-NOx, NH3	Rules 26, 74.23.B.1, 74.23.B.2, 74.23.B.4, 103.A.4, 40 CFR Part 60 Subpart GG	<ul> <li>Annual Source Test (NOx, O2, NH<sub>3</sub>, fuel HHV)</li> <li>Submit test results w/in 45 days of conducting tests</li> <li>CEMs for fuel consumption, NOx, O2, and control system operating parameters</li> <li>Report each CEM emission violation w/in 96 hours</li> <li>Annual compliance certification</li> </ul>	<ul> <li>Records of CEMs data</li> <li>Records of maintenance operations, periodic inspections, and repairs to turbine, air pollution control system, and CEMs</li> <li>Records of source test reports and any violations or limit exceedances</li> </ul>	<ul> <li>Actual annual operating hours or fuel consumption</li> <li>Annual source test with control system operating parameters</li> </ul>	<ul> <li>•NO<sub>x</sub>-EPA Method 20</li> <li>•O2 - ARB Method 100</li> <li>•NH3 - BAAQMD Method ST-1B (1/20/82)</li> <li>•Gaseous fuel HHV - ASTM Method D1826-88</li> <li>•Fuel oil HHV - ASTM Method 240-87</li> </ul>	Streamlined Requirements
STRMLN1267- LM2500-SOx	Rules 26, 54 and 64, 40 CFR Part 60 Subpart GG,	<ul> <li>Annual compliance certification</li> <li>None for PUC-quality gas</li> <li>Annual test for non PUC- quality gas (submit with annual compliance certification)</li> <li>Fuel oil supplier's certification, or fuel test per each delivery (submit with annual compliance certification)</li> <li>Upon request, source test for sulfur compounds at point of discharge</li> </ul>	<ul> <li>Annual fuel gas analysis for non PUC-quality gas</li> <li>Fuel supplier's certification, or fuel test per each delivery</li> </ul>	None	<ul> <li>Gaseous fuel: SCAQMD Method 307-94</li> <li>Fuel oil: ASTM Method D4294- 98 or D2622-98</li> <li>Exhaust Sulfur Compounds - EPA Test Method 6, 6A, 6C, 8, 15, 16A,16B, or SCAQMD Method 307-94, as appropriate</li> </ul>	Streamlined Requirements

# **1.c.1.** Specific Applicable Requirements (Continued)

# 1.c.2. Permit-Specific Conditions

The Permit-Specific Conditions Table includes a summary of the monitoring requirements, recordkeeping requirements, reporting requirements, and test methods associated with the attachments contained in Section No. 7 of this permit.

Attachment No./	Applicable Rule or	Monitoring	Recordkeeping	Semi-annual Reports	Test Methods	Comments
PO1267PC1 Condition No. 1	Rule 26 General Recordkeeping	<ul> <li>Annual compliance certification</li> <li>Monthly records of throughput and consumption</li> </ul>	•Monthly records	None	None	
PO1267PC1 Condition No. 2	Rule 29 Exempt Solvents	•Maintain a list of solvents is use and the solvent's permit exemption status data	None	None	None	
PO1267PC2 Condition No. 1 Condition No. 8	Rule 26 Combustion Units Annual Mass Emissions Limits	<ul> <li>Turbine CEMs (NO<sub>x</sub>)</li> <li>Monthly records of fuel consumption and emissions (ROC, NOx, PM, SOx, CO)</li> <li>Annual compliance certification</li> </ul>	•Monthly records of fuel consumption and emissions	None	None	
PO1267PC2 Condition No. 2 Condition No. 8	Rule 26 Fuel Limitations B&W Boilers	•Records of fuel consumption •Annual compliance certification	•Monthly records of fuel consumption	None	None	
PO1267PC2 Condition No. 3 Condition No. 8	Rule 26 Fuel Oil Combustion Requirements B&W Boilers	<ul> <li>Source test for NOx and CO upon District request</li> <li>Records of fuel oil deliveries</li> <li>Obtain fuel supplier's certification or test sulfur content of fuel</li> <li>Annual compliance certification, including fuel sulfur content data</li> </ul>	Monthly records of fuel consumption Record of efforts taken to obtain lowest sulfur fuel oil Records of fuel oil sulfur content certifications or tests	None	<ul> <li>NO<sub>x</sub>-ARB Method 100</li> <li>CO-ARB Method 100</li> <li>Fuel sulfur content: ASTM Method D4294- 98 or D2622-98</li> </ul>	Periodic monitoring required for NOx and CO while burning fuel oil upon District request as B&W Boilers only operate when turbine is not in operation and fire fuel oil only during unlikely event of natural gas curtailment
PO1267PC2 Condition No. 4	Rule 26 Fuel Metering Requirements B&W Boiler	•Annual compliance certification	None	None	None	
PO1267PC2 Condition No. 5	Rules 26 and 74.15 Oxygen Monitoring Requirements B&W Boilers	•Annual compliance certification	None	None	None	Boilers only operate when the turbine is not in operation

<b>1.c.2.</b>	<b>Permit-Specific</b>	Conditions	(Continued)
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Attachment No./ Condition No.	Applicable Rule or Requirement	Monitoring	Recordkeeping	Semi-annual Reports	Test Methods	Comments
PO1267PC2 Condition No. 6	Rule 26 Simultaneous Operation Limits	•Annual compliance certification	None	None	None	
PO1267PC2 Condition No. 7 Condition No. 8	Rule 26 Natural Gas and Fuel Oil Combustion Requirements Gas Turbine	<ul> <li>Records of fuel consumption</li> <li>Records of fuel oil deliveries</li> <li>Obtain fuel supplier's certification or test sulfur content of fuel</li> <li>Annual compliance certification, including fuel sulfur content data</li> <li>Notify District within 5 days of burning fuel oil of efforts taken to obtain lowest sulfur fuel oil</li> </ul>	Monthly records of fuel consumption Record of efforts taken to obtain lowest sulfur fuel oil Records of fuel oil sulfur content certifications or tests	None	Fuel sulfur content: ASTM Method D4294-98 or D2622-98	
PO1267PC2 Condition No. 9	Rule 29 Notification of Planned Shutdowns	Notify District Enforcement Section of planned shutdowns by Dec. 31 for next calendar year	None	None	None	District Enforceable only

# 1.c.3. General Applicable Requirements

The General Applicable Requirements Table includes a summary of the monitoring requirements, recordkeeping requirements, reporting requirements, and test methods associated with the attachments contained in Section No. 8 of this permit.

Attachment No./	Applicable Rule or	Monitoring	Recordkeeping	Semi-annual Reports	Test Methods	Comments
50	Requirement Rule 50	<ul> <li>Routine surveillance</li> <li>Visual inspections</li> <li>Annual compliance certification, including a formal survey</li> <li>Opacity readings upon request</li> <li>Notification required for uncorrectable visible emissions</li> </ul>	<ul> <li>All occurrences of visible emissions for periods&gt;3min in any one hour</li> <li>Annual formal survey of all emissions units</li> </ul>	None	•Opacity - EPA Method 9	
54.B.1	Rule 54.B.1	<ul> <li>Annual compliance certification</li> <li>Follow monitoring requirements under Rule 64</li> <li>Upon request, source test for sulfur compounds at point of discharge</li> </ul>	None	None	•Sulfur Compounds - EPA Test Method 6, 6A, 6C, 8, 15, 16A,16B, or SCAQMD Method 307-91, as appropriate	•Compliance with Rule 64 ensures compliance with this rule based on District analysis
54.B.2	Rule 54.B.2	•Annual compliance certification •Determine ground or sea level concentrations of SO <sub>2</sub> , upon request	•Representative fuel analysis or exhaust analysis and compliance demonstration	None	•SO <sub>2</sub> - BAAQMD Manual of Procedures, Vol.VI, Section 1, Ground Level Monitoring for H <sub>2</sub> S and SO <sub>2</sub>	
55	Rule 55	•Annual compliance certification	•Specific activity records as applicable	None	•EPA Method 9	
57.1	Rule 57.1	Annual compliance certification	None	None	None	<ul> <li>Not required based on District analysis</li> </ul>
64.B.1	Rule 64.B.1	<ul> <li>Annual compliance certification</li> <li>None for PUC-quality gas, propane, or butane</li> <li>Annual test if gas is other than PUC-quality gas, propane, or butane (submit with annual compliance certification)</li> </ul>	•Annual fuel gas analysis if gas is other than PUC-quality gas, propane, or butane	None	•SCAQMD Method 307-94	

Attachment No./ Condition No.	Applicable Rule or Requirement	Monitoring	Recordkeeping	Semi-annual Reports	Test Methods	Comments
64.B.2	Rule 64.B.2	•Annual compliance certification •Fuel supplier's certification, or fuel test per each delivery (submit with annual compliance certification)	•Fuel supplier's certification, or fuel test per each delivery	None	•ASTM Method D4294-98 or D2622-98	
74.6	Rule 74.6	<ul> <li>Annual compliance certification</li> <li>Maintain current solvent information</li> <li>Routine surveillance of solvent cleaning activities</li> <li>Upon request, solvent testing</li> <li>Measurement of freeboard height and drain hole area for cold cleaners (as applicable)</li> </ul>	•Records of current solvent information	None	<ul> <li>ROC content-EPA Test Method 24</li> <li>Identity of solvent components-ASTM E168-67, ASTM E169-87, or ASTM E260-85</li> <li>Initial boiling point-ASTM 1078-78 or published source</li> <li>Spray gun active/passive solvent losses-SCAQMD Method (10-3-89)</li> </ul>	
74.11.1	Rule 74.11.1	Annual compliance certification     Maintain identification records     of large water heaters and small     boilers	•Records of current information of large water heaters and small boilers	None	None	•Rule only applies to the installation of large water heaters and small boilers
74.22	Rule 74.22	•Annual compliance certification •Maintain furnace identification records	•Records of current furnace information	None	None	•Rule only applies to future installation of natural gas-fired, fan-type furnaces

# 1.c.4. General Requirements for Short-Term Activities

The General Requirements for Short-Term Activities Table includes a summary of the monitoring requirements, recordkeeping requirements, reporting requirements, and test methods associated with the attachments contained in Section No. 9 of this permit.

Attachment No./	Applicable Rule or	Monitoring	Recordkeeping	Semi-annual	Test Methods	Comments
Condition No.	Requirement			Reports		
74.1	Kule /4.1	<ul> <li>Annual compliance certification</li> <li>Routine surveillance and visual inspections of abrasive blasting operation</li> <li>Abrasive blasting records</li> </ul>	Abrasive blasting records	None	Visible emission evaluation-Section 92400 of CCR	
74.2	Rule 74.2	<ul> <li>Annual compliance certification</li> <li>Routine surveillance</li> <li>Maintain VOC records of coatings used</li> </ul>	•Maintain VOC records of coatings used	None	•See Rule 74.2.G	
74.4.D	Rule 74.4.D	<ul> <li>Annual Compliance certification</li> <li>Test ROC content of oil sample being proposed for usage</li> </ul>	•Records of oil analyses	None	•ASTM D402	
40CFR61.M	40 CFR Part 61, Subpart M	•Annual compliance certification •See 40 CFR Part 61.145 for inspection procedures	•See 40 CFR Part 61.145 for recordkeeping procedures	•See 40 CFR Part 61.145 for notification procedures	•See 40 CFR Part 61.145 for test methods	

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# 2. PERMITTED EQUIPMENT AND APPLICABLE REQUIREMENTS TABLE

# Purpose

The purpose of this table is to list the emissions units at this stationary source that are permitted to operate pursuant to Rule 10, "Permits Required" and Rule 23, "Exemptions from Permit." The table also provides a list of requirements that are specifically applicable to these emissions units. Permit conditions that enforce these requirements are listed in Section No. 6, "Specific Applicable Requirements" and Section No. 7, "Permit Specific Conditions" of this permit.

In addition to the emission unit specific requirements in Section No. 6 and Section No. 7, there are additional general requirements that may apply to the emissions units listed in this table, or to the stationary source as a whole. Furthermore, some general requirements may apply to emissions units or short-term activities not required to be specifically listed on the permit. These general requirements are contained in the following sections of the Permit: Section No. 8, "General Applicable Requirements"; Section No. 9, "General Requirements for Short-Term Activities"; Section No. 10, "General Permit Conditions"; and Section No. 11, "Miscellaneous Federal Program Conditions."

# Equipment Description

This portion of the table provides a brief description of the permitted equipment at this stationary source. Attached to the table is a "Title V Equipment List Description Key" that contains definitions and explanations for some of the standard terminology used in the equipment description.

# Applicable Requirements

The applicable requirements portion of the table is a matrix of applicability for the specific requirements that apply to the listed emissions units. The columns are labeled with APCD rule numbers or references to federal requirements. An "X" in the row corresponding to the emissions unit indicates the requirement is specifically applicable to that unit. For cases where a rule has multiple compliance options, a number appears instead of an "X." The number is a code key that corresponds to the "Title V Applicable Requirement Code Key" attached to the table. The code key table contains specific citations for the portions of the rule that are applicable. The code key is also used to identify the permit attachment in Section No. 6, "Specific Applicable Requirements," that contains the associated permit conditions. For example, code key "3" under Rule 74.9 indicates that the emission unit is required to comply with the requirements of Attachment 74.9N3 in Section No. 6.

Permit specific conditions are identified with a "PC" followed by a number in the column labeled "ADD REQ" (additional requirements). A "PC#" in the row corresponding to the emissions unit indicates that the permit specific condition is specifically applicable to that unit. For the purpose

of the Annual Compliance Certification, the owner or operator can identify the conditions that apply within the "PC#." The "PC#" also corresponds to the permit attachment in Section No. 7, "Permit Specific Conditions," that contains the permit specific requirements.

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#### TABLE NO. 2

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT											
Permit to Operate No. 01267 Permitted Equipment and Applicable Requirements											
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Equipment	54	64	74.9	74.15	74.23	103	NSPS GG	ATCM for CI Engines	RICE MACT	Additional Requirements	
<ul> <li>1 - 255.7 MMBTU/Hr (HHV) General Electric LM 2500-33</li> <li>21.5 MW Turbine with a Heat Recovery Boiler. Water Injection and SCR for NO<sub>x</sub> Control; Natural Gas-Fired with Fuel Oil for Curtailment Situations</li> </ul>	х	Х			4	4	Х			PC1, PC2	
1 - 31 MMBTU/Hr Babcock & Wilcox Steam Boiler (FM-3029) with a Coen DAF low NO <sub>x</sub> Burner; Natural Gas-Fired with Fuel Oil for Curtailment Situations				1						PC1, PC2	
1 - 31 MMBTU/Hr Babcock & Wilcox Steam Boiler (FM-3030) with a Coen DAF low NO <sub>x</sub> Burner; Natural Gas-Fired with Fuel Oil for Curtailment Situations				1						PC1, PC2	
1 - 755 HP Detroit Diesel Emergency Standby Engine, (565 KW) Model 71637305, Serial No. 16VA19578, "Blackstart"			7					2	3	PC1	

# PART 70 PERMIT NO. 01267 TITLE V EQUIPMENT LIST DESCRIPTION KEY

The Permitted Equipment and Applicable Requirements Table and this Title V permit contain a number of terms, abbreviations, and acronyms that have been standardized. The following list describes and defines many of the terms in this permit:

APCD	Air Pollution Control District
APCO	Air Pollution Control Officer of the Ventura County APCD
ARB	The California Air Resources Board
ASTM	American Standards for Testing Materials
BACT	Best Available Control Technology
BHP	The rating of an internal combustion engine as measured in brake horsepower
CARB	California Air Resources Board
CFH	Cubic feet per hour
CFM	Cubic feet per minute
CFR	Code of Federal Regulations
СО	Carbon Monoxide
EPA	Environmental Protection Agency
FGR	Flue Gas Recirculation – NOx control technology primarily used for boilers
FO	Fuel Oil
GE	General Electric
Gal	Gallon
НАР	Hazardous Air Pollutant
Lb ROC/Gal	Pound(s) of ROC per gallon
MMBTU	The heat input of a combustion device as measured in millions British Thermal Units
MW	MegaWatt
NESHAPS	National Emission Standards for Hazardous Air Pollutants
NH <sub>3</sub>	Ammonia

NG	Natural Gas
NOx	Oxides of Nitrogen
NSPS	New Source Performance Standard
PM	Particulate Matter
ROC	Reactive Organic Compound
SCAQMD	South Coast Air Quality Management District
SCFM	Standard cubic feet per minute
SCR	Selective Catalytic Reduction for NOx control
SIP	State Implementation Plan
SOx	Sulfur Oxides
1,1,1 <b>-</b> TCA	Trichloroethane
TV AF	Title V application form
VOC	Volatile Organic Compound

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# PART 70 PERMIT NO. 01267 TITLE V APPLICABLE REQUIREMENT CODE KEY

Rule 74.9, "Stationary Internal Combustion Engines"

- 1. Pre-January 1, 2002 emissions limits for rich-burn engines (increments of progress have passed)
- 2. Pre-January 1, 2002 emissions limits for lean-burn engines (increments of progress have passed)
- 3. Natural gas-fired rich-burn engines (74.9.B.1 or 74.9.B.2)
- 4. Natural gas-fired lean-burn engines (74.9.B.1 or 74.9.B.2) with ammonia emission limit, if applicable. (74.9.B.5)
- 5. Diesel engines. (74.9.B.1 or 74.9.B.2) with ammonia emission limit, if applicable. (74.9.B.5)
- 6. Exemption from Rule 74.9 for engines operated less than 200 hours per calendar year (74.9.D.2)
- 7. Exemption from Rule 74.9 for emergency standby engines operated during either an emergency or maintenance operation. (74.9.D.3)
- 8. Exemption from Rule 74.9 for diesel engines with a permitted capacity factor of less than or equal to 15%. (74.9.D.8)
- 9. Exemption from Rule 74.9 for diesel engines used to power cranes and welding equipment. (74.9.D.9)
- 10. Exemption from Rule 74.9 for diesel engines operated on San Nicolas Island. (74.9.D.10)

Rule 74.15, "Boilers, Steam Generators and Process Heaters"

- 1. NOx and CO emission limits for units with an annual heat input rate greater than or equal to 9,000 MMBTU per calendar year (74.15.B.1)
- 2. Tuning and fuel metering requirements for units with an annual heat input rate of less than 9,000 MMBTU per calendar year. (74.15.B.2 and 74.15.D.1)

Rule 74.23, "Stationary Gas Turbines"

- NOx and NH3 emission limit for turbines rated at 0.3 MW to less than 2.9 MW (74.23.B.1 and 74.23.B.4) Requirement to monitor operating parameters. (74.23.B.2.a and b)
- NOx and NH3 emission limit for turbines rated at 2.9 MW to less than 10.0 MW. (74.23.B.1 and 74.23.B.4) Requirement to monitor operating parameters. (74.23.B.2.a and b)
- 3. NOx and NH3 emission limit for turbines rated at 10.0 MW and higher, with SCR, and operated less than 4,000 hr/yr (74.23.B.1 and 74.23.B.4) Requirement to monitor operating parameters. (74.23.B.2.a and b)
- 4. NOx and NH3 emission limit and CEMS requirement for turbines rated at 10.0 MW and higher, with SCR, and operated more than 4,000 hr/yr (74.23.B.1, 74.23.B.2, and 74.23.B.4)

Section No. 2 Applicable Requirement Code Key

- 5. NOx emission limit for turbines rated at 10.0 MW and higher, without SCR, and operated less than 4,000 hr/yr (74.23.B.1) Requirement to monitor operating parameters. (74.23.B.2.a and b)
- 6. NOx emission limit and CEMS requirement for turbines rated at 10.0 MW and higher, without SCR, and operated more than 4,000 hr/yr (74.23.B.1 and 74.23.B.2)
- 7. NOx emission limit for turbines rated at 4.0 MW and higher, operated less than 877 hr/yr (74.23.B.1) Requirement to monitor operating parameters. (74.23.B.2.a and b)
- 8. Exemption from the requirements of 74.23.B, for turbines operated less than 200 hrs per calendar year (74.23.C.1.c)
- 9. Exemption from the requirements of 74.23.B, for emergency standby units operated during either an emergency or maintenance operation. (74.23.C.1.d)
- 10. Equipment is currently shut-down and not operating. Upon operation will install non-resettable totalizing hour meter (74.23.D.2). Exempt from the requirements of 74.23.B as long as turbine is operated less than 200 hrs per calendar year (74.23.C.1.c)

Rule 103, "Stack Monitoring"

- 1. CEM requirements for emission sources required by federal regulations to be equipped with a CEM system (103.A.1)
- 2. CEM requirements for boilers, steam generators, and process heaters with a heat input capacity of between 40 MMBTU/Hr and 250 MMBTU/Hr, and a capacity factor of at least 30% (103.A.2)
- 3. CEM requirements for boilers, steam generators, and process heaters with a heat input capacity of 250 MMBTU/Hr or more (103.A.3)
- 4. CEM requirements for any equipment which emits 2.3 kg/hr (5 lb/hr) or 22.7 kg/day (40 lb/day) or more of any single air contaminant (103.A.4)

Section 93115, Title 17, California Code of Regulations California Airborne Toxic Control Measure For Stationary Compression Ignition (CI) Engines

- 1. In-use emergency fire pump assembly engines
- 2. In-use emergency engines operated not more than 20 hours per year for maintenance and testing purposes.
- 3. Engines operated solely on OCS Platforms.
- 4. In-use emergency engines operated not more than 50 hours per year for maintenance and testing purposes.
- 5. Emergency engines installed after January 1, 2005

<u>40 CFR Part 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for</u> <u>Stationary Reciprocating Internal Combustion Engine (RICE MACT)</u>

- 1. Existing compression ignition and spark ignition engine compliance dates
- 2. Existing landfill gas engines area source
- 3. Existing emergency diesel engines area source
- 4. Existing non-emergency diesel engines  $\leq 300 \text{ HP} \text{area source}$
- 5. Existing non-emergency diesel engines  $300 \text{ HP} < X \le 500 \text{ HP} \text{area source}$
- 6. Existing non-emergency diesel engines < 500 HP area source

Section No. 2 Applicable Requirement Code Key

- 7. Existing non-emergency spark-ignited remote engine > 500 HP – area source
- Existing non-emergency diesel engines greater than 300 HP at an area source of HAPs 8. that qualify under the national security exemption Existing emergency spark ignited engines
- 9.

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# 3. PERMITTED THROUGHPUT AND CONSUMPTION LIMIT TABLE

# Purpose

The purpose of this table is to list the emissions units at this stationary source that have limitations on throughput, fuel consumption, raw material usage, hours of operation, or other parameters that limit the potential to emit of the emissions unit. In some cases, the limit on the potential to emit is expressed directly as a set of pollutants and emission limits in tons per year.

These limitations are applied pursuant to Rule 26, "New Source Review" or Rule 29, "Conditions on Permits." Two sets of limits are listed in this table. The "Throughput Permit Limit" is the enforceable limit pursuant to this permit. Permit conditions that enforce these limits are listed in Section No. 7, "Permit Specific Conditions" of this permit.

The "Calculation Throughput" is used only to calculate permitted emissions pursuant to Rule 29, "Conditions on Permits."

# Equipment Description

This portion of the table is the same as the equipment description in the "Permitted Equipment and Applicable Requirements Table."

# Throughput Permit Limit

The throughput or consumption limit listed in this column of the table is an enforceable limit on the emissions unit's potential to emit. In the column labeled "District (D)/ Federal (F) Enforceable," a "D" or an "F" denotes whether the limit is only enforceable by the District or whether the limit is a federally-enforceable limit. District-enforceable limits are limits applied solely pursuant to Rule 29, "Conditions on Permits." Limits that have been applied pursuant to Rule 26, "New Source Review" are federally enforceable.

The throughput permit limit may apply to a single emissions unit or to a set of emission units. When the limit applies to set of emissions units, the set consists of the emissions unit with which the limit is listed and the emissions units which follow that have an asterisk in the throughput permit limit column.

Pursuant to Rule 26 and Rule 29, the throughput permit limit is an annual limit which is enforceable based on a period of any twelve (12) consecutive calendar months.

Note that when the calculation throughput (discussed below) corresponds to using the emissions unit full time (8760 hours per year) at maximum rated capacity, the throughput permit limit column contains the notation "No Limit." When District emission calculation procedures do not involve throughput or consumption data, both the throughput permit limit and the calculation throughput

### column are left blank.

### Calculation Throughput

The throughput or consumption limit listed in this column of the table is the throughput used in the District calculation procedures to calculate permitted emissions for the emissions unit. The calculation throughput may apply to a single emissions unit or to a set of emissions units denoted as discussed above. The calculation throughput is not an enforceable permit limit.

### Abbreviations

The following abbreviations have been used in the "Permitted Throughput and Consumption Limit Table" for the "Throughput Permit Limit" column and for the "Calculation Throughput Limit" column:

BBL/Yr: barrels per year Days/Yr: days per year FO: fuel oil or diesel fuel Gal/Yr: gallons per year Hrs/Day: hours per day Hrs/Yr: hours per year Lbs/day: pounds per day Lbs ROC/Yr: pounds of reactive organic compounds per year MBBL/Yr: thousands of barrels per year MBBL/Yr: thousands of gallons per year MMBTU/Yr: million British Thermal Units of heat input per year MMCF/Yr: million standard cubic feet of natural gas per year MGal/Yr: million gallons per year

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#### TABLE NO. 3

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT											
Permi	to Operate No. 01267										
Permitted Th	oughput/Consumption Lir	nits									
M:\TITLEV\TV Permits\PO1267\PERMIT IV\TABLES1267-181	Throughput/Emission	District (D)/									
	Permit	Federal(F)	Calculation	Calculation							
Equipment	Limit	Enforceable	Throughput	Procedure							
<ul> <li>1 - 255.7 MMBTU/Hr (HHV) General Electric LM 2500-33</li> <li>21.5 MW Turbine with a Heat Recovery Boiler. Water Injection and SCR for NO<sub>x</sub> Control; Natural Gas-Fired with Fuel Oil for Curtailment Situations</li> </ul>	Fuel Oil @ 1,080 hr/yr										
ROC	14.88 TPY 33 38 TPV	F	2,089.4 MMCF/Yr NG Based on offsets provided								
PM	8.73 TPY	F	1,823.8 MMCF/Yr NG								
SO	25.01 TPY	F	& 2,004 Mgal/Yr FO 1,823.8 MMCF/Yr NG								
CC	57.59 TPY	F	& 2,004 Mgal/Yr FO 2,089.4 MMCF/Yr NG								
<ul> <li>1 - 31 MMBTU/Hr Babcock &amp; Wilcox Steam Boiler (FM-3029) with a Coen DAF low NO<sub>x</sub> Burner; Natural Gas-Fired with Fuel Oil for Curtailment Situations</li> </ul>		F									
ROC NO2	*	F F	Is.5 MMCF/Yr NG Included in offset provision								
			stated above								
PM	*	F	15.5 MMCF/Yr NG								
00/ C0	*	F	15.5 MMCF/Yr NG								
1 - 31 MMBTU/Hr Babcock & Wilcox Steam Boiler (FM-3030) with a Coen DAF low NO <sub>x</sub> Burner; Natural Gas-Fired with Fuel Oil for Curtailment Situations ROC NO <sub>2</sub> PM SO <sub>2</sub> CC	* * * * *	F F F F	* * * *								
1 - 755 HP Detroit Diesel Emergency Standby Engine, (565 KW) Model 71637305, Serial No. 16VA19578, "Blackstart"	20 Hrs/Yr (for maintenance and testing)	D	20 Hrs/Yr								
* - Included in Limit or Calculation Throughput Above											

# 4. PERMITTED EMISSIONS TABLE

# Purpose

The purpose of this table is to document the permitted emissions for this stationary source. Rule 29, "Conditions on Permits," requires permitted emissions to be included on each Permit to Operate. Rule 29 is not federally enforceable.

The permitted emissions table also characterizes the amount and type of criteria air pollutants emitted by this stationary source.

Rule 29 requires that annual permitted emissions be based on a 12 calendar month rolling period and be expressed in units of tons per year. Hourly permitted emissions are required to be expressed in units of pounds per hour. Permitted emissions for a stationary source are required to be determined by aggregating the permitted emissions for each emissions unit at the stationary source.

In general, permitted emissions are calculated based on throughput or consumption data for an emission unit, specific physical characteristics of the emission unit, and emission factors. The emission factors may be standard published emission factors, or they may be derived from source test data or specific emission limits that apply to the emissions unit. In some cases, permitted emissions are expressed directly as a set of pollutants and emission limits in tons per year without reference to any calculation method.

Section No. 3, "Permitted Throughput and Consumption Limit Table," contains information on the throughput and consumption limits that are enforceable at this stationary source. In addition, other sections of this permit contain conditions that act to enforce specific portions of the permitted emissions table.

# Equipment Description

This portion of the table is the same as the equipment description in the "Permitted Equipment and Applicable Requirements Table."

# Tons Per Year

This column of the table represents the permitted emissions in units of tons per year for ROC (reactive organic compounds), NOx (nitrogen oxides), PM (particulate matter), SOx (sulfur oxides), and CO (carbon monoxide). In some cases, emissions of non-criteria pollutants of interest may also be listed. Pursuant to Rule 29, annual permitted emissions shall be the annual emissions used to determine compliance for issuance of any new or revised permit issued after October 22, 1991. For emissions units for which no new or revised permit has been issued since

October 22, 1991, annual permitted emissions generally reflect actual historical emissions from the emissions unit.

The permitted emissions limit may apply to a single emissions unit or to a set of emission units. When the limit applies to set of emissions units, the set consists of the emissions unit with which the limit is listed and the emissions units which follow that have an asterisk in the pollutant columns.

# Pounds Per Hour

This column of the table represents the permitted emissions in units of pounds per hour for ROC (reactive organic compounds), NOx (nitrogen oxides), PM (particulate matter), SOx (sulfur oxides), and CO (carbon monoxide). Pursuant to Rule 29, hourly permitted emissions shall be calculated based on the maximum quantity of each air pollutant which may be emitted from the emissions unit during a one-hour period, as limited by any applicable rules or permit conditions.

# Hazardous Air Pollutants

This permit does not provide information that characterizes the emissions of hazardous air pollutants (HAPS) from this facility. This information can be obtained from the reissuance application or the facility's AB-2588, Air Toxics "Hot Spots," Report referenced at the bottom of the "Permitted Emissions Table." For Outer Continental Source (OCS) sources and other sources not subject to AB-2588, HAP emissions information is included in the permit reissuance application and is maintained by the stationary source.

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#### TABLE NO. 4

VENTUR.	Permitted Emissions											
M:\TITLEV\TV Permits\P01267\PERMIT IV\TABLES1267-181			TONS P	ER YEAI	ર			P	OUND	S PER HC	UR	
Equipment	ROC	NO <sub>x</sub>	PM	SO <sub>x</sub>	СО	NH <sub>3</sub>	ROC	NO <sub>x</sub>	PM	SO <sub>x</sub>	СО	NH <sub>3</sub>
<ol> <li>255.7 MMBTU/Hr (HHV) General Electric LM 2500-33</li> <li>21.5 MW Turbine with a Heat Recovery Boiler. Water Injection and SCR for NO<sub>x</sub> Control; Natural Gas-Fired with Fuel Oil for Curtailment Situations</li> </ol>	14.78	33.38	8.67	25.01	55.19	30.10	3.45	8.94	5.62	44.27	12.86	7.34
<ol> <li>31 MMBTU/Hr Babcock &amp; Wilcox Steam Boiler (FM-3029) with a Coen DAF low NO<sub>x</sub> Burner; Natural Gas-Fired with Fuel Oil for Curtailment Situations</li> </ol>	0.10	*	0.06	<0.01	2.40		0.79	9.12	0.88	10.73	19.31	
<ol> <li>31 MMBTU/Hr Babcock &amp; Wilcox Steam Boiler (FM-3030) with a Coen DAF low NO<sub>x</sub> Burner; Natural Gas-Fired with Fuel Oil for Curtailment Situations</li> </ol>	*	*	*	*	*		*	*	*	*	*	
<ul> <li>1 - 755 HP Detroit Diesel Emergency Standby Engine, (565 KW) Model 71637305, Serial No. 16VA19578, "Blackstart"</li> </ul>	0.02	0.25	0.02	<0.01	0.05		0.18	2.51	0.18	0.04	0.55	
* - Included in Emissions Above												
Total Permitted Emissions	14.90	33.63	8.75	25.01	57.64	30.10	4.42	20.57	6.68	55.04	32.72	7.34
HAP Emissions Ref.: AB 2588 Air Toxics Report			Report	ing Year:	1992			Submitta	al Date:	03/07/94		

# 5. EXEMPT EQUIPMENT LIST

Rule 33.2.A.3 (Part 70 Permits - Application Contents) requires the applicant to provide a list of all emissions units located at the stationary source that are exempt pursuant to Rule 23 based on size or production rate. Pursuant to Rule 33.2.A.3, emissions from insignificant activities do not need to be included in the permit application.

This section of the permit contains a table entitled "Insignificant Activities (Exempt Equipment)." This table is a list of insignificant activities (exempt equipment) at the facility that are exempt from permit based on a size or production rate exemption in Rule 23, "Exemptions from Permit." Insignificant Activity is defined in Rule 33.1 (Part 70 Permits – Definitions). The permittee shall provide calculations, usage records, emission records, and/or operational data as necessary to substantiate an activity as insignificant.

This table is presented for informational purposes only. Any changes to this list are not considered to be permit modifications, nor is the list considered to be enforceable. As detailed in Rule 33.2.A.3, this list is required to be submitted with an application for permit reissuance. The general requirements listed in Section No. 8 of this permit may apply to these insignificant activities.

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# Ventura County Air Pollution Control District INSIGNIFICANT ACTIVITIES (EXEMPT EQUIPMENT)

Part 70 Permit No. 01267

INSIGNIFICANT	<b>BASIS FOR EXEMPTION</b>	<b>RULE 23 CITATION</b>
ACTIVITIES (EXEMPT	(Size/Production Rate)	
EMISSION UNITS)		
1 – Waste Oil Aboveground Storage Tank (300 Gallons)	Reactive organic compound liquid with a modified Reid vapor pressure of 0.5 psia or less	23.F.21 (71.2.G.1.a and 71.2.G.1.b)
3 – Lube Oil Systems (1 – 150 gal, 1 – 160 gal, 1 – 900 gal)	Reactive organic compound liquid with a modified Reid vapor pressure of 0.5 psia or less	23.F.21 (71.2.G.1.a and 71.2.G.1.b)
1 – Cleaner	Cleaning agents certified by the SCAQMD as Clean Air Solvents	23.F.10.a
1 – 11 HP Gasoline Engine (Pressure Washer)	< 50 BHP	23.D.6
1 – 9 HP Gasoline Engine (Portable Welder)	< 50 BHP	23.D.6
1 – 0.25 HP Gasoline Engine (Leaf Blower)	< 50 BHP	23.D.6
1 – CARB Compliant Gasoline Engine (Weedeater)	< 50 BHP	23.D.6
1 – 22 HP Gasoline Engine (Tractor)	< 50 BHP	23.D.6

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#### 6. SPECIFIC APPLICABLE REQUIREMENTS (ATTACHMENTS)

As discussed in Section No. 2, "Permitted Equipment and Applicable Requirements Table," the emissions units at this stationary source listed in the table have requirements that are specifically applicable to them. The applicable requirements are based on the District's prohibitory rules, State of California ATCM's, federal NSPS (40 CFR Part 60), federal NESHAPS (40 CFR Part 61), and federal NESHAPS/MACT (40 CFR Part 63).

In this section of the permit, the permit conditions that are associated with each specific applicable requirement are listed in an individual attachment. The attachment is identified with the label "Attachment (APCD Rule No. or CFR No.) #" in the lower left corner. Each attachment has an applicability section that describes how and why this attachment applies to the specific emissions unit. The attachment may apply to one or more of the emissions units listed in the Permitted Equipment and Applicable Requirements Table in Section No. 2.

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# Ventura County Air Pollution Control District Rule 74.9.D.3 Applicable Requirements Emergency Standby Stationary Internal Combustion Engines Operated During Either an Emergency or Maintenance Operation

# Rule 74.9, "Stationary Internal Combustion Engines" Adopted 11/08/05, Federally-Enforceable

# **Applicability:**

This attachment applies to emergency standby stationary internal combustion engines rated at 50 or more horsepower, not subject to the provisions of APCD Rule 74.16, "Oilfield Drilling Operations", and operated during an emergency or maintenance operation. Maintenance operation is limited to 50 hours per calendar year. Pursuant to Rule 74.9.D.3, emergency standby stationary internal combustion engines operated during an emergency or during maintenance operation of no more than 50 hours per calendar year are exempt from all provisions of Rule 74.9.

As detailed in Rule 74.9.I.2 an emergency standby engine is defined as an internal combustion engine used only when normal power line or natural gas service fails, or for the emergency pumping of water for either fire protection or flood relief. An emergency standby engine may not be operated to supplement a primary power source when the load capacity or rating of the primary power source has been either reached or exceeded.

# **Conditions:**

1. Pursuant to Section D.3 of Rule 74.9, an applicable emergency standby stationary internal combustion engine shall only be operated during an emergency or during maintenance operation of not more than 50 hours per calendar year.

Pursuant to Section I.5 of Rule 74.9, a maintenance operation is defined as the use of an emergency standby engine and fuel system during testing, repair and routine maintenance to verify its readiness for emergency standby use.

- 2. Pursuant to Section D.3 of Rule 74.9, each emergency standby engine shall be equipped with an operating, non-resettable, elapsed hour meter.
- 3. Pursuant to Section F.1 of Rule 74.9, the Annual Compliance Certification shall include the following records for each emergency standby engine: Engine manufacturer, model number, operator identification number, and location.

4. Pursuant to Section F.2 of Rule 74.9, the annual engine hours of maintenance operation shall be reported annually. A report shall be provided to the District after every calendar year by February 15.

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# Ventura County Air Pollution Control District California Airborne Toxic Control Measure For Stationary Compression Ignition Engines In-Use Emergency Engines

#### Section 93115, Title 17, California Code of Regulations, Airborne Toxic Control Measure For Stationary Compression Ignition (CI) Engines Effective 05/19/11

The District is required to implement and enforce the state ATCM. The ATCM is not federallyenforceable.

# Applicability:

This attachment describes the requirements of California Airborne Toxic Control Measure (ATCM) For Stationary Compression Ignition (CI) Engines that apply to in-use emergency standby stationary diesel-fueled CI engines. An "in-use" engine is an engine that was installed at a facility prior to January 1, 2005. Pursuant to Section 93115.4(a)(30) "Emergency use" means providing electrical power during the failure or loss of all or part of normal electrical power service or normal natural gas supply to the facility: (1) which is caused by any reason other than the enforcement of a contractual obligation the owner or operator has with a third party or any other party; and (2) which is demonstrated by the owner or operator. Pursuant to Section 93115.4(a)(8) CARB Diesel Fuel means any diesel fuel that meets the specifications of vehicular diesel fuel, as defined in title 13, CCR, sections 2281 and 2282. The Verification Procedure is defined in Section 93115.4(a)(78).

# **Conditions:**

- 1. Pursuant to subsection 93115.5(a), as of January 1, 2006, the permittee shall not fuel the engine with any fuel unless the fuel is one of the following:
  - a. CARB Diesel Fuel, or
  - b. An alternative diesel fuel that is:
    - 1) biodiesel;
    - 2) a biodiesel blend that does not meet the definition of CARB diesel Fuel
    - 3) a Fischer-Tropsch fuel; or
    - 4) an emulsion of water in diesel fuel; or
  - c. any alternative diesel fuel that is not identified in section 93115.5(a)(2) and meets the requirements of the Verification Procedure; or
  - d. an alternative fuel; or
  - e. CARB Diesel Fuel used with fuel additives that meets the requirements of the Verification Procedure; or

- f. any combination of the above.
- 2. Pursuant to Section 93115.6(b)(3), as of January 1, 2006, annual hours of operation for maintenance and testing of the emergency engine(s) shall not exceed 20 hours per year. This limit does not include emergency operation as defined in the ATCM. When not being operated for maintenance or testing, the emergency engine(s) shall only be used for "emergency use" as defined in the ATCM.

In order to comply with this condition, the engine(s) shall be equipped with a nonresettable hour meter and the permittee shall maintain a log that differentiates operation during maintenance and testing from emergency use. These records shall be compiled into a monthly total. The monthly operating hour records shall be summed for the previous 12 months.

- 3. Pursuant to subsection 93115.10(f)(1), the permittee shall keep records and prepare a monthly summary that shall list and document the nature of use for each of the following:
  - a. Emergency use hours of operation;
  - b. Maintenance and testing hours of operation;
  - c. Type of fuel use in the engines. For engines operated exclusively on CARB Diesel Fuel, the owner or operator shall document the use of CARB Diesel Fuel through the retention of fuel purchase records indicating that the only fuel purchased for supply to an emergency standby engine was CARB Diesel Fuel; or for engines operated on any fuel other than CARB Diesel Fuel, the fuel records demonstrating that the only fuel purchased and added to an emergency standby engine or engines, or to any fuel tank directly attached to an emergency standby engine or engines, meets the requirements of section 93115.5(b).

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Ventura County Air Pollution Control District National Emission Standards for Hazardous Air Pollutants For Stationary Reciprocating Internal Combustion Engines Existing Emergency Diesel Engines at an Area Source of HAPs

# 40 CFR Part 63, Subpart ZZZZ, "National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines" (RICE MACT) RICE MACT Last Revised 08/10/22

#### **Applicability:**

The NESHAP for Stationary Reciprocating Internal Combustion Engines is applicable to all stationary reciprocating internal combustion engines (RICE) at both major and area sources of hazardous air pollutants. The NESHAP is applicable to both compression ignition (CI – diesel) engines and spark ignition (SI – natural gas, landfill gas, gasoline, propane, etc.) engines. The specific conditions below are for existing emergency diesel engines at an area source. An engine is defined as "existing" if it was constructed before June 12, 2006. A stationary source is defined as an "area source" if it is not a major source of HAP (Hazardous Air Pollutants) emissions; meaning the stationary source does not emit or have the potential to emit any single HAP at a rate of 10 tons or more per year or any combination of HAP at a rate of 25 tons or more per year.

Pursuant to Section 63.6640(f) and Section 63.6675, an "emergency engine" is any engine whose operation is limited to emergency situations and required testing and maintenance. An emergency can be the loss of grid power or the stationary source's own power production. An emergency engine may also be used for other limited purposes as specified in Section 63.6640(f)(4). Stationary RICE used for peak shaving or as part of a financial arrangement to supply power into the grid, or as a part of a non-emergency demand response program are not considered emergency stationary RICE.

For more up-to-date information regarding RICE NESHAP standards, please refer to the following link: <u>https://www.epa.gov/stationary-engines/national-emission-standards-hazardous-air-pollutants-reciprocating-internal-0</u>

#### **Conditions:**

- 1. Pursuant to Section 63.6603(a), Table 2d, the permittee shall comply with the following operating requirements:
  - a. Change oil and filter every 500 hours of operation or annually, whichever comes first. An oil analysis program as described in Section 63.6625(i) can be utilized in order to extend the specified oil change requirement.
  - b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes

first, and replace as necessary.

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

Pursuant to Table 2d, if an emergency RICE is operating during an emergency and it is not possible to perform the above maintenance or if performing the maintenance would otherwise pose an unacceptable risk under federal, state, or local law, the maintenance can be delayed and should be performed as soon as practicable after the emergency has ended or the unacceptable risk has abated. All such maintenance delays shall be reported to the APCD Compliance Division.

- 2. Pursuant to Section 63.6625(e) and 63.6640(a), Table 6, the permittee shall operate and maintain the stationary RICE according to the manufacturer's emission-related written instructions or develop your own plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
- 3. Pursuant to Section 63.6625(f), the RICE shall be equipped with a non-resettable hour meter.
- 4. Pursuant to Section 63.6625(h), 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.
- 5. Pursuant to Sections 63.6640(f) and 63.6675, the permittee shall operate the emergency RICE in compliance with the following requirements:
  - a. There is no time limit on the use of emergency stationary RICE in emergency situations. An emergency can be the loss of grid power or the stationary source's own power production.
  - b. The use of the engine is limited to 100 hours per calendar year for maintenance checks and readiness testing, and up to 50 hours per year for non-emergency situations as detailed in Section 63.6640(f)(4). The 50 hours are to be counted in the 100 hours limit.
  - c. The emergency stationary RICE may be operated up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided above. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response to generate income for a facility. The 50 hours per year for non-emergency situations can be

used to supply power as part of a financial agreement with another entity if all of the requirements of Section 63.6640(f)(4)(ii)(A-E) are met. The 50 hours per year limit is to be counted towards the 100 hours per year limit.

- 6. Pursuant to Sections 63.6655(e) and 63.6655(f), the permittee shall maintain the following records:
  - a. Records of maintenance conducted on the stationary emergency RICE.
  - b. Records of the hours of operation of the engine that is recorded through the nonresettable hour meter. The permittee must document how many hours are spent for emergency operation, including what classified the operation as emergency, and how many hours are spent for non-emergency operation.
- 7. If the engine is contractually obligated to be available for more than 15 hours per year for emergency demand response, 5% or greater voltage or frequency deviation situations, or for non-emergency situations as detailed in Section 63.6640(f)(4)(ii) the engine must use a diesel fuel that meets the requirements in 40 CFR 80.510(b) for non-road diesel fuel. This fuel is commonly known as ultra low sulfur diesel or ULSD. Any diesel fuel purchased (or otherwise obtained) prior to January 1, 2015 may be used until depleted. (Section 63.6604(b))
- 8. If the engine is contractually obligated to be available for more than 15 hours per year for emergency demand response, 5% or greater voltage or frequency deviation situations, or for non-emergency situations as detailed in Section 63.6640(f)(4)(ii) the permittee is required to compile and submit a report as required by Section 63.6650(h). This report includes, but is not limited to, location information, engine information, hours of operation, and fuel requirement deviations. The first annual report must cover calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year. As required by Section 63.6650(h)(3), the annual report must be submitted electronically via EPA's Central Data Exchange (CDX). (Section 63.6650(h))
- On an annual basis, the permittee shall certify that all engines at this stationary source are operating in compliance with 40 CFR Part 63, Subpart ZZZZ, "National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Engines" (RICE MACT).

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# Ventura County Air Pollution Control District Rule 74.15.B.1 Applicable Requirements Boilers, Heater Treaters, Steam Generators, and Process Heaters NOx and CO Emission Limits Annual Heat Input ≥ 9,000 MMBTU Unit Installed and Operating prior to January 1, 2021

#### Rule 74.15, "Boilers, Steam Generators, and Process Heaters" Federally Enforceable Version Adopted 11/08/94 District Enforceable Version Adopted 11/10/20

This permit attachment lists the requirements of the November 10, 2020 version of the rule. Compliance with this attachment will ensure compliance with both versions of Rule 74.15. The permit conditions below, therefore, are federally enforceable. The District-enforceable version of this rule will become federally enforceable when approved by the EPA as part of the SIP.

#### **Applicability:**

This attachment applies to portable or stationary boilers, heater treaters, steam generators and process heaters with a maximum heat input rating of greater than or equal to 5 MMBTU/Hr that have operated with an annual heat input rate of greater than or equal to 9,000 MMBTU during any twelve (12) calendar month rolling period. This attachment also applies to any unit operated with an annual heat input rate of less than 9,000 MMBTU that is equipped with low NOx burners or other such equipment to comply with the NOx and CO requirements of Rule 74.15.B.1. Such units are required to comply with the emission limits of Rule 74.15.B.2 no later than January 1, 2027, or upon resuming operation after the unit is modified, whichever comes first. A heat input of 9,000 MMBTU is equivalent to 90,000 therms and equivalent to 8.57 million cubic feet of natural gas at a higher heating value of 1,050 BTU/cf.

A boiler, steam generator or process heater is any external combustion equipment fired with liquid and/or gaseous fuel. A boiler or a steam generator is further defined as any external combustion equipment used to produce steam or transfers heat from combustion gases to water. Boiler or steam generator does not include any unfired waste heat recovery boiler that is used to recover sensible heat from the exhaust of any combustion gases to water or process heater is further defined as equipment that transfers heat from combustion gases to water or process streams. Process heater does not include any kiln, oven, open heated tank, dehydrator, dryer, crematory, incinerator, calciner, cooker, roaster, duct burner, or furnace; unfired waste heat recovery heater that is used to recover sensible heat from the exhaust of any combustion equipment; fuel-fired degreasing or metal finishing equipment including parts washers and metal heat treating or metal furnaces; afterburner, vapor incinerator, or thermal or catalytic oxidizers used as an emission control device; glass melting furnace. Annual heat input is defined as the actual amount of heat released by fuels burned in a unit during a twelve (12) calendar month rolling period, based on

the higher heating value of the fuel. The annual heat input shall be calculated as the sum of the previous 12 monthly fuel use rates multiplied by the higher heating value of the fuel.

#### **Conditions:**

- 1. Pursuant to Rule 74.15.B.1, emissions from an applicable emission unit shall not exceed the following limits:
  - a. Oxides of Nitrogen (NOx expressed as NO<sub>2</sub>): 40 ppmvd
  - b. Carbon Monoxide (CO): 400 ppmvd

These limits shall be referenced at three (3) percent volume stack gas oxygen on a dry basis averaged over 15 consecutive minutes. Compliance with this condition shall be verified every 24 months by source testing.

Applicable emissions unit shall comply with the emissions limits of Rule 74.15.B.2 no later than January 1, 2027, or upon resuming operation after the unit is modified, whichever comes first; and demonstrate compliance within 6 months.

2. Pursuant to Rule 74.15.B.1, an applicable emission unit shall be source tested not less than once every 24 months (biennially) utilizing the following methods as detailed in Rule 74.15.E:

a.	NOx	ARB Method 100
b.	CO	ARB Method 100
c.	Stack Gas Oxygen	ARB Method 100

Pursuant to Rule 74.15.E.4, emission tests shall be conducted on units in "as-found" operating condition. However, no emission test for Rule 74.15 shall be conducted during start-up, shutdown or under breakdown conditions. Prior to conducting a biennial emissions compliance test, permittee shall notify the District Compliance Division. Written notification, and a source test protocol subject to District approval, shall be received no less than 15 calendar days prior to the test. The emission compliance test report shall include the information listed in Rule 74.15.E.3 and shall be submitted to the District Compliance Division within 45 days after the test.

- 3. Pursuant to Rule 74.15.C.2, the emission limits of Rule 74.15.B.1 and B.2 shall not apply to any unit that operates on alternate fuel under the following conditions:
  - a. Alternate fuel is required due to the curtailment of natural gas service to the individual unit by the natural gas supplier. Alternate fuel use in this case shall not exceed the period of natural gas curtailment.

- b. Alternate fuel use is required to maintain the alternate fuel system. Alternate fuel use in this case shall not exceed fifty (50) hours per year.
- 4. Pursuant to Rule 74.15.C.4, the emission limits of Rule 74.15.B.1 and B.2 shall not apply during the cold startup of an applicable unit. For units with a rated heat input capacity of equal to, or greater than, one hundred (100) million BTUs per hour, the duration of this exemption shall not exceed three (3) hours. For units with a rated heat input capacity of less than one hundred (100) million BTUs per hour, the duration of this exemption shall not exceed one (1) hour.
- 5. Permittee shall record and maintain the following information:
  - a. Daily records of alternate fuel consumption as required by Rule 74.15.D.3. Each record shall include the type of fuel, the quantity of fuel, and the duration of the occurrence; and
  - b. The biennial source test report.

This information shall be submitted to the District upon request.

6. If the emission unit is equipped with an external flue gas recirculation (FGR) system for the control of nitrogen oxides, permittee shall also comply with the FGR monitoring and recordkeeping requirements in the Permit Specific Conditions (Attachments) presented in Section No. 7 of this permit.

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Ventura County Air Pollution Control District GE LM 2500-33 Gas Turbine Based Cogeneration Unit NO<sub>x</sub> and NH<sub>3</sub> Applicable Requirements Including Streamlined NO<sub>x</sub> Requirements

Rule 26, "New Source Review" Conditions applied pursuant to Rule 26 are Federally Enforceable

Rule 74.23, "Stationary Gas Turbines" Federally Enforceable Version Adopted 01/08/02 District Enforceable Version Adopted 11/12/19

This permit attachment lists the requirements of the November 12, 2019 version of the rule. Compliance with this attachment will ensure compliance with both versions of Rule 74.23. The permit conditions below, therefore, are federally enforceable. The District-enforceable version of this rule will become federally enforceable when approved by the EPA as part of the SIP. Note that the November 12, 2019 rule includes a future effective date of January 1, 2024 (see Condition No. 3 below).

Rule 103, "Stack Monitoring" Adopted 02/09/99, Federally Enforceable

40 CFR Part 60, "Standards of Performance for New Stationary Sources" (NSPS)
40 CFR Part 60, Subpart A, "General Provisions"
40 CFR Part 60, Subpart GG, "Standards of Performance for Stationary Gas Turbines" Federally Enforceable

#### **Applicability:**

This attachment applies to the nitrogen oxides (NO<sub>x</sub> measured as NO<sub>2</sub>) and ammonia (NH<sub>3</sub>) emissions at the gas turbine based cogeneration unit, consisting of a General Electric LM 2500-33 gas turbine with heat recovery boiler. This attachment describes and streamlines the most stringent requirements of Rule 26, "New Source Review" BACT (Best Available Control Technology) requirements; Rule 74.23, "Stationary Gas Turbines"; Rule 103, "Stack Monitoring"; and 40 CFR Part 60, Subpart GG, "Standards of Performance for Stationary Gas Turbines" (NSPS). The Ventura County APCD has been delegated authority for 40 CFR Part 60 Subpart GG and is considered to be the Administrator.

As shown on the attached table, the Rule 26 BACT  $NO_x$  emission limit is the most stringent in comparison to the Rule 74.23 and NSPS  $NO_x$  emission limits; therefore the Rule 74.23 and NSPS emission limits are subsumed. The monitoring requirements of District Rule 74.23 and 103 are more stringent than the NSPS requirements; therefore the NSPS monitoring,

recordkeeping, reporting, and test method requirements are subsumed by the requirements of Rules 74.23 and 103.

Compliance with the terms and conditions of the streamlined  $NO_x$  and  $NH_3$  requirements for the cogeneration unit assures compliance with all individual  $NO_x$  and  $NH_3$  applicable requirements pertaining to the cogeneration unit which have been addressed in the streamline analysis. The attached table details the determination of this permit shield for the cogeneration unit which consists of a General Electric LM 2500-33 natural gas-fired turbine that drives a 21.5 MW electrical generator.

The November 12, 2019 revision of Rule 74.23 includes a future effective NOx limitation that is more stringent than the permitted Rule 26, "New Source Review," NOx BACT limit for the turbine. The streamlined requirements will need to be revised when the new NOx limit becomes effective on January 1, 2024 (see Condition No. 3).

# **Conditions:**

- The stack outlet concentration of Nitrogen Oxides (NO<sub>x</sub> expressed as NO<sub>2</sub>) shall not exceed 9 ppmvd, while burning natural gas or fuel oil, referenced at fifteen (15) percent volume stack gas oxygen on a dry basis, and averaged over any three consecutive hours. This is a Rule 26 BACT requirement (Authority to Construct No. 1267-2, January 30, 1986) and is more stringent than Rule 74.23 and 40 CFR Part 60 Subpart GG. Compliance with this condition shall be verified by an annual source test, as specified in Condition No. 6 of this attachment, and by maintaining the continuous emission monitoring and control system operating parameter monitoring, as specified in Condition No. 7 of this attachment. This condition is not subject to the Rule 74.23.C.1.c (units operated less than 200 hours per calendar year) exemption.
- 2. The water injection system and the selective catalytic reduction system shall be operated as necessary to achieve the  $NO_x$  limitations of this permit. The water injection rate and the ammonia injection rate shall be controlled by the gas turbine control system at all times during the operation of the turbine.
- 3. Pursuant to Rule 74.23.B.3, on and after January 1, 2024, emissions from the gas turbine based cogeneration unit shall not exceed the following limits:
  - a. The stack outlet concentration of Nitrogen Oxides (NO<sub>x</sub> expressed as NO<sub>2</sub>) shall not exceed 2.5 ppmvd, while burning natural gas, referenced at fifteen (15) percent volume stack gas oxygen on a dry basis, and averaged over any three consecutive hours.
  - b. The stack outlet concentration of Nitrogen Oxides (NO<sub>x</sub> expressed as NO<sub>2</sub>) shall not exceed 30 ppmvd, while liquid fuel, referenced at fifteen (15) percent volume

Section No. 6 Attachment STRMLN1267LM2500-NO<sub>x</sub>NH<sub>3</sub> stack gas oxygen on a dry basis, and averaged over any three consecutive hours. Note that continued compliance with the 9 ppmvd (at 15 percent oxygen) while burning fuel oil will be required.

c. The stack outlet concentration of ammonia (NH<sub>3</sub>) shall not exceed 10 ppmvd, referenced at fifteen (15) percent volume stack gas oxygen on a dry basis.

Pursuant to Rule 74.23, compliance with these limits shall be verified by source test prior to January 1, 2024, and annually thereafter. On and after January 1, 2024, these limits will supersede the NOx (while burning natural gas) and NH<sub>3</sub> emission limits otherwise required by this permit attachment. Note that the turbine is exempt from these limits if the unit is operated less than 200 hours per calendar year. The permittee is required to submit an application to modify the Part 70 Permit prior to January 1, 2024 for compliance with Rule 74.23. The application shall include a demonstration (source test report) of compliance with the emission limits or a request to reduce the annual permitted usage of the turbine to less than 200 hours per year.

- 4. Pursuant to Rule 74.23.C.1.e, the NO<sub>x</sub> emission limits listed Condition No. 1 above, and the control system requirements provided in Condition No. 2 above, shall not apply to the cogeneration unit during the thermal stabilization period associated with a start-up, planned shutdown, or unplanned load change. These exemption periods shall not exceed one (1) hour. For failed start-ups, each restart shall begin a new exemption period.
- 5. Pursuant to Rule 74.23.B.2, on or before December 31, 2023 the stack outlet concentration of ammonia (NH<sub>3</sub>) shall not exceed 20 ppmvd, referenced at fifteen (15) percent volume stack gas oxygen on a dry basis. Compliance with this condition shall be verified by an annual source test, as specified in Condition No. 6 of this attachment.
- 6. Pursuant to Rule 74.23.B.4, the cogeneration unit shall be source tested not less than once every 12 months (annually) utilizing the following methods:

a.	NO <sub>x</sub>	EPA Method 20
b.	Oxygen content	ARB Method 100
c.	Gaseous fuel heating value	ASTM Method D 1945-14
d.	Fuel oil heating value	ASTM Method D 240-17
e.	NH <sub>3</sub>	BAAQMD Method ST-1B (Jan. 20, 1982)

The average of three source test runs shall be used to determine compliance. The tests shall be conducted at normal operating load.

A Relative Accuracy Test Audit (RATA) of the continuous emission monitoring system (CEMs) shall be performed annually in accordance with 40 CFR Part 60 Appendix F requirements.

Prior to conducting an annual emissions test and RATA, permittee shall notify the APCD Compliance Division. Written notification and a source test protocol, subject to District approval, shall be received no less than 15 calendar days prior to the test. The emissions test report shall indicate the following parameters at normal load: emissions of NO<sub>x</sub> and NH<sub>3</sub> in parts per million by volume on a dry basis; parts per million by volume corrected to 15% oxygen on a dry basis; pounds per hour; the amount of excess oxygen in percent by volume; and the fuel and exhaust flow rates, in standard cubic feet per minute. In addition, pursuant to Rule 74.23.B.5, the permittee shall provide documentation, including a certified source test, correlating the control system operating parameters to the associated measured NO<sub>x</sub> emissions. This information may be used by the District to determine compliance when the continuous emission monitoring system is not operating properly. These control system operating parameters include, but are not limited to, the water injection rate in pounds per hour and the water to fuel ratio, the ammonia injection rate, and the ammonia to  $NO_x$  mole ratio entering the SCR unit. The emissions test and RATA testing report and results shall be submitted to the APCD Compliance Division within 45 days after the test. The testing may be performed while burning natural gas only if distillate fuel oil has not been burned in the gas turbine since the previous test.

- 7. Pursuant to Rule 74.23.B.5 and Rule 103.A.4, the permittee shall provide, properly install, maintain in good working order, operate, and calibrate, in accordance with manufacturers specifications, continuous monitoring systems at the gas turbine to continuously monitor, calculate where appropriate, and record the following data and control system operating parameters:
  - a. Monthly fuel consumption;
  - b. The ratio of the amount of water injected into the gas turbine's combustor to the amount of fuel consumed by the gas turbine;
  - c. The ammonia to NO<sub>x</sub> mole ratio entering the SCR reactor;
  - d. The concentration of NO<sub>x</sub> in ppmvd, corrected to 15% oxygen, in the heat recovery boiler (turbine exhaust stack);
  - e. The NO<sub>x</sub> emissions in tons summed for the previous 12 months; and
  - f. The elapsed time of operation.

Pursuant to Rule 74.23.D.1, these records shall be available for inspection by the District upon request. The continuous monitoring systems used for measuring the control system operating parameters shall be accurate to within plus or minus 5.0 percent.

8. Pursuant to Rule 103.C.4, the continuous emission monitoring system shall be installed, calibrated, and maintained in accordance with the specifications in 40 CFR, Part 51, Appendix P, Sections 3.0 through 3.9.5. As stated in 40 CFR, Part 51, Appendix P, Section 3.1; the continuous monitoring systems shall comply with the following Performance Specifications:

- a. Continuous monitoring systems for measuring nitrogen oxides shall comply with 40 CFR, Part 60, Appendix B, Performance Specification 2.
- b. Continuous monitoring systems for measuring oxygen shall comply with 40 CFR, Part 60, Appendix B, Performance Specification 3.

As an alternative, as detailed in Rule 103.C.4, the continuous emission monitoring system shall be installed, calibrated, and maintained in accordance with other specifications established by the District.

- 9. Pursuant to Rule 103.B.1, the permittee shall report any violation of any emission standard with which the gas turbine is required to comply, as indicated by the records of the monitoring device. The report shall be in writing to the District Compliance Division within 96 hours after such occurrence. The District shall, in turn, report the violation to the state within five working days after receiving the report of the violation from the permittee.
- 10. Pursuant to Rule 103.B.2, the permittee shall maintain permanent continuous emission monitoring records. The records shall be in a form suitable for inspection, shall be made available to the Air Resources Board or the District upon request, and shall include:
  - a. The date, time and duration of any startup, shutdown or malfunction in the operation of any affected facility.
  - b. The results of performance testing, evaluations, calibrations, checks, adjustments, and maintenance of any continuous emission monitors that have been installed pursuant to Rule 103.
  - c. Emission measurements.
- 11. Pursuant to Rule 103.B.4, the permittee shall, upon written notice from the District Compliance Division, provide a summary of the data obtained from the continuous monitoring systems. The format of the summary shall be approved in writing by the District Compliance Division.
- 12. Pursuant to Rule 103.B.5, continuous emission monitoring data 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 determined to be equivalent by the District, the Air Resources Board, and the Environmental Protection Agency.
- 13. Permittee shall maintain records of all maintenance operations, periodic inspections, and repairs performed on the gas turbine, air pollution control system, and continuous emissions monitors. Permittee shall also maintain records and copies of all source test reports and any violations on exceedances of the limits shown in the conditions of this Permit to Operate. These records shall be made available for inspection by the District upon request.

- 14. Pursuant to Rule 74.23.E, the permittee shall submit a report to the District Compliance Division that contains the following information:
  - a. Actual fuel consumption or operating hours during the previous twelve (12) months; and
  - b. A copy of the required annual source test report and control system operating parameter information.

# NO<sub>x</sub> and NH<sub>3</sub> Streamlining Comparison LM 2500-33 Gas Turbine Based Cogeneration Unit , PO No. 01267 (Most Stringent Requirements Shaded)

	RULE 74.23 (Prior to 01/01/2024) AND RULE 103	NSPS SUBPART GG	RULE 26 NSR - BACT
WORK	None	None	BACT
PRACTICE			The water injection system and the
STDS.			SCR system shall be operated as
			necessary to achieve the NO <sub>x</sub>
			limitations of this permit
NO <sub>x</sub> EMISSION	<u>Rule 74.23.B.1</u>	<u>60.332(a)(1)</u>	BACT
LIMIT	<u>Natural Gas with SCR:</u> 9 x $E/25 = 12$ ppmvd @ 15% O <sub>2</sub>	STD = 0.015x (14.4)/Y + F	$9 \ ppmvd @ 15\% \ O_2$ (this limit
	E = Unit Efficiency = 32	STD is allowable % NO <sub>x</sub> by vol @ 15% $O_2$	applies to both natural gas and fuel
	<u>Fuel Oil with SCR</u> : 25 x E/25 = 38 ppmvd @ 15% $O_2$	with no allowances for unit efficiency (Y) or	oil)
	E = Unit Efficiency = 38	fuel bound nitrogen (F):	
		STD = $0.0172\%$ vol = <b>172 ppmvd</b> @ <b>15%</b> O <sub>2</sub>	
NH <sub>3</sub> EMISSION	<u>Rule 74.23.B.2</u>	None	BACT
NH3 EMISSION LIMIT	Rule 74.23.B.2           20 ppmvd @ 15% O2	None	BACT Identical to Rule 74.23
NH3 EMISSION LIMIT MONITORING	Rule 74.23.B.2           20 ppmvd @ 15% O2           Rule 74.23	None <u>60.334</u>	BACT Identical to Rule 74.23 BACT
NH3 EMISSION LIMIT MONITORING	Rule 74.23.B.2         20 ppmvd @ 15% O2         Rule 74.23         Source test annually for NOx, NH3, and O2 content and conduct	None <u>60.334</u> Continuously monitor fuel consumption and	BACT         Identical to Rule 74.23         BACT         Identical to Rule 74.23
NH3 EMISSION LIMIT MONITORING	Rule 74.23.B.2         20 ppmvd @ 15% $O_2$ Rule 74.23         Source test annually for $NO_x$ , $NH_3$ , and $O_2$ content and conduct annual RATA (74.23.B.4);	None <u>60.334</u> Continuously monitor fuel consumption and ratio of water (steam) to fuel (system accurate	BACT Identical to Rule 74.23 BACT Identical to Rule 74.23
NH3 EMISSION LIMIT MONITORING	Rule 74.23.B.2         20 ppmvd @ 15% O2         Rule 74.23         Source test annually for NOx, NH3, and O2 content and conduct annual RATA (74.23.B.4);         Monitor NOx directly w/CEM (74.23.B.5.c);	None 60.334 Continuously monitor fuel consumption and ratio of water (steam) to fuel (system accurate to $\pm$ 5.0%) (60.334(a));	BACT Identical to Rule 74.23 BACT Identical to Rule 74.23
NH3 EMISSION LIMIT MONITORING	Rule 74.23.B.2         20 ppmvd @ 15% O2         Rule 74.23         Source test annually for NOx, NH3, and O2 content and conduct annual RATA (74.23.B.4);         Monitor NOx directly w/CEM (74.23.B.5.c);         Monitor control system operating parameters and elapsed time of	None <u>60.334</u> Continuously monitor fuel consumption and ratio of water (steam) to fuel (system accurate to $\pm$ 5.0%) (60.334(a));	BACT Identical to Rule 74.23 BACT Identical to Rule 74.23
NH3 EMISSION LIMIT MONITORING	Rule 74.23.B.2         20 ppmvd @ 15% O2         Rule 74.23         Source test annually for NOx, NH3, and O2 content and conduct annual RATA (74.23.B.4);         Monitor NOx directly w/CEM (74.23.B.5.c);         Monitor control system operating parameters and elapsed time of operation (74.23.B.5)	None $\frac{60.334}{Continuously monitor fuel consumption and ratio of water (steam) to fuel (system accurate to \pm 5.0%) (60.334(a));Monitor nitrogen content of fuel daily or as$	BACT Identical to Rule 74.23 BACT Identical to Rule 74.23
NH3 EMISSION LIMIT MONITORING	Rule 74.23.B.2         20 ppmvd @ 15% O2         Rule 74.23         Source test annually for NOx, NH3, and O2 content and conduct         annual RATA (74.23.B.4);         Monitor NOx directly w/CEM (74.23.B.5.c);         Monitor control system operating parameters and elapsed time of         operation (74.23.B.5)         Rule 103	None <u>60.334</u> Continuously monitor fuel consumption and ratio of water (steam) to fuel (system accurate to ± 5.0%) (60.334(a));         Monitor nitrogen content of fuel daily or as approved by Administrator (District is	BACT Identical to Rule 74.23 BACT Identical to Rule 74.23
NH3 EMISSION LIMIT MONITORING	Rule 74.23.B.2         20 ppmvd @ 15% O2         Rule 74.23         Source test annually for NOx, NH3, and O2 content and conduct         annual RATA (74.23.B.4);         Monitor NOx directly w/CEM (74.23.B.5.c);         Monitor control system operating parameters and elapsed time of         operation (74.23.B.5)         Rule 103         Monitor NOx directly w/CEM (103.A.4);	None <u>60.334</u> Continuously monitor fuel consumption and ratio of water (steam) to fuel (system accurate to ± 5.0%) (60.334(a));         Monitor nitrogen content of fuel daily or as approved by Administrator (District is Administrator; and does not give a fuel bound	BACT Identical to Rule 74.23 BACT Identical to Rule 74.23
NH3 EMISSION LIMIT MONITORING	Rule 74.23.B.2         20 ppmvd @ 15% O2         Rule 74.23         Source test annually for NOx, NH3, and O2 content and conduct         annual RATA (74.23.B.4);         Monitor NOx directly w/CEM (74.23.B.5.c);         Monitor control system operating parameters and elapsed time of         operation (74.23.B.5)         Rule 103         Monitor NOx directly w/CEM (103.A.4);         CEM, maintained per 40 CFR, Part 51, Appendix P, 3.0-3.9.5 &	None <u>60.334</u> Continuously monitor fuel consumption and ratio of water (steam) to fuel (system accurate to ± 5.0%) (60.334(a));         Monitor nitrogen content of fuel daily or as approved by Administrator (District is Administrator; and does not give a fuel bound nitrogen allowance in limit) (60.334(b))	BACT Identical to Rule 74.23 BACT Identical to Rule 74.23

# NO<sub>x</sub> and NH<sub>3</sub> Streamlining Comparison (Continued) LM 2500-33 Gas Turbine Based Cogeneration Unit, PO No. 01267 (Most Stringent Requirements Shaded)

	<b>RULE 74.23 AND RULE 103</b>	NSPS SUBPART GG	RULE 26 NSR - BACT
RECORDKEEPING	<u>Rule 74.23.D.1</u>	<u>60.334(a)</u>	BACT
	Continuous records of monitoring requirements specified	Continuous records of the water (or steam) to fuel	Identical to Rule 74.23
	above (103.B.2)	ratio	
	<u>Rule 103</u>	<u>60.7</u>	
	NOx CEM records, etc., reduce per 40 CFR Part 51	Record startups, shutdowns, and malfunctions of unit	
	Appendix P, 5.0-5.3.3 (103.B.5)	and control device (60.7(b))	
		Maintain file of all measurements, etc. (60.7(f))	
REPORTING	<u>74.23.E</u>	<u>NOx (60.334(c)(1))</u>	BACT
	Actual annual fuel consumption or operating hours	Report exceedances of the water (steam) to fuel ratio	None
	Annual source test report and RATA	which has been determined to demonstrate compliance	
	<u>Rule 103</u>	with the NO <sub>x</sub> limit	
	Report NOx emission limit exceedances to the District	Report exceedances of the fuel bound nitrogen content	
	within 96 hours (103.B.1)	allowed by the fuel-bound nitrogen allowance used	
	Provide a summary of the CEM data, upon written request	during the performance test	
	from the District Compliance Division (103.B.4)		
TEST METHODS	<u>74.23.F</u>	<u>60.335(c)(3)</u>	BACT
	NO <sub>x</sub> - EPA Method 20	NO <sub>x</sub> - EPA Method 20	Identical to Rule 74.23
	O2 content - ARB Method 100	O2 Content - EPA Method 20	
	Gaseous fuel HHV - ASTM Method D 1945-14	<u>60.335(a)</u>	
	Fuel oil HHV - ASTM Method D 240-17	nitrogen content of fuel - a method approved by the	
	NH <sub>3</sub> - BAAQMD Method ST-1B, 1/20/82	Administrator (District) that is accurate to within 5%	

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Ventura County Air Pollution Control District GE LM 2500-33 Gas Turbine Based Cogeneration Unit SO<sub>x</sub> Applicable Requirements - Streamlined Natural Gas and Distillate Fuel Oil Limits

Rule 26, "New Source Review" Conditions applied pursuant to Rule 26 are Federally Enforceable

Rule 54, "Sulfur Compounds" Adopted 01/14/14, Federally Enforceable

Rule 64, "Sulfur Content of Fuels" Adopted 04/13/99, Federally-Enforceable

40 CFR Part 60, "Standards of Performance for New Stationary Sources" (NSPS)
40 CFR Part 60, Subpart A, "General Provisions"
40 CFR Part 60, Subpart GG, "Standards of Performance for Stationary Gas Turbines" Federally-Enforceable

#### **Applicability:**

This attachment applies to the sulfur oxides (SOx measured as SO2) emissions at the gas turbine based cogeneration unit, consisting of a GE LM 2500-33 gas turbine with heat recovery boiler. This attachment describes and streamlines the most stringent sulfur content of fuel and SO<sub>x</sub> emissions at the point of discharge requirements of Rule 26, "New Source Review" BACT (Best Available Control Technology) requirements; Rule 54, "Sulfur Compounds"; Rule 64, "Sulfur Content of Fuels"; and 40 CFR Part 60, Subpart GG, "Standards of Performance for Stationary Gas Turbines" (NSPS). The Ventura County APCD has been delegated authority for 40 CFR Part 60 Subpart GG and is considered to be the Administrator.

As detailed in the attached tables, the Rule 64 fuel sulfur content limits for gaseous fuel combustion are the most stringent in comparison to the Rule 26, Rule 54, and NSPS Subpart GG SO<sub>x</sub> emission limits and sulfur content limits; and the Rule 26 BACT fuel sulfur content limit for distillate fuel oil is the most stringent in comparison to the Rule 54, Rule 64, and NSPS Subpart GG SO<sub>x</sub> emission limits and sulfur content limits. Rule 26, Rule 64, and NSPS Subpart GG require monitoring of the fuel sulfur content at the discretion of the District. Therefore, for gaseous fuels, the Rule 26, the Rule 54, and the NSPS Subpart GG SO<sub>x</sub> emission limits, monitoring, recordkeeping, reporting, and test methods requirements are subsumed by Rule 64; for distillate fuel oil, the Rule 54, the Rule 64, and the NSPS Subpart GG SO<sub>x</sub> emission limits, monitoring, recordkeeping, reporting, and test methods requirements are subsumed by Rule 64; for distillate fuel oil, the Rule 54, the Rule 64, and the NSPS Subpart GG SO<sub>x</sub> emission limits, monitoring, recordkeeping, reporting, and test methods requirements are subsumed by Rule 64; for distillate fuel oil, the Rule 54, the Rule 64, and the NSPS Subpart GG SO<sub>x</sub> emission limits, monitoring, recordkeeping, reporting, and test methods requirements are subsumed by Rule 64;

Compliance with the terms and conditions of the streamlined  $SO_x$  requirements for the cogeneration unit assures compliance with all individual  $SO_x$  applicable requirements pertaining

to the cogeneration unit which have been addressed in the streamline analysis. The attached table details the determination of this permit shield for the cogeneration unit which consists of an LM 2500-33 natural gas-fired turbine that drives a 21.5 MW electrical generator.

# **Conditions:**

- Pursuant to Rule 64.B.1, no person shall burn at any time gaseous fuel containing sulfur compounds in excess of 50 grains per 100 cubic feet of gaseous fuel (788 ppmv), calculated as hydrogen sulfide at standard conditions, unless specifically exempted by Rule 64.
- 2. If only Public Utilities Commission-regulated natural gas, propane, or butane is combusted by the gas turbine, it will be assumed that the permittee is complying with Rule 64 without additional periodic monitoring requirements.
- 3. If other than Public Utilities Commission-regulated natural gas, propane, or butane is being combusted by the gas turbine, the permittee shall analyze the sulfur content of the fuel on an annual basis using South Coast AQMD Method 307-94 Determination of Sulfur in a Gaseous Matrix or by ASTM D1072-90 (1994), Standard Test Method for Total Sulfur in Fuel Gases. This annual fuel analysis shall be maintained at the facility and shall be provided to the District with the annual compliance certification.
- 4. When burning distillate fuel oil in the gas turbine, the fuel oil shall not have a sulfur content in excess of 0.17 percent, by weight. This is a Rule 26 BACT requirement (Authority to Construct No. 1267-2, January 30, 1986) and is more stringent than Rules 54 and 64, and 40 CFR Part 60 Subpart GG.
- 5. For each distillate fuel oil delivery, the permittee shall record the date and amount delivered, and shall either obtain the fuel supplier's certification, or test the sulfur content of the fuel using ASTM Method D4294-98 or D2622-98, to ensure that compliance with Rule 26 is being maintained. The fuel sulfur content by weight data shall be maintained at the facility and shall be provided with the annual compliance certification.
- 6. Pursuant to Rule 54, no person shall discharge sulfur compounds, which would exist as a liquid or gas at standard conditions, in excess of 300 ppm by volume from any combustion operation, calculated as sulfur dioxide (SO<sub>2</sub>) by volume, corrected to 15% oxygen, at the point of discharge.

In order to comply with Rule 54, permittee shall comply with the fuel sulfur content limits of Rule 64 for natural gas, and Rule 26 for distillate fuel oil. No additional periodic monitoring requirements for Rule 54 are required beyond the periodic monitoring requirements of Rules 64 and 26.

7. Upon District request, sulfur compounds at the point of discharge shall be determined by source testing using EPA Test Method 6, 6A, 6C, 8, 15, 16A, 16B, or South Coast AQMD Test Method 307-91 (Determination of Sulfur in a Gaseous Matrix), as appropriate.

# SO<sub>x</sub> Streamlining Comparison LM 2500-33 Gas Turbine Based Cogeneration Unit, PO No. 01267 Natural Gas Combustion (Most Stringent Requirements Shaded)

	RULE 54	RULE 64	NSPS SUBPART GG
WORK PRACTICE	None	None	None
STANDARDS			
EMISSION LIMIT	<u>Rule 54.B.1</u>	<u>Rule 64.B.1</u>	<u>60.333(a)</u>
	≤ 300 ppmv	Sulfur Compounds $\leq 50$ grains per 100 ft <sup>3</sup> (788	$\leq 0.015\%$ vol @ 15% O <sub>2</sub> on a dry basis
	(Equivalent EF = 1612.8 lb SO <sub>x</sub> /mmcf @ 15%	ppmv) calculated as $H_2S$ @ standard conditions	(0.015% vol = 150ppmv)
	O <sub>2</sub> )	(Equivalent EF = 134.5 lb SOx/mmcf)	(Equivalent EF = 806.4 lb SO <sub>x</sub> /mmcf)
			OR
			<u>Rule 60.333(b)</u>
			Sulfur content of fuel $\leq 0.8$ wt%
			(Equivalent EF = 661.5 lb SO <sub>x</sub> /mmcf)
MONITORING			<u>60.334(b)</u>
	PUC-quality natural gas - None	PUC-quality natural gas - None	PUC-quality natural gas - None, as approved by
	Non-PUC quality natural gas - Annual analysis of	Non-PUC quality natural gas - Annual analysis of	the District (Administrator)
	fuel sulfur content	fuel sulfur content	Non-PUC quality natural gas - Monitor sulfur
			content of fuel annually, as approved by the
			District (Administrator)

# SO<sub>x</sub> Streamlining Comparison (Continued) LM 2500-33 Gas Turbine Based Cogeneration Unit, PO No. 01267 Natural Gas Combustion (Most Stringent Requirements Shaded)

	RULE 54	RULE 64	NSPS SUBPART GG
RECORDKEEPING	PUC-quality natural gas - None	PUC-quality natural gas - None	PUC-quality natural gas - None, as approved by
	Non-PUC quality natural gas - Maintain records	Non-PUC quality natural gas - Maintain records	the District (Administrator)
	of annual fuel analyses	of annual fuel analyses	Non-PUC quality natural gas - Maintain records
			of annual fuel analyses, as approved by the
			District (Administrator)
REPORTING	Provide fuel records to the District upon request	Provide fuel records to the District upon request	<u>(60.334(c)(2)</u>
			Provide fuel records to the District upon request,
			as approved by the District (Administrator)
TEST METHODS	<u>Rule 54.D.1</u>	<u>Rule 64.E</u>	<u>60.335(c)(3)</u>
	SO <sub>x</sub> - EPA Methods 6, 6A, 6C, 8, 15, 16A, 16B,	Sulfur content of gaseous fuels - SCAQMD	SO <sub>x</sub> - EPA Method 20
	or SCAQMD Method 307-91	Method 307-91	O2 Content - EPA Method 20
			<u>60.335(d)</u>
			Sulfur content of gaseous fuels - ASTM D 1072-
			80, D 3031-81, D 4084-82, or D 3246-81

## SO<sub>x</sub> Streamlining Comparison LM 2500-33 Gas Turbine Based Cogeneration Unit, PO No. 01267 Fuel Oil Combustion (Most Stringent Requirements Shaded)

	RULE 54	RULE 64	NSPS SUBPART GG	RULE 26 NSR - BACT
WORK PRACTICE	None	None	None	Fuel shall only be burned during
STANDARDS				periods of natural gas supply
				curtailment, periodic fuel distribution
				system testing, and source testing
EMISSION LIMIT	Rule 54.B.1	Rule 64.B.2	<u>60.333(a)</u>	Sulfur content of fuel: 0.17 % S by
	≤ 300 ppmv	Sulfur content of fuel: 0.5 % S by wt.	$\leq 0.015\%$ vol @ 15% $O_2$ , dry basis	wt.
	(@ <b>3%</b> O <sub>2</sub>	(EF = 72.0 lb SOx/Mgal)	(0.015% vol = 150ppmv)	(EF = 24.5 lb SOx/Mgal)
	$EF = 75.3 lb SO_x/Mgal)$		$(EF = 114.2 lb SO_x/Mgal) OR$	
	(@ 15% O <sub>2</sub>		<u>Rule 60.333(b)</u>	
	EF = 228.5 lb SO <sub>x</sub> /Mgal)		Sulfur content of fuel ? 0.8 wt%	
			(EF = 115.2 lb SO <sub>x</sub> /Mgal)	
MONITORING	None specified	For each delivery, obtain fuel	60.334(b) Test bulk storage sulfur	For each delivery, obtain date and amt
		supplier's certification or test for	content on each occasion that fuel is	delivered; lab analyses or supplier's
		sulfur content.	transferred to the storage tank from	statements of sulfur content; submit
			any other source	summary of efforts taken to obtain the
				lowest % S
RECORDKEEPING	Maintain records of fuel analyses	Maintain records of certifications and	Maintain records of fuel analyses	Maintain records of fuel analyses, and
		fuel analyses		reason for firing fuel oil rather than
				natural gas
REPORTING	Provide fuel sulfur content records to	Provide fuel sulfur records to the	<u>(60.334(c)(2)</u>	Provide fuel sulfur content records to
	the District upon request	District upon request and with the	Provide fuel sulfur content records to	the District and EPA upon request
		annual compliance certification	the District upon request	
TEST METHODS	<u>Rule 54.D.1</u>	<u>Rule 64.E.2</u>	<u>60.335(d)</u>	Same as Rule 64.D.2
	SO <sub>x</sub> - EPA Methods 6, 6A, 6C, 8, 15,	Sulfur content of liquid fuels - ASTM	Sulfur content of liquid fuels - ASTM	
	16A, 16B, or SCAQMD Method 307-	Method D4294-98 or D2622-98	D 2880-71	
	91			

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#### 7. PERMIT SPECIFIC CONDITIONS (ATTACHMENTS)

As discussed in Section No. 2, "Permitted Equipment and Applicable Requirements Table," the emissions units at this stationary source listed in the table have requirements that are specifically applicable to them. The applicable requirements are primarily based on Rule 26, "New Source Review" requirements (e.g., BACT and offset requirements), or Rule 29, "Conditions on Permits" requirements (e.g., throughput recordkeeping requirements, specific requirements that limit emissions, etc.). These requirements are in addition to the specific applicable requirements listed in Section No. 6.

In this section of the permit, the permit conditions that are associated with each specific applicable requirement are listed in an individual attachment. The attachment is identified with the label "Attachment PO (Title V Permit No.) PC#" in the lower left corner. Each attachment has an applicability section that describes how and why this attachment applies to the specific emissions unit. The attachment may apply to one or more of the emissions units listed in the Permitted Equipment and Applicable Requirements Table in Section No. 2.

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# Ventura County Air Pollution Control District Additional Permit Requirements

#### Rule 26, "New Source Review"

#### Rule 29, "Conditions on Permits"

Conditions applied pursuant to Rule 26 are federally enforceable and conditions applied pursuant to Rule 29 are District enforceable only.

#### **Applicability:**

This attachment applies to the entire stationary source. These requirements are in addition to any other specific or general requirements referenced in this permit.

#### **Conditions:**

- 1. In order to comply with the throughput and consumption limits of this permit, the permittee shall maintain monthly records of throughput and consumption as detailed in Section No. 3, "Permitted Throughput and Consumption Limit Table", of this permit. The monthly records shall be summed for the previous 12 months. Throughput or consumption totals for any of these 12 calendar month rolling periods in excess of the specified limit shall be considered a violation of this permit. This is a general throughput and consumption recordkeeping condition and applies unless another throughput and consumption recordkeeping condition appears in this section of the permit. (Rule 26)
- 2. Pursuant to Rule 23.F.7, the use of solvents, in addition to the use of coatings, adhesives, lubricants, and sealants, for facility and building maintenance and repair is exempt from permit. However, the use of such materials by contractors for the maintenance and repair of process and industrial equipment is not exempt from permit pursuant to Rule 23.F.7, unless the material is exempted under another specific section of Rule 23. Pursuant to Rule 23.F.6, the use of non-refillable aerosol cans is exempt from permit. Pursuant to Rule 23.F.10, the use of cleaning agents certified by the SCAQMD as Clean Air Solvents (Rule 23.F.10.a) and the use of cleaning agents that contain no more than 25 grams per liter of ROC as used or applied, and no more than 5 percent by weight combined of methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, and chloroform (Rule 23.F.10.b), is also exempt from permit. Pursuant to Rule 23.F.10.d, solvent cleaning where less than 200 pounds each of ROC, methylene chloride, 1,1,1 trichloroethane, and perchloroethylene are lost to the atmosphere during any rolling period of 12 consecutive calendar months is exempt. This permit does not limit the usage of acetone. Acetone is exempt from permit and record keeping requirements, as it is not defined as a reactive organic compound.

In order to substantiate the solvent use exemptions listed above, the permittee shall maintain a list of all exempt solvents used at the stationary source, a reference to the specific permit exemption status, and their ROC content and pounds used per rolling 12 month period, as necessary.

(Rule 29)

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# Ventura County Air Pollution Control District Additional Permit Requirements Combustion Emissions Units

# Rule 74.15, "Boilers, Steam Generators, and Process Heaters" Federally Enforceable Version Adopted 11/08/94 District Enforceable Version Adopted 11/10/20

This permit attachment lists the requirements of the November 10, 2020 version of the rule. Compliance with this attachment will ensure compliance with both versions of Rule 74.15. The permit conditions below, therefore, are federally enforceable. The District-enforceable version of this rule will become federally enforceable when approved by the EPA as part of the SIP.

#### Rule 26, "New Source Review"

#### Rule 29, "Conditions on Permits"

Conditions applied pursuant to Rule 26 are federally enforceable and conditions applied pursuant to Rule 29 are District enforceable only.

#### **Applicability:**

This attachment applies to the combustion units at this stationary source. The combustion units are the one (1) 255.7 MMBTU/Hr GE LM 2500-33 gas turbine, and the two (2) 31.0 MMBTU/Hr Babcock & Wilcox steam boilers. These requirements are in addition to any other specific or general requirements referenced in this permit.

#### **Conditions:**

1. As stated in Section No. 3 of this permit, "Permitted Throughput and Consumption Limit Table", the combined annual emissions from the one (1) GE LM 2500-33 gas turbine and the two (2) 31.0 MMBTU/Hr Babcock & Wilcox steam boilers shall not exceed the following limits:

#### Annual Emission Limits

	ROC	NOx	<u>PM</u>	<u>SOx</u>	<u>CO</u>
Tons per Year:	14.88	33.38	8.73	25.01	57.59

In order to comply with this condition, the permittee shall maintain a rolling twelve month total of ROC,  $NO_x$ , PM,  $SO_x$ , and CO emissions from the above units. The permittee shall record the monthly fuel consumption at each of the above units and shall maintain a rolling twelve month record of  $NO_x$  emissions from the turbine as recorded by

the continuous emissions monitoring system (CEM). The monthly fuel consumption records shall be used with the following emission factors to calculate monthly emissions (where no emission factor is given the CEM data is used):

	Emission	Factors			
<u>ROC</u>	<u>NOx</u>	<u>PM</u>	<u>SOx</u>	<u>CO</u>	<u>Units</u>
14.15	CEM	6.10	0.60	52.83	lbs/MMcf
1.84	CEM	3.10	24.41	4.45	lbs/Mgal
13.45	50.94	7.60	0.60	310.00	lbs/MMcf
1.60	20.74	2.00	24.41	43.92	lbs/Mgal
	<u>ROC</u> 14.15 1.84 13.45 1.60	Emission           ROC         NOx           14.15         CEM           1.84         CEM           13.45         50.94           1.60         20.74	Emission Factors           ROC         NOx         PM           14.15         CEM         6.10           1.84         CEM         3.10           13.45         50.94         7.60           1.60         20.74         2.00	Emission Factors           ROC         NOx         PM         SOx           14.15         CEM         6.10         0.60           1.84         CEM         3.10         24.41           13.45         50.94         7.60         0.60           1.60         20.74         2.00         24.41	Emission Factors           ROC         NOx         PM         SOx         CO           14.15         CEM         6.10         0.60         52.83           1.84         CEM         3.10         24.41         4.45           13.45         50.94         7.60         0.60         310.00           1.60         20.74         2.00         24.41         43.92

The emission factors may be changed at the discretion of the VCAPCD. If the factors are revised, the annual emission limits listed above will be changed accordingly. Combined monthly emissions for the turbine and the boilers shall be summed for the previous twelve months. Emission totals for any of these 12-month periods in excess of the specified limits shall be considered a violation of this condition.

The NO<sub>x</sub> emission limit of 33.38 tons per year is the initial offset provided for Authority to Construct No. 1267-2, dated January 30, 1986. This offset amount is comprised of 14.03 tons NO<sub>x</sub> per year provided by the non-operation of the former boilers at the California State University facility (former VCAPCD Permit to Operate No. 00238) and 19.35 tons NO<sub>x</sub> per year which were granted to the stationary source as Utility Displacement Credits pursuant to California Health and Safety Code Section 41605.

The ROC, PM,  $SO_x$ , and CO annual emission limits are based on the emission factors listed above and the annual fuel throughputs listed below.

#### Annual Fuel Throughputs

LM 2500-33 Turbine:	2,089.4 MMcf natural gas (8497 Hours) for ROC and CO
	1,823.8 MMcf natural gas (7417 Hours) & 2,004 Mgal fuel oil
	(1080 Hours) for PM and SO <sub>X</sub>
B & W Boilers:	15.5 MMcf natural gas (263 Hours)

This emission limit basis was established with Permit to Operate Application No. 1267-121. (Rule 26)

2. The Babcock and Wilcox steam boilers shall be fired on natural gas. Distillate fuel oil shall only be burned in the Babcock and Wilcox steam boilers during periods of natural

gas supply curtailment, periodic fuel distribution system testing, or source testing. (Rule 26)

- 3. When burning distillate fuel oil in the Babcock and Wilcox steam boilers, the following conditions shall be met:
  - a. The stack outlet concentration of nitrogen oxides (NO<sub>x</sub> expressed as NO<sub>2</sub>) and carbon monoxide (CO) shall not exceed 115 ppmvd and 400 ppmvd, respectively, corrected to 3% oxygen, averaged over 15 minutes. The monitoring, recordkeeping, reporting, and test method requirements for these boilers are included in Attachment 74.15N1 in Section No. 6 of this permit. A source test for NOx and CO while burning distillate fuel oil shall be performed upon District request. (Rule 26 and Rule 74.15)
  - b. The fuel oil shall have the lowest sulfur content available, and shall not exceed 0.17% by weight. (Rule 26)

This condition is applied as BACT, per Authority to Construct No. 1267-3.

- 4. The Babcock and Wilcox steam boilers shall be equipped with a means to continuously monitor and record the fuel consumption in each boiler. Such systems shall be accurate to within plus or minus 1 percent, as certified by the manufacturer in writing. (Rule 26)
- 5. The permittee shall install, operate, and maintain continuous in-stack emissions monitors and recorders to measure and record the amount of excess oxygen in the Babcock and Wilcox steam boiler exhaust stacks. These monitoring systems shall be installed, operated, calibrated, and maintained pursuant to manufacturer's specifications. (Rule 26 and Rule 74.15)
- 6. The Babcock and Wilcox steam boilers are to be used for standby service only, and shall be fired to meet the thermal requirements of the California State University facility when the gas turbine is not in operation. Therefore, the steam boilers shall not be operated simultaneously with the gas turbine. This condition shall not apply for a period not to exceed 60 minutes during which a transition is being made between operation of the gas turbine and the steam boilers. (Rule 26)
- 7. The GE LM-2500-33 gas turbine shall be fired on natural gas. Distillate fuel oil combustion in the gas turbine shall be limited to the following conditions:
  - a. Fuel oil shall only be burned during periods of natural gas supply curtailment, periodic fuel distribution system testing, or source testing. (Rule 26)

- b. Fuel oil use shall be limited to 1,080 hours (45 days) in any 12 month period. (Rule 26)
- c. Within five calendar days of each natural gas curtailment period in which fuel oil is burned, the permittee shall provide the District Compliance Division with documentation of efforts to obtain the lowest sulfur content of fuel oil. (Rule 26)
- 8. The permittee shall maintain the following records:
  - a. Monthly records of the amount of natural gas and distillate fuel oil consumed by the Babcock and Wilcox steam boilers and the reason for firing distillate fuel oil rather than natural gas. (Rule 26)
  - Monthly records of the amount of natural gas, fuel oil, and ammonia consumed by the gas turbine; and the reason for firing distillate fuel oil rather than natural gas. (Rule 26)
  - c. Combined monthly and twelve-month rolling records of ROC,  $NO_X$ , PM,  $SO_X$ , and CO emissions (in tons) for the GE LM 2500-33 gas turbine and the Babcock and Wilcox steam boilers. The  $NO_X$  emissions for the LM 2500-33 gas turbine shall be measured by the continuous emission monitoring system. All other annual emission rates shall be calculated by using the monthly fuel records and the emission factors listed in Permit Condition No. 1 above. (Rule 26)
  - d. For each distillate fuel oil delivery, the permittee shall record the date and amount delivered, and shall either obtain the fuel supplier's certification, or test the sulfur content of the fuel using ASTM Method D4294-98 or D2622-98. Also, a summary of the efforts taken to obtain the lowest sulfur content distillate fuel shall be maintained at the facility. The fuel sulfur content by weight data shall be maintained at the facility and shall be provided with the annual compliance certification. (Rule 26)

These records shall be maintained at the facility and submitted to the District upon request. (Rule 26)

9. The permittee shall notify the District Compliance Division in writing by the 31<sup>st</sup> day of each December of the date(s) planned for scheduled shutdowns for the next calendar year. (Rule 29)

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#### 8. GENERAL APPLICABLE REQUIREMENTS (ATTACHMENTS)

The general applicable requirements are broadly applicable requirements that apply and are enforced in the same manner for all subject emissions units or activities. These requirements can normally be adequately addressed in the permit application with minimal or no reference to any specific emissions unit or activity, provided that the scope of the requirement and the manner of its enforcement are clear. Examples of such requirements include those that apply identically to all emissions units at a facility (e.g., source-wide opacity limits), general housekeeping requirements, and requirements that apply identical emissions limits to small units (e.g., process weight requirements).

As detailed in the Title V Permit Reissuance Application, general applicable requirements that apply to this facility were determined. The permit conditions associated with each generally applicable requirement are listed in an individual attachment. The attachment is identified with the label "Attachment (APCD Rule No.) \_\_\_\_\_" in the lower left corner of each attachment. Each attachment has an applicability section that describes the emissions units to which the attachment applies. Each attachment may apply to one or more of the emissions units listed in the Applicable Requirements Table of Section No. 2. Note that these general applicable requirements may also apply to emissions units not required to be listed in the permit, such as those that are short-term.

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#### Ventura County Air Pollution Control District Rule 50 Applicable Requirements Opacity

Rule 50, "Opacity" Adopted 04/13/04, Federally-Enforceable

#### **Applicability:**

This attachment applies to all emissions units at this stationary source.

#### **Conditions:**

- 1. Pursuant to Rule 50.A, permittee shall not discharge into the atmosphere from any single source whatsoever any air contaminants for a period or periods aggregating more than three (3) minutes in any one (1) hour which are as dark or darker in shade as that designated as No. 1 on the Ringelmann Chart, or equivalent to 20% opacity and greater, unless specifically exempted by Rule 50.
- 2. Permittee shall perform periodic visual inspections to ensure that compliance with Rule 50 is being maintained. A record shall be kept of any occurrence of visible emissions other than uncombined water greater than zero percent for a period or periods aggregating more than three (3) minutes in any one (1) hour. These records shall include the date, time, and identity of emissions unit. If the visible emissions problem cannot be corrected within 24 hours, permittee shall provide verbal notification to the District within the subsequent 24 hours. These visible emissions records shall be maintained at the facility and submitted to the District upon request. Records of zero percent visual emissions are not required.
- 3. On an annual basis, permittee shall certify that all emissions units at the facility are complying with Rule 50. This annual compliance certification shall include a formal survey identifying the date, time, emissions unit, and verification that there are no visible emissions other than uncombined water greater than zero percent for a period or periods aggregating more than three (3) minutes in any one (1) hour. As an alternative, the annual compliance certification shall include a formal survey identifying the date, time, emissions unit, and verification that there are no visible emissions for a period or periods aggregating more than three (3) minutes in any one (1) hour. As an alternative, the annual compliance certification that there are no visible emissions for a period or periods aggregating more than three (3) minutes in any one (1) hour which are as dark or darker in shade as that designated as No. 1 on the Ringelmann Chart, or equivalent to 20% opacity and greater, as determined by a person certified in reading smoke using EPA Method 9, or any other appropriate test method as approved in writing by the District, the California Air Resources Board, and the U.S. Environmental Protection Agency.
- 4. Upon District request, opacity shall be determined by a person certified in reading smoke using EPA Method 9 or a certified, calibrated monitoring system.

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Ventura County Air Pollution Control District Rule 54 Applicable Requirements Sulfur Compounds - Sulfur Emissions from Combustion Operations at Point of Discharge

Rule 54, "Sulfur Compounds" Adopted 01/14/14, Federally Enforceable

Rule 64, "Sulfur Content of Fuels" Adopted 04/13/99, Federally-Enforceable

#### **Applicability:**

This attachment applies to all combustion emissions units at this stationary source that combust gaseous or liquid fuels. This attachment addresses the requirements of Rule 54 for sulfur emissions at the point of discharge. It can be demonstrated that compliance with the fuel sulfur content limits of Rule 64 ensures compliance with the sulfur emission limits of Rule 54.

#### **Conditions:**

1. Pursuant to Rule 54.B.1.a, no person shall discharge sulfur compounds from any combustion operation, which would exist as a liquid or gas at standard conditions, in excess of the following limit at the point of discharge:

300 ppm by vol,	For sources subject to:
on a dry basis,	Rule 74.11, "Natural Gas-Fired Water Heaters"
as sulfur dioxide	Rule 74.11.1, "Large Water Heaters and Small Boilers"
(SO <sub>2</sub> ), at 3%	Rule 74.15, "Boilers, Steam Generators, and Process Heaters"
oxygen	Rule 74.15.1, "Boilers, Steam Generators, and Process Heaters"
	(1 to 5 MMBTUs)
300 ppm by vol,	For sources subject to:
on a dry basis,	Rule 74.9, "Stationary Internal Combustion Engines"
as sulfur dioxide	Rule 74.23, "Stationary Gas Turbines"
(SO <sub>2</sub> ), at 15% O <sub>2</sub>	Flares and all other combustion operations

- 2. In order to comply with Rule 54, permittee shall comply with the fuel sulfur content limits of Rule 64. No additional periodic monitoring requirements for Rule 54 are required beyond the periodic monitoring requirements of Rule 64.
- 3. Upon District request, sulfur compounds at the point of discharge shall be determined by source testing using EPA Test Method 6, 6A, 6C, 8, 15, 16A, 16B, or South Coast AQMD Test Method 307-91 (Determination of Sulfur in a Gaseous Matrix), as appropriate.

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# Ventura County Air Pollution Control District Rule 54 Applicable Requirements Sulfur Compounds - Sulfur Dioxide Concentration at Ground Level

# Rule 54, "Sulfur Compounds" Adopted 01/14/14, Federally Enforceable

## **Applicability:**

This attachment applies to all emissions units at this stationary source that emit sulfur compounds. This attachment addresses the requirements of Rule 54 for sulfur emissions at ground or sea level at or beyond the property line of the stationary source.

# **Conditions:**

- 1. Pursuant to Rule 54, no person shall discharge sulfur compounds, which would exist as a liquid or gas at standard conditions, as sulfur dioxide which results in average ground or sea level concentrations at any point at or beyond the property line in excess of 0.25 ppmv averaged over any one hour period, or 0.04 ppmv averaged over any 24 hour period.
- 2. Pursuant to Rule 54.B.2.a, no person shall discharge sulfur compounds, which would exist as a liquid or gas at standard conditions, as sulfur dioxide which results in ground or sea level concentrations at any point at or beyond the property line such that the 1-hour average design value exceeds 0.075 ppm (Vol).
  - a) For purposes of Subsection B.2.a, the design value is derived from the 3-year average of annual 99th percentile daily maximum 1-hour values. At the District's discretion, compliance with the ground or sea level concentration limit in Subsection B.2.a of this rule may be demonstrated using EPA-approved dispersion models or ambient air monitoring. If the District requires ambient air monitoring, the test method(s) listed in Subsection D.2 of this rule must be employed.
  - b) To demonstrate compliance using dispersion modeling, the annual 99<sup>th</sup> percentile daily maximum at each receptor is determined from model results as follows: for each year of meteorological data modeled, select from each day the maximum hourly modeled SO<sub>2</sub> concentration value and sort all these daily maximum hourly values by descending value. The 99<sup>th</sup> percentile is the 4<sup>th</sup> highest value for each modeled year. Calculate the average of the 99<sup>th</sup> percentile values for three consecutive years of modeling data for each receptor. Compliance is demonstrated if this average value is less than or equal to the design value concentration limit in Subsection B.2.a of this Rule at each receptor.
  - c) Compliance with the limit in subsection B.2.a may also be demonstrated using EPA-approved screen models. Compliance is demonstrated if the 1-hour SO<sub>2</sub>

ground or sea level concentration does not exceed 0.075 ppm (Vol) at or beyond the property line.

- d) If ambient air monitoring data is used to demonstrate compliance, the design value must be calculated in accordance with 40 CFR Part 50 Appendix T Interpretation of the Primary National Ambient Air Quality Standards for Oxides of Sulfur (Sulfur Dioxide).
- 3. Permittee shall maintain a representative fuel analysis or exhaust analysis, along with modeling data or other demonstration to ensure that compliance with Rule 54 is being maintained. This analysis and compliance demonstration shall be provided to the District upon request.
- 4. Upon District request, ground or sea level concentrations of SO<sub>2</sub> shall be determined by Bay Area Air Quality Management District Manual of Procedures, Volume VI, Section 1, Ground Level Monitoring for Hydrogen Sulfide and Sulfur Dioxide (July 20, 1994) with the following amendments:
  - a. The wind direction shall be continuously measured and recorded to within 5 degrees of arc, and wind speed shall be continuously measured and recorded to within 0.25 miles per hour (mph) at wind speeds less than 25 mph and with a threshold no greater than 0.2 mph.
  - b. The meteorological instruments and siting requirements shall comply with the guidelines in "Quality Assurance Handbook for Air Pollution Measurements Systems, Volume IV, Meteorological Measurements Version 2.0," EPA-454/B-08-002, March 2008.
  - c. The gas standards shall be restandardized against the reference wet chemical method at a minimum of once every 12 months, or be standardized using National Institute of Standards and Technology (NIST) standard gases.

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## Ventura County Air Pollution Control District Rule 55 Applicable Requirements Fugitive Dust

## Rule 55, "Fugitive Dust" Adopted 06/10/08, District-Enforceable

This permit attachment will become federally enforceable when Rule 55 is approved by EPA as part of the SIP.

## **Applicability:**

This attachment applies to any operation, disturbed surface area, or man-made condition at this stationary source that is capable of generating dust. These operations may include bulk material handling, earth-moving, construction, demolition, storage piles, unpaved roads, track-out, or off-field agricultural operations.

All definitions listed in Section H of Rule 55 are applicable to this attachment. The Rule 55 definition section includes the following definitions: "disturbed surface area", "bulk material", "earth moving activities", "construction/demolition activities", "storage piles", "paved road", "track-out", and "off-field agricultural operations". All exemptions listed in Section D of Rule 55 are applicable to this attachment.

#### **Conditions:**

- 1. Pursuant to Rule 55.B.1, the permittee shall not cause or allow the emissions of fugitive dust from any applicable source such that the dust remains visible beyond the midpoint (width) of a public street or road adjacent to the property line of the emission source or beyond 50 feet from the property line if there is not an adjacent public street or road.
- 2. Pursuant to Rule 55.B.2, the Permittee shall not cause or allow the emissions of fugitive dust from any applicable source such that the dust causes 20 percent opacity or greater during each observation and the total duration of such observations (not necessarily consecutive) is a cumulative 3 minutes or more in any one (1) hour. Only opacity readings from a single source shall be included in the cumulative total used to determine compliance. Compliance with the opacity limit shall be determined by using EPA Method 9 with the modifications listed in Section F of Rule 55.
- 3. Pursuant to Rule 55.B.3, the permittee shall not allow track-out to extend 25 feet or more in length unless at least one of the following three control measures is utilized: track-out area improvement, track-out prevention, or track-out removal. These control measures are detailed in Rule 55.B.3.a.

- 4. Pursuant to Rule 55.B.3.b, notwithstanding other track-out requirements, all track-out shall be removed at the conclusion of each workday or evening shift subject to the conditions listed in Section 55.B.3.b.
- 5. Pursuant to Rule 55.C, the permittee shall comply with the specific activity requirements detailed in Section C of Rule 55, for earth-moving, bulk material handling, and truck hauling activities, as applicable.
- 6. The permittee shall comply with the specific recordkeeping requirements listed in Section E of Rule 55, as applicable.
- 7. On an annual basis, the permittee shall certify that all applicable sources of dust at this stationary source are operating in compliance with Rule 55. The permittee may also certify annually that there are no operations, disturbed surface areas, or man-made conditions at this stationary source that are subject to Rule 55.

# Ventura County Air Pollution Control District Rule 57.1 Applicable Requirements Particulate Matter Emissions from Fuel Burning Equipment

# Rule 57.1, "Particulate Matter Emissions from Fuel Burning Equipment" Adopted 01/11/05, Federally Enforceable

## **Applicability:**

This attachment applies to fuel burning equipment such as boilers, steam generators, process heaters, water heaters, space heaters, flares, and gas turbines. This attachment does not apply to internal combustion engines, jet engine test stands and rocket engine test stands, and rocket propellant testing devices and rocket fuel testing devices. This attachment also does not apply to exhaust gas streams containing particulate matter that was not generated by the combustion of fuel; such exhaust gas streams are subject to Rule 52 and Rule 53.

## **Conditions:**

1. Pursuant to Section B of Rule 57.1, emissions of particulate matter shall not exceed 0.12 pounds per million BTU of fuel input.

Particulate matter is defined as any material, except uncombined water, that exists in a finely divided form as a liquid or solid at standard conditions. Standard conditions are: a gas temperature of 68 degrees Fahrenheit (20 degrees Celsius) and a gas pressure of 14.7 pounds per square inch (760 mm. Hg) absolute.

- 2. Upon request of the District Compliance Division, compliance shall be determined by independent source test using CARB Method 5. The total particulate catch shall include the filter catch, probe catch, impinger catch, and the solvent extract, as specified in CARB Method 5. Any other appropriate test method may be used with prior written approval by the District, the California Air Resources Board, and the U.S. Environmental Protection Agency.
- 3. Periodic monitoring is not necessary to certify compliance with Rule 57.1. To certify compliance, a reference to the Rule 57.B District analysis dated December 3, 1997 is sufficient.

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# Ventura County Air Pollution Control District Rule 64 Applicable Requirements Sulfur Content of Fuels - Gaseous Fuel Requirements

# Rule 64, "Sulfur Content of Fuels" Adopted 04/13/99, Federally Enforceable

#### **Applicability:**

This attachment applies to all combustion emissions units at this stationary source while the emissions units are combusting gaseous fuels. Rule 64 shall not apply to any flare gas combustion, where no useful energy is produced, and which is subject to Rule 54, "Sulfur Compounds."

## **Conditions:**

- Pursuant to Rule 64, no person shall burn at any time gaseous fuel containing sulfur compounds in excess of 50 grains per 100 cubic feet of gaseous fuel (788 ppmv), calculated as hydrogen sulfide at standard conditions, unless specifically exempted by Rule 64.
- 2. If only Public Utilities Commission-regulated natural gas, propane, or butane is combusted at this facility, it will be assumed that the permittee is complying with Rule 64 without additional periodic monitoring requirements. Any person claiming this exemption shall maintain records sufficient to substantiate the use of these fuels.
- 3. If other than Public Utilities Commission-regulated natural gas, propane, or butane is being combusted, the permittee shall analyze the sulfur content of the fuel on an annual basis using South Coast AQMD Method 307-94 Determination of Sulfur in a Gaseous Matrix or by ASTM D1072-90 (1994), Standard Test Method for Total Sulfur in Fuel Gases.

Alternatively, when measuring the sulfur content of landfill or oilfield gaseous fuel, permittee may use the colorimetric method ASTM D 4810-88 (Reapproved 1994) or the ASTM D4084-94 (Lead Acetate Reaction Rate Method) and may assume that the hydrogen sulfide content of the fuel gas adequately represents the total sulfur content. However, if the sulfur content as measured by ASTM D4810-88 or ASTM D4084-94 equals or exceeds 200 ppmv, then only South Coast AQMD Method 307-94 or ASTM D1072-90 (1994) shall be used to determine compliance.

The applicable ranges of some ASTM methods mentioned above are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis may be used subject to the verification of the dilution ratio.

Permittee may use the colorimetric method ASTM D 4810-88 (Reapproved 1994) for the measurement of the sulfur content of gaseous fuels other than landfill or oilfield gas only if written approval has been granted by the District and by US EPA.

- 4. Monitoring of the sulfur content of landfill or oilfield gaseous fuel by the permittee shall be at least quarterly if any of the following conditions apply:
  - a. Any sulfur measurement exceeds 394 ppmv, calculated as hydrogen sulfide at standard conditions.
  - b. A stationary source is new.
  - c. The permittee has not reported historical measurements of hydrogen sulfide of the landfill or oilfield gaseous fuel performed within the previous three years in writing to the District for a stationary source.

An operator may have the sulfur content of landfill or oilfield gaseous fuel monitored annually only, instead of quarterly, by satisfying the following provisions:

- d. During four consecutive calendar quarters, each sulfur content measurement shall not exceed 394 ppmv, calculated as hydrogen sulfide at standard conditions, and
- e. Submit a written request to the District for a reduction in monitoring frequency. This request shall contain backup documentation including monitoring reports that document the above provision. Requests for a reduction in monitoring frequency are not effective until written approval by the District is received by the operator.

This annual fuel analysis, and the quarterly analyses if applicable, shall be maintained at the facility and a copy of the annual analysis shall be provided to the District with the annual compliance certification.

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# Ventura County Air Pollution Control District Rule 64 Applicable Requirements Sulfur Content of Fuels - Liquid Fuel Requirements

# Rule 64, "Sulfur Content of Fuels" Adopted 04/13/99, Federally Enforceable

### **Applicability:**

This attachment applies to all combustion emissions units at this stationary source while the emissions units are combusting liquid fuels. This attachment does not apply to any combustion emission unit with sulfur emission controls.

## **Conditions:**

- 1. Pursuant to Rule 64, no person shall burn any liquid fuels with a sulfur content in excess of 0.5 percent, by weight, unless specifically exempted by Rule 64.
- 2. If only ARB-quality reformulated gasoline or ARB-certified diesel fuel is combusted at this facility, it will be assumed that the permittee is complying with Rule 64 without additional periodic monitoring requirements. Any person claiming this exemption shall maintain records sufficient to substantiate the use of these fuels.
- 3. If other than ARB-quality reformulated gasoline or ARB-certified diesel fuel is being combusted, for each liquid fuel delivery permittee shall either obtain the fuel supplier's certification, or shall test the sulfur content of the fuel using ASTM Method D4294-98 or D2622-98, to ensure that compliance with Rule 64 is being maintained. For liquid fuels, operators of electric power generation units may use the sampling and analysis methods prescribed in Code of Federal Regulations 40CFR Part 75 Appendix D.2.2. The fuel supplier's certification may be provided once for each purchase lot, if records are kept of the purchase lot number of each delivery.

The fuel sulfur content by weight data shall be maintained at the facility and shall be provided with the annual compliance certification.

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# Ventura County Air Pollution Control District Rule 74.6 Applicable Requirements Surface Cleaning and Degreasing

## Rule 74.6, "Surface Cleaning and Degreasing" Adopted 11/10/20, Federally Enforceable

## **Applicability:**

This attachment applies to all solvent cleaning activities at this stationary source, except those activities listed in Condition No. 11 that are exempt pursuant to Section E of Rule 74.6. This attachment does not apply to substrate surface preparation regulated by other APCD surface coating, adhesive, ink, resin, and solvent rules. "Solvent" is defined as any ROC-containing liquid used to perform solvent cleaning. "Solvent cleaning" is defined as the use of organic solvent to remove loosely held uncured adhesives, uncured inks, uncured coatings, uncured resins, and other contaminants which include, but are not limited to, dirt, soil, lubricants, coolant, moisture, grease, and fingerprints, from parts, tools, machinery, equipment, and general work areas.

This attachment also contains requirements, pursuant to Rule 74.6, for cold cleaners. A cold cleaner is defined in Rule 74.6 as any batch operated equipment designed to contain liquid solvent that is operated below the solvent's boiling point to carry out solvent cleaning operations. A specific type of cold cleaner is a "remote reservoir cold cleaner" which is a device in which solvent is moved through a sink-like work area for cleaning parts and drains immediately, without forming a pool, through a single drain hole less than 100 square centimeters (15.5 square inches) in area into an enclosed container that is not accessible for soaking parts. The freeboard height for remote reservoir cold cleaners is the distance from the top of the solvent drain to the top of the tank.

This attachment does not apply to solvent cleaning where an emission control system is used pursuant to Rule 74.6.B.5 or where an alternative cleaning system is used pursuant to Rule 74.6.B.6. Pursuant to APCD Rule 23.F.7, solvents used by the permittee for facility, ground, and building maintenance and repair are exempt from the requirement to have a permit. However, unless exempted by Rule 74.6.E, such solvents are required to comply with Rule 74.6.

#### **Conditions:**

- 1. Pursuant to Rule 74.6.B.1, no person shall perform solvent cleaning using solvent that exceeds the following limits:
  - a. Solvents used for application equipment cleanup, and all other cleanup of uncured coatings, adhesives, inks, or resins, shall not exceed an ROC content of 25 grams per liter, as applied.

- b. Solvents used for cleaning of electronic components, electrical apparatus, or aerospace components conducted in a degreaser shall not exceed an ROC content of 100 grams per liter, as applied.
- c. Solvents used for cleaning of medical devices and pharmaceuticals, including repair and maintenance of tools, equipment and machinery shall not exceed an ROC content of 800 grams per liter, as applied.
- d. Solvents used for the general work surface cleaning of medical devices and pharmaceuticals shall not exceed an ROC content of 600 grams per liter, as applied.
- e. Solvents used for cleaning for purposes other than those listed in (a) through (d) above shall not exceed an ROC content of 25 grams per liter, as applied.
- 2. Pursuant to Rule 74.6.B.2, no person shall perform solvent cleaning using a solvent with an ROC content greater than 25 grams per liter unless one of the following cleaning devices or methods is used:
  - a. Wipe cleaning where solvent is dispensed to wipe cleaning materials from containers that are kept closed to prevent evaporation, except while dispensing solvent or replenishing the solvent supply;
  - b. Non-atomized solvent flow, dip, or flush method where pooling on surfaces being cleaned is prevented or drained, and all solvent runoff is collected in a manner that enables solvent recovery or disposal. The collection system shall be kept closed to prevent evaporation except while collecting solvent runoff or emptying the collection system;

If the cleaning method has a solvent capacity more than one gallon, a cold cleaner or remote reservoir cold cleaner meeting the equipment and operating requirements of Condition Nos. 8, 9, and 10 of this attachment (Sections C and D of Rule 74.6) shall be used to comply with this requirement.

- c. Application of solvent from a hand held spray bottle, squirt bottle or other closed container with a capacity of one liter or less;
- d. A properly used enclosed gun washer or low emission spray gun cleaner.
- 3. Pursuant to Rule 74.6.B.3.a, no person shall allow liquid cleaning solvent to leak from any equipment or container.

- 4. Pursuant to Rule 74.6.B.3.b, no person shall specify, solicit, supply, or require any cleaning solvent or solvent cleaning equipment intended for uses governed by Rule 74.6 if such use would violate Rule 74.6. This prohibition applies to all written and oral contracts under which solvent cleaning operations subject to Rule 74.6 are to be conducted at any location in Ventura County.
- 5. Pursuant to Rule 74.6.B.3.c, no person shall use more than one gallon per week of solvents containing methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, or chloroform, or any combination of these solvents, in a total concentration greater than 5 percent by weight, for cold cleaning except in a cold cleaner operated in accordance with National Emission Standards for Halogenated Solvent Cleaning, 40 CFR Parts 9 and 63, Subpart T, Sections 63.460 through 63.469 (Degreasing MACT Standards). Any person that uses the above solvent in quantities less than one gallon per week shall maintain records of the volume and formulation of such solvent on an as-used basis (recording use each day such material is used). Records shall be saved for at least five (5) years from the date of each record and shall be made available to District personnel upon request.
- 6. Pursuant to Rule 74.6.B.4.a, all ROC-containing solvents shall be stored in non-absorbent, non-leaking containers that shall be kept closed at all times except when filling or emptying.
- 7. Pursuant to Rule 74.6.B.4.b, waste solvent and waste solvent residues shall be disposed properly. Spent cleanup solvents may be classified as hazardous waste. The owner or operator shall obtain approval from applicable local, state, or federal water pollution control agency prior to disposing of spent solvents into the sewer or storm drain systems.
- 8. Pursuant to Rule 74.6.C.1, all cold cleaners, except remote reservoir cold cleaners, shall be equipped with the following devices:
  - a. A drying rack suspended above the solvent, or other facility for draining cleaned parts such that the drained solvent is returned to the cleaner.
  - A cover that prevents the solvent from evaporating when not processing work in the cleaner. If high volatility solvent is used, the cover must be a sliding, rolling, or guillotine (bi-parting) type that is designed to easily open and close, or it must be designed to be easily operated with one hand. A high volatility solvent is an unheated solvent with an ROC composite partial pressure of greater than 2 mmHg @ 20°C.
  - c. A freeboard height of at least 6 inches (15.2 centimeters), if low volatility solvent is used. A low volatility solvent is an unheated solvent with an ROC composite partial pressure of 2 mmHg or less @ 20°C.
  - d. At least one of the following control devices, if high volatility solvent is used:

- 1. A freeboard height such that the freeboard ratio is at least 0.75.
- 2. A water cover if the solvent is insoluble in and heavier than water.
- e. A permanent conspicuous mark locating the maximum allowable solvent level that conforms with the applicable freeboard height requirement in Condition No. 8.c or 8.d.1.
- f. A permanent conspicuous label or sign summarizing the applicable operating requirements appropriate for cold cleaning operations.
- 9. Pursuant to Rule 74.6.C.2, remote reservoir cold cleaners shall be equipped with the following devices:
  - a. A permanent conspicuous label or sign summarizing the applicable operating requirements appropriate for cold cleaning operations.
  - b. A sink-like work area that is sloped sufficiently towards the drain to preclude pooling of solvent.
  - c. A single drain hole, less than 100 square centimeters (15.5 square inches) in area, for the solvent to flow from the sink into the enclosed reservoir.
  - d. A freeboard height of at least 6 inches (15.2 centimeters).
  - e. A cover for the drain when no work is being processed in the cleaner and high volatility solvent is used. If low volatility solvent is used, a cover is not required.
- 10. Pursuant to Rule 74.6.D, any person who operates a cold cleaner shall conform to the following operating requirements:
  - a. The operator shall drain cleaned parts of all solvent until dripping ceases to ensure that the drained solvent is returned to the cleaner.
  - b. Solvent agitation, where necessary, shall be achieved using pump recirculation, a mixer, or ultrasonics. Air agitation shall not be used.
  - c. If a solvent flow is utilized, only a solid fluid stream (not a fine, atomized, or shower type spray) shall be used.
  - d. The pressure of the solvent flow system shall be such that liquid solvent does not splash outside the container.
  - e. No person shall remove or open any required device designed to cover the solvent unless work is being processed in the cleaner or maintenance is being performed on the cleaner.

- f. The cleaning equipment and emission control equipment shall be operated and maintained in proper working order.
- g. The cleaning of porous or absorbent materials such as cloth, leather, wood, or rope is prohibited. This provision shall not apply to paper gaskets or paper filters.
- 11. Pursuant to Rule 74.6.E.1, Rule 74.6 (all requirements of this permit attachment) shall not apply to:
  - a. Cleaning activities using Clean Air Solvent, or a solvent with an ROC-content no more than 25 grams per liter as applied. A "Clean Air Solvent" is a solvent certified by the South Coast Air Quality Management District as a Clean Air Solvent.
  - b. The use of up to 160 fluid ounces of non-refillable aerosol cleaning products per day, per facility.
  - c. Janitorial cleaning including graffiti removal.
  - d. Cleaning carried out in vapor degreasers or motion picture film cleaning equipment.
  - e. Cleaning operations subject to any of the following rules:

Rule 74.3, Paper, Fabric and Film Coating Operations Rule 74.5.1, Petroleum Solvent Dry Cleaning Rule 74.5.2, Synthetic Solvent Dry Cleaning Rule 74.19, Graphic Arts Operations Rule 74.19.1, Screen Printing Operations Rule 74.21, Semiconductor Manufacturing

- f. Stripping of cured coating (e.g.; stripping), cured adhesive (e.g.; debonding, ungluing), cured ink, or cured resin.
- g. The use of solvent for purposes other than solvent cleaning activities.
- 12. Pursuant to Rule 74.6.E.2, Rule 74.6.B.1 (Condition No. 1 of this attachment) shall not apply to:
  - a. Cleaning operations required to comply with any ROC content and/or composite vapor pressure limit in any of the following rules:

Rule 74.12, Surface Coating of Metal Parts and Products Rule 74.13, Aerospace Assembly and Component Manufacturing Operations Rule 74.14, Polyester Resin Material Operations Rule 74.18, Motor Vehicle and Mobile Equipment Coating Operations Rule 74.20, Adhesives and Sealants Rule 74.24, Marine Coating Operations Rule 74.24.1, Pleasure Craft Coating Operations Rule 74.30, Wood Products Coatings

- b. Cleaning of ultraviolet lamps used to cure ultraviolet inks coatings, adhesives or resins.
- c. Cleaning of solar cells, laser hardware, scientific instruments, or high-precision optics.
- d. Cleaning conducted in laboratory tests and analyses including quality assurance/quality control applications, or bench scale or short-term (less than 2 years) research and development programs.
- e. Removal of elemental sodium from the inside of pipes and lines.
- f. Cleaning of mold release compounds from molds.
- g. Cleaning of tools used to cut or abrade cured magnetic oxide coatings.
- h. Cleaning of aerospace assembly and subassembly surfaces that are exposed to strong oxidizers or reducers such as nitrogen tetroxide, liquid oxygen or hydrazine.
- i. Cleaning of paper gaskets.
- j. Cleaning of clutch assemblies where rubber is bonded to metal by means of an adhesive.
- k. Cleaning of hydraulic actuating fluid from filters and filter housings.
- 1. Removal of explosive materials and constituents from equipment associated with manufacturing, testing or developing explosives.
- m. Facility wide use of less than 1 gallon per week of non-compliant solvent where compliant solvents are not available. Any person claiming this exemption shall maintain records of the volume and formulation of non-compliant solvent used on an as-used basis (recording use each day such material is used). Records shall be saved for at least five (5) years from the date of each record and shall be made available to District personnel upon request.

- 13. Pursuant to Rule 74.6.E.3, Rule 74.6 Sections B.1 and B.2 (Condition Nos. 1 and 2 of this attachment) shall not apply to aircraft engine gas path cleaning or stationary gas turbine gas path cleaning using solvent with an ROC content of 200 g/l or less, as applied.
- 14. Pursuant to Rule 74.6.F, the permittee shall maintain a current material list showing each ROC containing material used in solvent cleaning activities. The list shall summarize the following information:
  - a. Solvent name and manufacturer's description.
  - b. All intended uses of the solvent at the facility, classified as follows:
    - 1. Cleanup, including application equipment cleaning, or
    - 2. Cleaning of electronic components, electrical apparatus components, medical devices, or aerospace components, or
    - 3. Solvent used pursuant to an exemption in Rule 74.6.E (specify the exemption claimed).
  - c. The ROC content in units of grams per liter of material (and ROC composite partial pressure in units of mm Hg @ 20C, if applicable) of the solvent.
  - d. If the solvent is a mix of materials blended by the operator, a record of the mix ratio.

This information shall be made available to District personnel upon request.

- 15. Permittee shall maintain the above records and conduct periodic facility inspections, and an annual compliance certification to ensure that compliance with Rule 74.6 is being maintained. Upon request of the District, compliance with Rule 74.6 shall be determined using the following methods:
  - a. Pursuant to Rule 74.6.G.1, the ROC content of materials shall be determined by EPA Test Method 24 (40 CFR Part 60, Appendix A). The ROC content of materials containing 50 g/l of ROC or less shall be determined by the most recent version of South Coast Air Quality Management District (SCAQMD) Method 313 (Determination of Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry) or any other alternative test methods approved by the U.S. EPA, CARB, and the District.
  - b. Pursuant to Rule 74.6.G.4, the identity of components in solvents shall be determined using manufacturer's formulation data or by using ASTM E168-67, ASTM E169-87, or ASTM E260-85.

- c. Rule 74.6.G.5, on or before December 31, 2021, ROC composite partial pressure of a solvent shall be calculated using a widely accepted published source such as: Boublik, T., V. Fried and E. Hala, "The Vapor Pressure of Pure Substances," Elsevier Scientific Publishing Co., New York (1973), Perry's Chemical Engineers Handbook, McGraw-Hill Book Company, CRC Handbook of Chemistry and Physics, Chemical Rubber Publishing Company (1986-1987), and Lange's Handbook of Chemistry, John A. Dean, editor, McGraw-Hill Book Company (1985). The true vapor pressure of a component in a solvent mix may be determined by ASTM Method D2879-86. The ROC composite partial pressure of a solvent mix consisting entirely of ROC may be determined by ASTM Method D2879-86.
- Pursuant to Rule 74.6.G.6, the active and passive solvent losses from spray gun cleaning systems shall be determined using South Coast Air Quality Management District's "General Test Method for Determining Solvent Losses from Spray Gun Cleaning Systems" dated October 3, 1989. The test solvent for this determination shall be any lacquer thinner with a minimum vapor pressure of 105 mm Hg at 20°C. The minimum test temperature shall be 15°C.
- e. Pursuant to Rule 74.6.G.7, initial boiling point of solvent shall be determined by ASTM 1078-78 or by using a published source such as listed in Rule 74.6.G.5.

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# Ventura County Air Pollution Control District Rule 74.11.1 Applicable Requirements Rule 74.11.1, Large Water Heaters and Small Boilers

# Rule 74.11.1, "Large Water Heaters and Small Boilers" Adopted 09/11/12, Federally Enforceable

## **Applicability:**

This attachment applies to all natural gas-fired water heaters, boilers, steam generators or process heaters (units) with a rated heat input capacity greater than or equal to 75,000 BTU/hr and less than 1,000,000 BTU/hr at this stationary source installed after January 1, 2013 and to the future installation of any such unit at this stationary source. Note that units rated less than 1,000,000 BTU/hr are exempt from District permit requirements pursuant to Rule 23.C.1.

## **Conditions:**

- 1. Pursuant to Rule 74.11.1.B.2, no person shall sell, offer for sale, or install in Ventura County any new unit with a rated heat input capacity of greater than or equal to 75,000 BTU/hr and less than or equal to 400,000 BTU/hr that does not meet the following criteria:
  - a. Oxides of nitrogen emissions shall not exceed 14 nanograms per joule of heat output (32.5 pounds per billion BTU), or 20 parts per million, and
  - b. The unit is certified in accordance with Rule 74.11.1.C.

The oxides of nitrogen emission standard required above (Condition No. 1.a) does not apply to units specifically designed to heat swimming pools, hot tubs, or spas. For such units, oxides of nitrogen emissions shall not exceed 40 nanograms per joule of heat output (93 pounds per billion BTU), or 55 parts per million.

- 2. Pursuant to Rule 74.11.1.B.4, no person shall sell, offer for sale, or install in Ventura County any new unit with a rated heat input capacity of greater than 400,000 BTU/hr and less than 1,000,000 BTU/hr that does not meet the following criteria:
  - a. Oxides of nitrogen emissions shall not exceed 20 parts per million and carbon monoxide emissions shall not exceed 400 parts per million, and
  - b. The unit is certified in accordance with Rule 74.11.1.C.
- 3. The permittee shall maintain a listing of manufacturer, brand name, model number, heat input rating, and installation date for each water heater, boiler, steam generator and

process heater, with a rated heat input capacity greater than or equal to 75,000 BTU/hr and less than 1,000,000 BTU/hr, at this stationary source. Permittee shall submit these identification records for all of these units to the District upon request.

4. On an annual basis, the permittee shall certify that all water heaters, boilers, steam generators and process heaters, with a rated heat input capacity greater than or equal to 75,000 BTU/hr and less than 1,000,000 BTU/hr, at this stationary source are complying with Rule 74.11.1. This annual certification shall include a formal survey identifying each unit and documentation of certification status (pursuant to Rule 74.11.1.C), as required.

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# Ventura County Air Pollution Control District Rule 74.22 Applicable Requirements Rule 74.22, Natural Gas-Fired Fan-Type Central Furnaces

# Rule 74.22, "Natural Gas-Fired Fan-Type Central Furnaces" Adopted 11/09/93, Federally Enforceable

## **Applicability:**

This attachment applies to all natural gas-fired, fan-type central furnaces at this stationary source installed after May 31, 1994 and to the future installation of any natural gas-fired, fan-type central furnaces at this stationary source. A fan-type central furnace is a self contained space heater providing for circulation of heated air at pressures other than atmospheric through ducts of more than 10 inches in length that has a rated heat input capacity of less than 175,000 BTU per hour and, for combination heating and cooling units, a rated cooling capacity of less than 65,000 BTU per hour. Natural gas-fired, fan-type central furnaces installed in manufactured housing (mobile homes) are exempt from Rule 74.22.

## **Conditions:**

- 1. Pursuant to Rule 74.22.B, no person shall install, after May 31, 1994, any natural gasfired fan-type central furnace:
  - a. with NOx (oxides of nitrogen) emissions in excess of 40 nanograms per joule of heat output. (74.22.B.1)
  - b. unless it is certified and identified in accordance with Section C of Rule 74.22. (74.22.B.2)
- 2. Permittee shall maintain a listing of manufacturer, brand name, model number, and heat input rating for each natural gas-fired fan-type central furnace at this stationary source. Permittee shall submit these identification records for all of these furnaces to the District upon request.
- 3. On an annual basis, permittee shall certify that all natural gas-fired fan-type central furnaces at this stationary source are complying with Rule 74.22. This annual certification shall include a formal survey identifying each natural gas-fired fan-type central furnace; whether it was installed before or after May 31, 1994; and for those furnaces installed after May 31, 1994, information indicating that the certification is contained on the furnace nameplate, or that the furnace is included on a District-provided list of certified furnaces.

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#### 9. GENERAL REQUIREMENTS FOR SHORT-TERM ACTIVITIES (ATTACHMENTS)

The general requirements for short-term activities are broadly applicable requirements that apply to temporary activities at the facility (e.g., abrasive blasting, architectural coatings, degassing operations, etc.). These are activities occurring infrequently and for a short duration. Requirements for short-term activities can normally be adequately addressed in the permit application with minimal or no reference to any specific emissions unit, provided that the scope of the requirement and the manner of its enforcement are clear.

As detailed in the Title V Permit Reissuance Application, general applicable requirements for short-term activities that apply to this facility were determined. The permit conditions associated with each requirement for a short-term activity are listed in an individual attachment. The attachment is identified with the label "Attachment (APCD Rule No.) \_\_\_\_\_" or "Attachment 40CFR61.M" in the lower left corner of each attachment.

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# Ventura County Air Pollution Control District Rule 74.1 Applicable Requirements Abrasive Blasting

# Rule 74.1, "Abrasive Blasting" Adopted 11/12/91, Federally Enforceable

### **Applicability:**

This attachment applies to short term activities involving any abrasive blasting operation conducted at this facility. Abrasive blasting is the operation of cleaning or preparing a surface by forcibly propelling a stream of abrasive material against that surface. Abrasive materials subject to Rule 74.1 include, but are not limited to, sand, slag, steel shot, garnet or walnut shells.

#### **Conditions:**

- 1. Pursuant to Rule 74.1.B.1.a, all abrasive blasting operations shall be conducted within a permanent building, except for abrasive blasting operations conducted under one or more of the following conditions as detailed in Rule 74.1.B.1.b:
  - a. Steel or iron shot/grit is used exclusively
  - b. The item to be blasted exceeds eight feet in any dimension
  - c. The surface being blasted is situated at its permanent location or no further away from its permanent location than is necessary to allow the surface to be blasted
- 2. Pursuant to Rule 74.1.B.1.c, any abrasive blasting that is allowed to be conducted outside of a permanent building, and is not exclusively using steel or iron shot/grit, must use one of the following:
  - a. Wet abrasive blasting
  - b. Hydroblasting
  - c. Vacuum blasting
  - d. Dry blasting with California ARB certified abrasives
- 3. Abrasive blasting for pavement marking shall comply with the requirements of Rule 74.1.B.2.

- 4. Abrasive blasting of stucco and concrete shall comply with the requirements of Rule 74.1.B.3.
- 5. Packages or containers for abrasives certified in accordance with Section 92530 of the California Code of Regulations used for permissible outdoor blasting shall comply with the labeling requirements of Rule 74.1.B.4.
- 6. Abrasive blasting operations shall comply with the visible emission standards of Rule 74.1.C.1 and the nuisance prohibition of Rule 74.1.C.2. The visible emission evaluation of abrasive blasting operations shall be conducted in accordance with Section 92400 of the California Code of Regulations.
- 7. Permittee shall monitor each abrasive blasting operation to ensure that compliance with Rule 74.1 is being maintained. For each abrasive blasting operation conducted at the facility, permittee shall maintain records of the following information:
  - a. Date of operation
  - b. Type of abrasive blasting media used
  - c. Identity, size, and location of item blasted
  - d. Whether operation was conducted inside or outside a permanent building
  - e. California ARB certifications for abrasives used

These records shall be maintained at the facility and submitted to the District upon request.

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# Ventura County Air Pollution Control District Rule 74.2 Applicable Requirements Architectural Coatings

# Rule 74.2, "Architectural Coatings" Federally Enforceable Version Adopted 01/12/10 District Enforceable Version Adopted 11/10/20

This permit attachment lists the requirements of the November 10, 2020 version of the rule. Compliance with this attachment will ensure compliance with both versions of Rule 74.2. The permit conditions below, therefore, are federally enforceable. The District-enforceable version of this rule will become federally enforceable when approved by the EPA as part of the SIP.

# **Applicability:**

This attachment applies to short term activities involving any person who markets, supplies, sells, offers for sale, applies or solicits the application of any architectural coating at this stationary source. An architectural coating is a coating to be applied to stationary structures or their appurtenances at the site of installation, to portable buildings at the site of installation, to pavements, to fields or lawns, or to curbs. Coatings applied in shop applications or to nonstationary structures, such as airplanes, ships, boats, railcars and automobiles, are not considered to be architectural coatings for the purposes of this rule, nor are adhesives.

This attachment and Rule 74.2 do not apply to architectural coatings that are sold in a container with a volume of one liter (1.057 quart) or less (as stipulated in Rule 74.2.F.2); do not apply to any aerosol coating product; and do not apply to colorants added at the factory or at the worksite (as stipulated in Rule 74.2.F.3).

#### **Conditions:**

- 1. Pursuant to Rule 74.2.B.1, the volatile organic compound (VOC) content of architectural coatings shall not exceed the following standards, as found in Table 2 of Rule 74.2.B.1, unless specifically exempted by Rule 74.2:
  - a. The VOC content of flat coatings shall not exceed 50 grams per liter of coating.
  - b. The VOC content of nonflat coatings shall not exceed 50 grams per liter of coating.
  - c. The VOC content of nonflat-high gloss coatings shall not exceed 50 grams per liter of coating.

Limits are expressed as VOC Regulatory (unless otherwise specified in Rule 74.2) thinned to the manufacturer's maximum recommendation, excluding colorant added to the tint bases. VOC Regulatory is defined in Rule 74.2.

2. Pursuant to Rule 74.2.B.1, the VOC content of specialty architectural coatings shall not exceed the VOC limits in the Table of Standards in Rule 74.2, unless specifically exempted by Rule 74.2.

Specifically, the VOC content of default coatings shall not exceed 50 grams per liter of coating. A default coating is any specialty coating (those other than flat or nonflat coatings) that is not defined in Section J of Rule 74.2 as any other coating category.

Specifically, the VOC content of industrial maintenance coatings shall not exceed 250 grams per liter of coating.

Limits are expressed as VOC Regulatory (unless otherwise specified in Rule 74.2) thinned to the manufacturer's maximum recommendation, excluding colorant added to the tint bases. VOC Regulatory is defined in Rule 74.2.

- 3. Pursuant to Rule 74.2.B.4, all architectural coating containers used to apply the contents therein to a surface directly from the container by pouring, siphoning, brushing, rolling, padding, ragging or other means, shall be closed when not in use. These architectural coating containers include, but are not limited to, drums, buckets, cans, pails, trays or other application containers. Containers of any VOC-containing materials used for thinning and cleanup shall also be closed when not in use.
- 4. Pursuant to Rule 74.2.B.5, no person who applies or solicits the application of any architectural coating shall apply or solicit the application of any coating that is thinned to exceed the applicable VOC limit specified in the Tables in Subsection B.1.
- 5. Permittee shall monitor each architectural coating operation to ensure that compliance with Rule 74.2 is being maintained. Permittee shall specify the usage of compliant coatings and shall maintain VOC records of coatings used at the stationary source. This information shall be submitted to the District upon request.
- 6. The VOC content of architectural coatings, along with other specified physical and chemical properties, shall be measured using the testing procedures in Rule 74.2.G.

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# Ventura County Air Pollution Control District Rule 74.4.D Applicable Requirements Cutback Asphalt - Road Oils

# Rule 74.4, "Cutback Asphalt" Adopted 07/05/83, Federally-Enforceable

## **Applicability:**

This attachment applies to short term activities involving the application of road oils for road, highway or street paving and maintenance. For the purpose of Rule 74.4, road oil shall be synonymous with slow cure asphalt.

# **Conditions:**

- 1. Pursuant to Rule 74.4.D, road oils used for highway or street paving or maintenance applications shall contain no more than 0.5 percent of organic compounds which boil at less than 500°F as determined by ASTM D402.
- 2. Permittee shall maintain a test report of oil being proposed for usage in order to ensure that compliance with Rule 74.4.D is being maintained. Permittee shall maintain records of oil analyses at the facility and submit these records to the District upon request.

# Ventura County Air Pollution Control District 40 CFR Part 61, Subpart M Applicable Requirements National Emission Standard for Asbestos

40 CFR Part 61, Subpart M, "National Emission Standard for Asbestos" Federally Enforceable

#### **Applicability:**

This attachment applies to short term activities conducted at this facility pertaining to procedures for asbestos demolition or renovation activities as detailed in 40 CFR Part 61.145.

As defined in 40 CFR Part 61.141, asbestos means the asbestiform varieties of serpentinite (chrysotile), riebeckite (crocidolite), cummingtonite-grunerite, anthophyllite, and actinolite-tremolite. Renovation means altering a facility or one or more facility components in any way, including the stripping or removal of regulated asbestos containing material (RACM) from a facility component. Operations in which load-supporting structural members are wrecked or taken out are demolitions.

#### **Conditions:**

- 1. Permittee shall insure compliance with 40 CFR Part 61 Subpart M, "National Emission Standard for Asbestos." The owner or operator of a demolition or renovation activity, as defined in 40 CFR Part 61.141, shall comply with the applicable inspection, notification, removal, and disposal procedures for asbestos containing materials as specified in 40 CFR Part 61.145, "Standards for Demolition and Renovation."
- 2. During times when asbestos renovation or demolition are underway at the facility, permittee shall ensure that all applicable requirements of 40 CFR Part 61.145 are met.

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#### 10. GENERAL PERMIT CONDITIONS

This section contains general Part 70 permit conditions and general APCD permit to operate conditions. The general Part 70 permit conditions are associated with general federal requirements that apply to all Title V facilities. These conditions are based on APCD Rules 8, 30, 32, and 33, and 40 CFR Part 70.

The general permit to operate conditions are associated with general District requirements that apply to all operating Title V facilities. These conditions are based on APCD Rules 19, 20, 22, and 27.

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## Ventura County Air Pollution Control District General Part 70 Permit Conditions

- 1. The permittee shall comply with all federally-enforceable conditions of the Part 70 permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of an application for reissuance of the permit. (40 CFR 70.6(a)(6)(i), APCD Rule 33.3.B.1)
- 2. The permittee shall continue to comply with all the applicable requirements with which the company has certified that it is already in compliance. The permittee shall comply in a timely manner with applicable requirements that become effective during the permit term of this permit.
- 3. The permittee shall promptly report deviations from Part 70 permit requirements, including those attributable to upset conditions as defined in the Part 70 permit, the probable cause of the deviations, and any corrective actions or preventive measures taken. Promptly is defined as no later than four (4) hours after its detection by such owner or operator, or his agents or employees. (40 CFR 70.6(a)(3)(iii)(B), APCD Rule 33.3.A.3, APCD Rule 32.B.1)
- 4. The need to halt or reduce activity is not a defense. It shall not be a defense for a permittee in an enforcement action that it would be necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Part 70 permit. (40 CFR 70.6(a)(6)(ii), APCD Rule 33.3.B.2)
- 5. All applicable records, monitoring data, and support information shall be maintained for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, and copies of all reports required by the Part 70 permit. All applicable reports shall be submitted to the District every 6 months and shall be certified by a responsible official. Such reports shall identify any deviations from Part 70 permit conditions. (40 CFR 70.6(a)(3)(ii)(B), 40 CFR 70.6(a)(3)(iii)(A), APCD Rule 33.3.A.3)
- 6. 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 Part 70 permit or to determine compliance with the Part 70 permit. Upon request, the permittee shall also furnish to the District copies of records required to be kept by the Part 70 permit or, for information claimed to be confidential, the permittee may furnish such records directly to the Administrator of the EPA along with a claim of confidentiality. (40 CFR 70.6(a)(6)(v), APCD Rule 33.3.B.5)

- 7. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the District or an authorized representative to perform the following:
  - a. Enter upon the permittee's premises where a Part 70 source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the Part 70 permit;
  - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the Part 70 permit;
  - c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the Part 70 permit; and
  - d. As authorized by the federal Clean Air Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the Part 70 permit or applicable requirements.

(40 CFR 70.6(c)(2), APCD Rule 8, APCD Rule 33.3.B.7)

- 8. The Part 70 permit may be modified, revoked, reopened, reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. (40 CFR 70.6(a)(6)(iii), APCD Rule 33.3.B.3)
- 9. A Part 70 permit shall be reopened under the following conditions:
  - a. Additional applicable requirements under the federal Clean Air Act become applicable to the facility with a remaining Part 70 permit term of 3 or more years. Such a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the Part 70 permit is due to expire, unless the original Part 70 permit or any of its terms and conditions has been extended pursuant to APCD Rule 33.6.D;
  - b. Additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program. Upon approval by the Administrator of the EPA, excess emissions offset plans shall be deemed to be incorporated into the Part 70 permit;

- c. The District or EPA determines that the Part 70 permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Part 70 permit; or
- d. The Administrator of the EPA or the District determines that the Part 70 permit must be revised or revoked to assure compliance with the applicable requirements.

(40 CFR 70.7(f), APCD Rule 33.8.A)

- 10. All fees required by District Regulation III, Fees, shall be paid on a timely basis as requested by the District. Notwithstanding the term of the Part 70 permit, if the permittee fails to pay the annual renewal fees required pursuant to APCD Rule 42.H within the time period specified in APCD Rule 30, the Part 70 permit will be void. (40 CFR 70.6(a)(7), APCD Rule 30, APCD Rule 33.3.B.6)
- 11. The Part 70 permit does not convey any property rights of any sort, or any exclusive privilege. (40 CFR 70.6(a)(6)(iv), APCD Rule 33.3.B.4)
- 12. The provisions of this Part 70 permit shall be severable, and in the event of any challenge to any portion of the permit, or if any portion is held invalid, the remaining permit conditions shall remain valid and in force. (40 CFR 70.6(a)(5), APCD Rule 33.3.B.8)
- 13. An application for reissuance of this Part 70 Permit shall be submitted no more than 18 months prior to the expiration date and no less than 6 months prior to the expiration date as stated on this permit. The application shall be subject to the same procedural requirements, including those for public participation and EPA review, that apply to initial Part 70 permit issuance. (40 CFR 70.5(a)(1)(iii), 40 CFR 70.7(c)(1)(i), APCD Rule 33.6.B)
- 14. Any Part 70 application and any document, including reports, schedule of compliance progress reports, and compliance certification, required by this Part 70 permit shall be certified by a responsible official. The certification shall state that, based on information and belief formed after a reasonable inquiry, the statements and information in the document are true, accurate, and complete (40 CFR 70.5(d), APCD Rule 33.9.C)
- 15. Permittee must submit certification of compliance with all applicable requirements and all Part 70 permit conditions. A compliance certification shall be submitted with any Part 70 permit application and annually, on the anniversary date of the Part 70 permit, or on a more frequent schedule if required by an applicable requirement or permit condition.

This compliance certification shall identify each applicable requirement or condition of the Part 70 permit, the compliance status of the stationary source, whether the compliance

was continuous or intermittent since the last certification, and the method(s) used to determine compliance. In addition, the certification shall indicate the stationary source's compliance status with any applicable enhanced monitoring and compliance certification requirement of the federal Clean Air Act. A copy of each compliance certification shall be submitted to EPA Region IX. (40 CFR 70.5(c)(9), 40 CFR 70.6(c)(5), APCD Rule 33.3.A.9, APCD Rule 33.9.B)

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# Ventura County Air Pollution Control District General Permit to Operate Conditions

- 1. Within 30 days after receipt of a permit to operate, the permittee may petition the Hearing Board, in writing, to review any new or modified condition on the permit. (APCD Rule 22)
- 2. This permit to operate, or a copy, shall be posted reasonably close to the subject equipment and shall be readily accessible to inspection personnel from the District. Posting a copy of the "Permitted Equipment and Applicable Requirements Table" contained in Section No. 2 will fulfill this requirement if the entire permit to operate is readily available at another location at the stationary source. (APCD Rule 19)
- 3. This permit to operate is not transferable from one location to another unless the equipment is specifically listed as being portable. (APCD Rule 20)
- 4. If, within a reasonable amount of time, any permittee refuses to furnish information requested by the District, the District may suspend this permit to operate. The permittee will be informed, in writing, of the permit suspension and the reasons for the suspension. (APCD Rule 27)

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#### 11. MISCELLANEOUS FEDERAL PROGRAM CONDITIONS

This section contains miscellaneous federal program conditions that are not emission unitspecific or short-term. These federal requirements are broadly applicable requirements that apply and are enforced in the same manner for all subject emissions units or short-term activities. Permit conditions associated with these miscellaneous federal program requirements are listed in individual attachments. The attachment is identified with the label "Attachment 40CFR (Part No.) \_\_\_" in the lower left corner of each attachment.

# Ventura County Air Pollution Control District 40 CFR Part 68 Applicable Requirements Accidental Release Prevention and Risk Management Plans

## 40 CFR Part 68, "List of Regulated Substances and Thresholds for Accidental Release Prevention" Federally-Enforceable

## **Applicability:**

This attachment applies to regulated substances that are contained in a process at this stationary source and that exceed the threshold quantity, as presented in 40 CFR Part 68.130. This regulation addresses the requirements of section 112(r) of the federal Clean Air Act as amended. Specifically, this attachment applies to a facility that has stated that a federal Risk Management Plan pursuant to section 112(r) is currently not required, but where flexibility is desired to preclude a permit reopening should 40 CFR Part 68 become an applicable requirement. This stationary source does utilize a regulated substance, anhydrous ammonia (NH<sub>3</sub>); however, the application states that the stored amount is less than the 10,000 pound threshold.

#### **Conditions:**

1. Should the stationary source, as defined in 40 CFR Part 68.3, become subject to Part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in Part 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 CFR Part 70.

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# Ventura County Air Pollution Control District 40 CFR Part 82 Applicable Requirements Protection of Stratospheric Ozone

40 CFR Part 82, "Protection of Stratospheric Ozone" 40 CFR Part 82, Subpart B, "Servicing of Motor Vehicle Air Conditioners" 40 CFR Part 82, Subpart F, "Recycling and Emissions Reduction" Federally Enforceable (last revised 11/18/16)

## **Applicability:**

This attachment applies to activities conducted at this facility that involve producing, importing, exporting, or consuming of the specified controlled substances described under 40 CFR Part 82.4. Specifically, this attachment includes the requirements of 40 CFR Part 82, Subpart B, "Servicing of Motor Vehicle Air Conditioners," and 40 CFR Part 82, Subpart F, "Recycling and Emissions Reduction."

As stated in 40 CFR Part 82.30, 40 CFR Part 82, Subpart B applies to any person performing service on a motor vehicle for consideration when this service involves the refrigerant in the motor vehicle air conditioner.

As stated in 40 CFR Part 82.150, 40 CFR Part 82, Subpart F applies to any person maintaining, servicing, or repairing appliances containing class I, class II, or non-exempt substitute refrigerants. This subpart also applies to persons disposing of such appliances (including small appliances and motor vehicle air conditioners), refrigerant reclaimers, technician certifying programs, appliance owners and operators, manufacturers of appliances, manufacturers of recovery and/or recycling equipment, approved recovery and/or recycling equipment testing organizations, and persons buying, selling, or offering to sell class I, class II, or non-exempt substitute refrigerants.

As defined in 40 CFR82.152, *appliance* means any device which contains and uses a class I or class II substance or substitute as a refrigerant and which is used for household or commercial purposes, including any air conditioner, motor vehicle air conditioner, refrigerator, chiller, or freezer. For a system with multiple circuits, each independent circuit is considered a separate appliance. *Refrigerant* means, for purposes of this subpart, any substance, including blends and mixtures, consisting in part or whole of a class I or class II ozone-depleting substance or substitute that is used for heat transfer purposes and provides a cooling effect.

# **Conditions:**

1. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable

requirements as specified in 40 CFR Part 82, Subpart B, "Servicing of Motor Vehicle Air Conditioners."

The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant.

2. If the permittee performs maintenance on, or services, repairs, or disposes of appliances, the permittee is subject to all of the applicable requirements as specified in 40 CFR Part 82, Subpart F, "Recycling and Emissions Reduction."

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## Ventura County Air Pollution Control District Permit Shield - New Source Performance Standards 40 CFR Part 60, Subpart Dc

## 40 CFR Part 60, Subpart Dc, "Standards of Performance for Small Industrial -Commercial - Institutional Steam Generating Units"

## Permit Shield:

The New Source Performance Standard listed above has been reviewed; and it has been determined that it is not applicable to this stationary source. The following discussion details the determination of this permit shield for the two 31 MMBTU/Hr Babcock and Wilcox Steam Boilers. The units burn natural gas as the primary fuel and burn fuel oil only during periods when natural gas is not available due to curtailment.

40 CFR Part 60, Subpart Dc is applicable to steam generating units for which construction, modification, or reconstruction was commenced after June 9, 1989; and that have a maximum design heat input capacity of 29 megawatts (100 million BTU/Hr) or less, but greater than or equal to 2.9 megawatts (10 million BTU/Hr). Since construction of these two (2) 31 MMBTU/Hr boilers commenced prior to June 9, 1989; and since the units have not undergone any reconstruction or modifications, as defined in the New Source Performance Standards, Subpart Dc of 40 CFR Part 60 is not applicable to this stationary source.

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## Ventura County Air Pollution Control District Permit Shield – Standards of Performance for Stationary Combustion Turbines 40 CFR Part 60, Subpart KKKK

# 40 CFR Part 60, Subpart KKKK, "Standards of Performance for Stationary Combustion Turbines"

## Permit Shield:

The requirements of 40 CFR Part 60, Subpart KKKK, "Standards of Performance for Stationary Combustion Turbines" have been reviewed; and it has been determined that this federal regulation is not applicable to this stationary source. The following discussion details the determination of this permit shield for the GE LM 2500-33 Turbine.

## **Discussion:**

40 CFR Part 60, Subpart KKKK, is applicable to stationary combustion turbines with a heat input at peak load equal to or greater than 10 MMBTU/hr which commenced construction, modification, or reconstruction after February 18, 2005. The GE LM 2500-33 Turbine is rated at 255.7 MMBTU/hr; however, it was constructed prior to February 18, 2005. The turbine has been a part of Part 70 Permit No. 01267 since it was initially issued on April 1, 1999. The unit has been permitted with the District since December 28, 1989. Construction of the turbine was initiated in 1986.

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## Ventura County Air Pollution Control District Permit Shield – National Emission Standards for Hazardous Air Pollutants 40 CFR Part 63, Subpart YYYY

# 40 CFR Part 63, Subpart YYYY, "National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines"

## Permit Shield:

The requirements of 40 CFR Part 63, Subpart YYYY, "National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines" have been reviewed; and it has been determined that this federal regulation is not applicable to this stationary source. The following discussion details the determination of this permit shield for the GE LM 2500-33 Turbine.

## **Discussion:**

40 CFR Part 63, Subpart YYYY, is applicable to stationary combustion turbines that operate at a major source of HAP (Hazardous Air Pollutant) emissions. A stationary source is a major source of HAP emissions when the HAP emissions exceed thresholds of 10 tons per year of a single HAP or 25 tons per year of combined HAPs. Emissions at this stationary source do not exceed these HAP thresholds; therefore, the stationary source is not a major source of HAP emissions. The HAP emissions for the stationary source are shown in the Reissuance Application.

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## Ventura County Air Pollution Control District Permit Shield National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources

# 40 CFR Part 63, Subpart JJJJJJ, "National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources"

## Permit Shield:

The requirements of 40 CFR Part 63, Subpart JJJJJJ, "National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources" have been reviewed; and it has been determined that the boilers at this stationary source are not subject to this federal regulation. The following discussion details the determination of this permit shield for the two (2) 31 MMBTU/hr Babcock & Wilcox Steam Boilers. The units are fired on natural gas with Fuel Oil as a standby fuel.

## **Discussion:**

Section 63.1195(e) of 40 CFR Part 63, Subpart JJJJJJ, states that gas-fired boilers are not subject to Subpart JJJJJJ. Gas-fired boilers are defined in the subpart as any boiler that burns gaseous fuels not combined with any solid fuels and burns liquid fuels only during periods of gas curtailment, gas supply interruption, startups, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year (Section 63.11237). The use of the two (2) 31 MMBTU/hr Babcock & Wilcox Steam Boilers meet this definition as used at this stationary source.

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## Ventura County Air Pollution Control District Permit Shield - Acid Rain Program 40 CFR Parts 72 - 78

## 40 CFR Part 72, "Permits Regulation"

40 CFR Part 73, "Sulfur Dioxide Allowance System"

40 CFR Part 74, "Sulfur Dioxide Opt-Ins"

40 CFR Part 75, "Continuous Emission Monitoring"

40 CFR Part 76, "Acid Rain Nitrogen Oxides Emission Reduction Program"

40 CFR Part 77, "Excess Emissions"

40 CFR Part 78, "Appeal Procedures for Acid Rain Program"

## Permit Shield:

The Acid Rain Program requirements listed above have been reviewed; and it has been determined that they are not applicable to the LM 2500-33 natural gas-fired turbine at this stationary source. The following discussion details the determination of this permit shield for the LM 2500-33 natural gas-fired turbine that drives a 21.5 MW electrical generator.

Pursuant to 40 CFR Part 72.6(b)(1), a simple combustion turbine that commenced operation before November 15, 1990 is not an affected unit subject to the requirements of the Acid Rain Program. A simple combustion turbine is a unit that is a rotary engine driven by a gas under pressure that is created by the combustion of any fuel. This term includes combined cycle units without auxiliary firing. A combined cycle unit captures the hot air exiting the turbine through a heat recovery steam generator or a waste heat boiler. Since the LM 2500-33 turbine is a simple combustion turbine that commenced operation before November 15, 1990, it is not subject to the Acid Rain Program.

This permit shield shall remain in effect as long as: (1) no physical modification is made to the LM 2500-33 gas turbine that would make it an affected unit, and (2) the applicability requirements of the Acid Rain Program do not change such that the turbine becomes an affected unit.

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## 12. PART 70 PERMIT APPLICATION PACKAGE

The Part 70 permit application, which was submitted by this facility, is included in this section for reference only and is not a part of the Part 70 permit.

During the processing of the permit application, additional information was submitted by the facility in response to District requests. This additional information is included with the application. If the applicant was asked to replace a page or a portion of the application, the original submittal is stamped "REPLACED" and the replacement page or section is placed in front of the original. The applicant and District correspondence for the Part 70 permit application is located in the District permit file for this stationary source.



Ventura County Air Pollution Control District

669 County Square Drive Ventura, Colifornia 93003

tel 805/645-1400 fax 805/645-1444 www.vcaped.org Michael Villegas Air Pollution Control Officer

## VCAPCD PART 70 PERMIT REISSUANCE APPLICATION FORM

## **General Facility Information Form**

Form TVAE11

1. Permit Number: 01267

2. Company Name:

Trustee's off CSU and CSUCI Site Authority

3. Company Mailing Address:

One University Drive

4. Company City, State Zip Code:

Camarillo CA. 93012

5. Responsible Official and Title (as defined in 40 CFR 70.2 and VCAPCD Rule 33.1);

Ms. Ysabelirinidad. Vice President

6. Responsible Official Telephone Number:

(805) 437-8878

7. Facility Name (Usually Same As Company Name):

Trustee's off CSU and CSUCI Site Authority

8. Facility Street Address (or Lease Name/Field Name):

1947 W. Potrero Road

9. Facility City, CA Zip Code:

Camarillo CA. 93012

10. Title V Permit Contact Person and Title: Mr. Johney M. Smith. Plant Manager

11. Title V Permit Contact Person Telephone Number and Email:

(805) 437 3797. je**fifi**.smith@csuci.edu

 Title V Permit Contact Street Address: 1947 W. Potrero Road

13. Title V Permit Contact City, State Zip Code:

Camarillo CA. 9301 2

DISTRICT USE ONLY Amount Paid: \$ 450 +2000 Date Received: <u>9/16/19</u> Re

Receipt No. 92999

General Facility Information - Reissuance Form TVAF11 (08-01-16)

#### 14. Type of Organization:

II Corporation	□ Sole Proprietorship
Partnership	X Government

#### 15. Facility Operating Schedule: 24 Hours/Day 7 Days/Weck 52 Weeks/Year

16. Facility SIC Code: 4931

#### CAM (Compliance Assurance Monitoring) Plans

17. Does the current Part 70 Permit for this facility include any CAM Plan(s) as required by 40 CFR Part 64?

If yes, list the emissions unit(s) that are required to comply with CAM

If yes, are there any proposed changes to the CAM Plan(s)?

Provide details of any changes to the CAM Plan(s) as necessary. See the District CAM Plan Instructions for more detail.

Alternative Scenarios – If you answer "yes" to any questions 18 through 20 below, submit supplemental information as an attachment to the application. See instructions for more detail.

18. Does this application request alternative operating scenarios pursuant to Rule 33.4.B? 🗆 Yes 🙀 No

19. Doe this application request voluntary emission caps pursuant to Rule 33.4.C? D Yes No.

#### Miscellaneous Federal Requirements

21.	Has this facility been required to prepare a federal Risk Management Plan pursuant to Section 112(r) of the federal Clean Air Act and 40 CFR Part 68? My Yes Do Please see Additional Information Sheet for General Facility Information.							
	If yes, has the federal Risk Management Plan been submitted to the implementing agency? 👳 Yes 🛛 No							
	If a federal Risk Management Plan is required but has not been submitted to the implementing agency, provide a detailed explanation as an attachment to the application.							
22.	Does this facility conduct any activities that are regulated by the federal protection of stratospheric ozone requirements in 40 CFR Part 82?							
23.	Is this facility subject to the acid rain requirements in 40 CFR Part 72 through 40 CFR Part 78? 11 Yes 🛛 No							
24.	Is this facility subject to the federal outer continental shelf air regulations in 40 CFR Part 55? Di Yes og No							

🗆 Yes 🖄 No

n No

• Yes

**Permit Shields** 

25.

Does the current Part 70 permit for this facility include any permit shields?

If yes, list the emissions unit(s) with shields and the regulation they are shielded from \_

40 CFR Part 60 Subpart Dc, 40 CFR Part 63 Subpart KKKK, 40 CFR 63 Subpart YYYY, 40 CFR 63 Subpart JJJJJJ, 40 CFR 70-72

If yes, is the basis for each permit shield still correct?

⊯ Ycs □ No

If the current Part 70 permit contains any permit shield for which the basis is no longer correct, provide a detailed explanation as an attachment to the application.

Facilities Must Submit Process Descriptions, Plot Plans, and Process Flow Diagrams That Provide the Following:

- 26. General Nature of Business (e.g., Autobody Painting, Gasoline Storage & Dispensing, Oil Production, etc.)
- 27. Facility Process Description
- 28. A Street Map or Road Map That Shows the Location of the Facility in Ventura County.
- 29. A Facility Map That Clearly Indicates the Facility Boundaries and the Location of Permitted Equipment.
- 30. A Process Flow Diagram That Traces the Processes Throughout All Permitted Equipment from Start to Finish.

### 31. Certification by Responsible Official (as defined in 40 CFR 70.2 and VCAPCD Rule 33.1)

I certify that, based on information and belief formed after reasonable inquiry, the statements and information provided for this Part 70 Permit Application are true, accurate, and complete.

Signature and Title of Responsible Official:	VP BUSINESS & FINANCIAL	Date:	
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General Facility Information - Reissuance Form TVAF11 (08-01-16)

### General Facility Information Part 70 Permit Reissuance Application Form Attachments

- 21. The facility filed for Accidental Release Prevention de-registration in March 2009 because we currently store and handle less than the threshold quantity for ammonia. A copy of the De-registration Statement is included with this Application Package.
- 26. The Trustees of CSU and CSUCI Site Authority facility is a cogeneration facility that produces electricity for sale to the power grid; and steam to the nearby California State University Channel Islands Campus. The source has a Standard Industrial Classification (SIC) Code of 4931, Electric and Other Services Combined.
- 27. The facility operates a cogeneration unit which consists of a General Electric LM 2500-33 natural gas fired turbine that drives a 21.5 MW electrical generator. The facility also operates two 31.0 MMBTU/hr Babcock and Wilcox steam boilers as standby units to provide steam to the California State University Campus during periods when the gas turbine is not in operation. In addition, the facility has an emergency generating engine that is subject to the California Air Toxic Control Measure for Stationary Compression Ignition Engines. The emergency generating engine is exempt from Rule 74.9, "Stationary Internal Combustion Engines".



SITE AUTHORITY CI POWER One University Drive 805-437-3797 805-437-3791 fax

## Title V Reissuance Application Package

## For

## Trustees of CSU and CSUCI Site Authority

Permit To Operate No. 1267



Section 1

**General Facility Information** 

#### OLS Energy, Carnarillo PSM/RMP/CalARP Manuals

Jan 20 04 04:17p WBBM

801-489-0902

CalARP Risk Management Plan CCR Title 19, Section 2735.1 p.2

117

3/27/2009

RMP Reporting Center P.O. Box 1515 Lanham-Seabrook, Maryland 20703-1515 Attention: RMP De-registration

#### Re: De-registration of EPA Facility ID#: 1000 0005 2006

Reason for De-registration: Source reduced inventory of all regulated substances below TQs

OLS Energy-Camarillo Cogeneration Facility 1947 W. Potrero Drive Camarillo, CA 93010

Ventura County (111)

Effective date of De-registration: 03/27/2009

I certify the above stationary source as of the above effective date is no longer covered by the Risk Management Plan, 40 CFR Part 68.

PAEsina Signature Title Date

Exhibit 7-1 : RMP Certification Statement & Submission

40 CFR 68 RMP-1267







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Section 2

**Title V Permit Tables 1 - 4** 

#### Tables Part 70 Permit Reissuance Application Form Attachments

The following tables have been reviewed in the current Part 70 Permit: Periodic Monitoring Summary (Table No. 1), Permitted Equipment and Applicable Requirements Table (Table No. 2), Title V Equipment List Description Key (Table No. 2 Attachment), Title V Applicable Requirement Code Key (Table No. 2 Attachment), Permitted Throughput / Consumption Limit Table (Table No. 3), and the Permitted Emissions Table (Table No. 4). An overview of changes notes is summarized below.

Table No. 1 – Periodic Monitoring Summary

Table No. 1.c.1 - Specific Applicable Requirements

No Changes Noted

Table No. 1.c.2 - Permit Specific Conditions

No Changes Noted

Table No 1.c.3 – General Applicable Requirements

Rule 74.11.1 Has Changed

Table No. 1.c.4 – General Requirements for Short Term Activities

No Changes Noted

Table No. 2 - Permitted Equipment and Applicable Requirements

No Changes Noted

Table No. 2 Attachment – Title V Equipment List Description Key

No Changes Noted

Table No. 2 Attachment – Title V Applicable Requirement Code Key

No Changes Noted

Table No. 3 - Permitted Throughput / consumption Limit Table

No Changes Noted

Table No. 4 – Permitted Emissions Table

No Changes Noted.

## 1.c. PERIODIC MONITORING SUMMARY

This periodic monitoring summary is intended to aid the permittee in quickly identifying key monitoring, recordkeeping, and reporting requirements. It is not intended to be used as a "stand alone" monitoring guidance document that completely satisfies the requirements specifically applicable to this facility. The following tables are included in the periodic monitoring summary:

- Table 1.c.1 Specific Applicable Requirements
- Table 1.c.2 Permit-Specific Conditions
- Table 1.c.3 General Applicable Requirements
- Table 1.c.4 General Requirements for Short-Term Activities

### 1.c.1. Specific Applicable Requirements

The Specific Applicable Requirements Table includes a summary of the monitoring requirements, recordkeeping requirements, reporting requirements, and test methods associated with the attachments contained in Section No. 6 of this permit.

Attachment No./ Condition No.	Applicable Rule or Requirement	Monitoring	Recordkeeping	Semi-annual Reports	Test Methods	Comments
74.9N7	Rule 74.9.D.3	•Annual compliance certification •Records of operating hours and reasons for operation along with applicable engine identification	•Records of operating hours and reasons for operation along with applicable engine identification	None		Rule 74.9 exemption for emergency engines
ATCM Engine N2	ATCM for Stationary Compression Ignition Engines	•Hours of operation records for maintenance and testing •Fuel type records	•Hours of operation records for maintenance and testing •Fuel type records	None	None	Not Federally Enforceable
40CFR632222N3	RICE MACT for emergency diesel engines – oil change and inspections	Maintenance records     Annual compliance     certification	<ul> <li>Maintenance records</li> <li>Hours of operation records</li> </ul>	None	None	
74.15NI	Rule 74.15.B.1	<ul> <li>Annual compliance certification</li> <li>Biennial Source Test (NO<sub>x</sub>, CO)</li> </ul>	Records of source tests     Daily records of alternate fuel consumption	None	•NO <sub>x</sub> -ARB Method 100     •CO-ARB Method 100	These boilers are used only when the gas turbine is not operating

1.c.1.	Specific A	Applicable	Requirements	(Continued)
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Attachment No./	Applicable Rule or	Monitoring	Recordkeeping	Semi-annual Reports	Test Methods	Comments
Condition No.	Requirement	au				
STRMLN1267- LM-2500-NOx, NH3	Rules 26, 74.23.B.1, 74.23.B.2, 74.23.B.4, 103.A.4, 40 CFR Part 60 Subpart GG	<ul> <li>Annual Source Test (NOx, O2, NH3, fuel HHV)</li> <li>Submit test results w/in 45 days of conducting tests</li> <li>CEMs for fuel consumption, NOx, O2, and control system operating parameters</li> <li>Report each CEM emission violation w/in 96 hours</li> <li>Annual compliance certification</li> </ul>	•Records of CEMs data •Records of maintenance operations, periodic inspections, and repairs to turbine, air pollution control system, and CEMs •Records of source test reports and any violations or limit exceedances	<ul> <li>Actual annual operating hours or fuel consumption</li> <li>Annual source test with control system operating parameters</li> </ul>	<ul> <li>•NO<sub>x</sub>-EPA Method 20</li> <li>•O2 - ARB Method 100</li> <li>•NH3 - BAAQMD Method ST- 1B (1/20/82)</li> <li>•Gaseous fuel HHV - ASTM Method D1826-88</li> <li>•Fuel oil HHV - ASTM Method 240-87</li> </ul>	Streamlined Requirements
STRMLN1267- LM2500-SOx	Rules 26, 54 and 64, 40 CFR Part 60 Subpart GG,	<ul> <li>Annual compliance certification</li> <li>None for PUC-quality gas</li> <li>Annual test for non PUC- quality gas (submit with annual compliance certification)</li> <li>Fuel oil supplier's certification, or fuel test per each delivery (submit with annual compliance certification)</li> <li>Upon request, source test for sulfur compounds at point of discharge</li> </ul>	•Annual fuel gas analysis for non PUC-quality gas •Fuel supplier's certification, or fuel test per each delivery	None	•Gaseous fuel: SCAQMD Method 307-94 •Fuel oil: ASTM Method D4294- 98 or D2622-98 •Exhaust Sulfur Compounds - EPA Test Method 6, 6A, 6C, 8, 15, 16A, 16B, or SCAQMD Method 307-94, as appropriate	Streamlincd Requirements

Section No. 1 Periodic Monitoring Summary/Table (01267-221)

## 1.c.2. Permit-Specific Conditions

The Permit-Specific Conditions Table includes a summary of the monitoring requirements, recordkeeping requirements, reporting requirements, and test methods associated with the attachments contained in Section No. 7 of this permit.

Attachment No./ Condition No.	Applicable Rule or Requirement	Monitoring	Recordkeeping	Semi-annual Reports	Test Methods	Comments
PO1267PC1 Condition No. 1	Rule 26 General Recordkeeping	Annual compliance certification     Monthly records of throughput and consumption	<ul> <li>Monthly records</li> </ul>	Nonc	None	
PO1267PC1 Condition No. 2	Rule 29 Exempt Solvents	•Maintain a list of solvents is use and the solvent's permit exemption status data	None	None	None	
PO1267PC2 Condition No. 1 Condition No. 8	Rule 26 Combustion Units Annual Mass Emissions Limits	<ul> <li>Turbine CEMs (NO<sub>x</sub>)</li> <li>Monthly records of fuel consumption and emissions (ROC, NOx, PM, SOx, CO)</li> <li>Annual compliance certification</li> </ul>	Monthly records of fuel consumption and emissions	None	None	
PO1267PC2 Condition No. 2 Condition No. 8	Rule 26 Fuel Limitations B&W Boilers	Records of fuel consumption     Annual compliance     certification	•Monthly records of fuel consumption	None	None	
PO1267PC2 Condition No. 3 Condition No. 8	Rule 26 Fuel Oil Combustion Requirements B&W Boilers	<ul> <li>Source test for NOx and CO upon District request</li> <li>Records of fuel oil deliveries</li> <li>Obtain fuel supplier's certification or test sulfur content of fuel</li> <li>Annual compliance certification, including fuel sulfur content data</li> </ul>	Monthly records of fuel consumption Record of efforts taken to obtain lowest sulfur fuel oil Records of fuel oil sulfur content certifications or tests	None	NO <sub>x</sub> -ARB Method 100     CO-ARB Method 100     Fuel sulfur content: ASTM Method D4294- 98 or D2622-98	Periodic monitoring required for NOx and CO while burning fuel oil upon District request as B&W Boilers only operate when turbine is not in operation and fire fuel oil only during unlikely event of natural gas curtailment
PO1267PC2 Condition No. 4	Rule 26 Fuel Metering Requirements B&W Boiler	•Annual compliance certification	None	None	None	
PO1267PC2 Condition No. 5	Rules 26 and 74.15 Oxygen Monitoring Requirements B&W Boilers	•Annual compliance certification	None	None	None	Boilers only operate when the turbine is not in operation

1.c.2.	Permit-Specific	Conditions	(Continued)
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Attachment No./ Condition No.	Applicable Rulc or Requirement	Monitoring	Recordkeeping	Semi-annual Reports	Test Methods	Comments
Pe1267PC2 Condition No. 6	Rule 26 Simultaneous Operation Limits	•Annual compliance certification	None	None	None	
PO1267PC2 Condition No. 7 Condition No. 8	Rule 26 Natural Gas and Fuel Oil Combustion Requirements Gas Turbine	<ul> <li>Records of fuel consumption</li> <li>Records of fuel oil deliveries</li> <li>Obtain fuel supplier's certification or test sulfur content of fuel</li> <li>Annual compliance certification, including fuel sulfur content data</li> <li>Notify District within 5 days of burning fuel oil of efforts taken to obtain lowest sulfur fuel oil</li> </ul>	Monthly records of fuel consumption Record of efforts laken to obtain lowest sulfur fuel oil Records of fuel oil sulfur content certifications or tests	None	Fuel sulfur content: ASTM Method D4294-98 or D2622-98	
PO1267PC2 Condition No. 9	Rule 29 Notification of Planned Shutdowns	Notify District Enforcement Section of planned shutdowns by Dec. 31 for next calendar year	None	None	None	District Enforceable only

Section No. 1 Periodic Monitoring Summary/Table (01267-221)

## 1.c.3. General Applicable Requirements

The General Applicable Requirements Table includes a summary of the monitoring requirements, recordkeeping requirements, reporting requirements, and test methods associated with the attachments contained in Section No. 8 of this permit.

Attachment No./ Condition No.	Applicable Rule or Requirement	Monitoring	Recordkeeping	Semi-annual Reports	Test Methods	Comments
50	Rule 50	Routine surveillance     Visual inspections     Annual compliance certification,     including a formal survey     Opacity readings upon request     Notification required for     uncorrectable visible emissions	•Ail occurrences of visible emissions for periods>3min in any one hour •Annual formal survey of all emissions units	None	•Opacity - EPA Method 9	
54.B.1	Rule 54.B.1	<ul> <li>Annual compliance certification</li> <li>Follow monitoring requirements under Rule 64</li> <li>Upon request, source test for sulfur compounds at point of discharge</li> </ul>	None	None	•Sulfur Compounds - EPA Test Method 6, 6A, 6C, 8, 15, 16A.16B, or SCAQMD Method 307-91, as appropriate	•Compliance with Rule 64 ensures compliance with this rule based on District analysis
54.B.2	Rute \$4.B.2	•Annual compliance certification •Determine ground or sea level concentrations of SO <sub>2</sub> , upon request	Representative fuel analysis or exhaust analysis and compliance demonstration	None	•SO <sub>2</sub> - BAAQMD Manual of Procedurcs, Vol.VI, Section 1, Ground Level Monitoring for H <sub>2</sub> S and SO <sub>2</sub>	
55	Rule 55	Annual compliance certification	•Specific activity records as applicable	None	•EPA Method 9	
57.1	Rule 57.1	•Annual compliance certification	None	None	None	<ul> <li>Not required based on District analysis</li> </ul>
64. <b>B</b> .1	Rule 64.B.1	<ul> <li>Annual compliance certification</li> <li>None for PUC-quality gas, propane, or butane</li> <li>Annual test if gas is other than PUC-quality gas, propane, or butane (submit with annual compliance certification)</li> </ul>	•Annual fuel gas analysis if gas is other than PUC-quality gas, propane, or butane	None	•SCAQMD Method 307-94	

Attachment No./	Applicable Rule or	Monitoring	Recordkeeping	Semi-annual Reports	Test Methods	Comments
Condition No.	Requirement					
64. <b>B</b> .2	Rule 64. B.2	•Annual compliance certification •Fuel supplier's certification. or fuel test per each delivery (submit with annual compliance certification)	•Fuel supplier's certification. or fuel test per each delivery	None	•ASTM Method D4294-98 or D2622-98	
74.6	Rule 74.6	<ul> <li>Annual compliance certification</li> <li>Maintain current solvent information</li> <li>Routine snrveillance of solvent cleaning activities</li> <li>Upon request, solvent testing</li> <li>Measurement of freeboard height and drain hole area for cold cleaners (as applicable)</li> </ul>	•Records of current solvent information	None	<ul> <li>ROC content-EPA Test Method 24</li> <li>Identity of solvent components-ASTM E168-67, ASTM E169-87, or ASTM E260-85</li> <li>True vapor pressure or composite partial pressure -ASTM D2879-86 or other methods per Rule 74.6.G.5</li> <li>Initial boiling point-ASTM 1078-78 or published source</li> <li>Spray gun active/passive solvent losses-SCAQMD Method (10-3-89)</li> </ul>	
74.11.1	Rule 74.11.1	Annual compliance certification     Maintain identification records     of large water heaters and small     boilers	•Records of current information of large water heaters and small boilers	None	None	•Rule only applies to the installation of large water heaters and small boilers
74 22	Rule 74.22	•Annual compliance certification •Maintain furnace identification records	•Records of current furnace information	None	None	•Rule only applies to future installation of natural gas-fired, fan-type furnaces

## 1.c.3. General Applicable Requirements (Continued)

Section No. 1 Periodic Monitoring Summary/Table (01267-221)

## 1.c.4. General Requirements for Short-Term Activities

The General Requirements for Short-Term Activities Table includes a summary of the monitoring requirements, recordkeeping requirements, reporting requirements, and test methods associated with the attachments contained in Section No. 9 of this permit.

Attachment No./	Applicable Rule or Requirement	Monitoring	Recordkeeping	Semi-annual Reports	Test Methods	Comments
74.1	Rule 74.1	Annual compliance certification     Routine surveillance and visual     inspections of abrasive blasting     operation     Abrasive blasting records	•Abrasive blasting records	None	Visible emission evaluation-Section     92400 of CCR	
74.2	Rule 74.2	Annual compliance certification     Routine surveillance     Maintain VOC records of     coatings used	•Maintain VOC records of coatings used	None	•Sec Rule 74.2.G	
74.4.D	Rule 74.4.D	•Annual Compliance certification •Test ROC content of oil sample being proposed for usage	•Records of oil analyses	None	•ASTM D402	
40CFR61.M	40 CFR Part 61. Subpart M	•Annual compliance certification •See 40 CFR Part 61.145 for inspection procedures	•See 40 CFR Part 61.145 for recordkeeping procedures	•See 40 CFR Part 61.145 for notification procedures	•See 40 CFR Part 61.145 for test methods	

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#### TABLE NO. 2

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT Permit to Operate No. 01267										
Permitted Equipment and Applicable Requirements										
M VTTLEVOV PermitsPOL26/APermit IV/FABLES(267-18)	54	64	74.9	74.15	74.23	103	NSPS GO	ATCM for CI Engines	RICE MACT	Additional Requirements
<ul> <li>1 - 255.7 MMBTU/Hr (HHV) General Electric LM 2500-33</li> <li>21.5 MW Turbine with a Heat Recovery Boiler. Water Injection and SCR for NO<sub>x</sub> Control, Natural Gas-Fired with Fuel Oil for Curtailment Situations</li> </ul>	x	x			4	4	х			PC1, PC2
I - 31 MMBTU/Hr Babcock & Wilcox Steam Boiler (FM-3029) with a Coen DAF low NO <sub>x</sub> Burner; Natural Gas-Fired with Fuel Oil for Curtailment Situations				I.						PCI, PC2
<ol> <li>31 MMBTU/Hr Babcock &amp; Wilcox Steam Boiler (FM-3030) with a Coen DAF low NO<sub>x</sub> Burner: Natural Gas-Fired with Fuel Oil for Curtailment Situations</li> </ol>				3					2	PC1, PC2
1 - 755 HP Detroit Diesel Emergency Standby Engine, (565 KW) Model 71637305, Serial No. 16VA19578, "Blackstart"			7					2	3	PCI

## PART 70 PERMIT NO. 01267 TITLE V EQUIPMENT LIST DESCRIPTION KEY

The Permitted Equipment and Applicable Requirements Table and this Title V permit contain a number of terms, abbreviations, and acronyms that have been standardized. The following list describes and defines many of the terms in this permit:

APCD	Air Pollution Control District
APCO	Air Pollution Control Officer of the Ventura County APCD
ARB	The California Air Resources Board
ASTM	American Standards for Testing Materials
BACT	Best Available Control Technology
BHP	The rating of an internal combustion engine as measured in brake horsepower
CARB	California Air Resources Board
CFH	Cubic feet per hour
CFM	Cubic feet per minute
CFR	Code of Federal Regulations
CO	Carbon Monoxide
EPA	Environmental Protection Agency
FGR	Flue Gas Recirculation - NOx control technology primarily used for boilers
FO	Fuel Oil
GE	General Electric
Gal	Gallon
нар	Hazardous Air Pollutant
Lb ROC/Gal	Pound(s) of ROC per gallon
MMBTU	The heat input of a combustion device as measured in millions British Thermal Units
MW	MegaWatt
NESHAPS	National Emission Standards for Hazardous Air Pollutants
NH3	Ammonia

NG	Natural Gas
NOx	Oxides of Nitrogen
NSPS	New Source Performance Standard
PM	Particulate Matter
ROC	Reactive Organic Compound
SCAQMD	South Coast Air Quality Management District
SCFM	Standard cubic feet per minute
SCR	Selective Catalytic Reduction for NOx control
SIP	State Implementation Plan
SOx	Sulfur Oxides
1,1,1-TCA	Trichloroethanc
TV AF	Title V application form
VOC	Volatile Organic Compound

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## PART 70 PERMIT NO. 01267 TITLE V APPLICABLE REQUIREMENT CODE KEY

Rule 74.9, "Stationary Internal Combustion Engines"

- 1. Pre-January 1, 2002 emissions limits for rich-burn engines (increments of progress have passed)
- 2. Pre-January 1, 2002 emissions limits for lean-burn engines (increments of progress have passed)
- 3. Natural gas-fired rich-burn engines (74.9.B.1 or 74.9.B.2)
- 4. Natural gas-fired lean-burn engines (74.9.B.1 or 74.9.B.2) with ammonia emission limit, if applicable. (74.9.B.5)
- 5. Diesel engines. (74.9.B.1 or 74.9.B.2) with ammonia emission limit, if applicable. (74.9.B.5)
- 6. Exemption from Rule 74.9 for engines operated less than 200 hours per calendar year (74.9.D.2)
- 7. Exemption from Rule 74.9 for emergency standby engines operated during either an emergency or maintenance operation. (74.9.D.3)
- 8. Exemption from Rule 74.9 for diesel engines with a permitted capacity factor of less than or equal to 15%. (74.9.D.8)
- 9. Exemption from Rule 74.9 for diesel engines used to power cranes and welding equipment. (74.9.D.9)
- 10. Exemption from Rule 74.9 for diesel engines operated on San Nicolas Island. (74.9.D.10)

Rule 74.15, "Boilers, Steam Generators and Process Heaters"

- 1. NOx and CO emission limits for units with an annual heat input rate greater than or equal to 9,000 MMBTU per calendar year (74.15.B.1)
- 2. Tuning and fuel metering requirements for units with an annual heat input rate of less than 9,000 MMBTU per calendar year. (74.15.B.2 and 74.15.D.1)

Rule 74.23, "Stationary Gas Turbines"

- NOx and NH3 emission limit for turbines rated at 0.3 MW to less than 2.9 MW (74.23.B.1 and 74.23.B.4) Requirement to monitor operating parameters. (74.23.B.2.a and b)
- 2. NOx and NH3 emission limit for turbines rated at 2.9 MW to less than 10.0 MW. (74.23.B.1 and 74.23.B.4) Requirement to monitor operating parameters. (74.23.B.2.a and b)
- 3. NOx and NH3 emission limit for turbines rated at 10.0 MW and higher, with SCR, and operated less than 4,000 hr/yr (74.23.B.1 and 74.23.B.4) Requirement to monitor operating parameters. (74.23.B.2.a and b)
- 4. NOx and NH3 emission limit and CEMS requirement for turbines rated at 10.0 MW and higher, with SCR, and operated more than 4,000 hr/yr (74.23.B.1, 74.23.B.2, and 74.23.B.4)

Section No. 2 Applicable Requirement Code Kcy

- 5. NOx emission limit for turbines rated at 10.0 MW and higher, without SCR, and operated less than 4,000 hr/yr (74.23.B.1) Requirement to monitor operating parameters. (74.23.B.2.a and b)
- 6. NOx emission limit and CEMS requirement for turbines rated at 10.0 MW and higher, without SCR, and operated more than 4,000 hr/yr (74.23.B.1 and 74.23.B.2)
- 7. NOx emission limit for turbines rated at 4.0 MW and higher, operated less than 877 hr/yr (74.23.B.1) Requirement to monitor operating parameters. (74.23.B.2.a and b)
- 8. Exemption from the requirements of 74.23.B, for turbines operated less than 200 hrs per calendar year (74.23.C.1.c)
- 9. Exemption from the requirements of 74.23.B, for emergency standby units operated during either an emergency or maintenance operation. (74.23.C.1.d)
- 10. Equipment is currently shut-down and not operating. Upon operation will install non-resettable totalizing hour meter (74.23.D.2). Exempt from the requirements of 74.23.B as long as turbine is operated less than 200 hrs per calendar year (74.23.C.1.c)

Rule 103, "Stack Monitoring"

- 1. CEM requirements for emission sources required by federal regulations to be equipped with a CEM system (103.A.1)
- 2. CEM requirements for boilers, steam generators, and process heaters with a heat input capacity of between 40 MMBTU/Hr and 250 MMBTU/Hr, and a capacity factor of at least 30% (103.A.2)
- 3. CEM requirements for boilcrs, steam generators, and process heaters with a heat input capacity of 250 MMBTU/IIr or more (103.A.3)
- 4. CEM requirements for any equipment which emits 2.3 kg/hr (5 lb/hr) or 22.7 kg/day (40 lb/day) or more of any single air contaminant (103.A.4)

Section 93115, Title 17, California Code of Regulations California Airborne Toxic Control Measure For Stationary Compression Ignition (CI) Engines

- 1. In-use emergency fire pump assembly engines
- 2. In-use emergency engines operated not more than 20 hours per year for maintenance and testing purposes.
- 3. Engines operated solely on OCS Platforms.
- 4. In-use emergency engines operated not more than 50 hours per year for maintenance and testing purposes.
- 5. Emergency engines installed after January 1, 2005

40 CFR Part 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engine (RICE MACT)

- 1. Existing compression ignition and spark ignition engine compliance dates
- 2. Existing landfill gas engines area source
- 3. Existing emergency diesel engines area source
- 4. Existing non-emergency diesel engines  $\leq 300$  HP area source
- 5. Existing non-emergency diesel engines  $300 \text{ HP} < X \le 500 \text{ HP}$  area source
- 6. Existing non-emergency dicsel engines < 500 HP -- area source

Section No. 2 Applicable Requirement Code Key

- 7.
- Existing non-emergency spark-ignited remote engine > 500 HP area source Existing non-emergency diesel engines greater than 300 HP at an area source of HAPs that qualify under the national security exemption Existing emergency spark ignited engines 8.
- 9.

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#### TABLE NO. 3

VENTURA COUN	TY AH	R POLLUTION CONTRO	DL DISTRIC	T	
1	Permit	to Operate No. 01267			
Permitte	ed Thro	oughput/Consumption Lin	nits		
MATTERVATV PermusiPO1267(PERMITTIV/TABLES1267-18)		Throughput/Emission	District (D)/		
		Permit	Federal(F)	Calculation	Calculation
Equipment		Limit	Enforceable	Throughput	Procedure
<ol> <li>255.7 MMBTU/Hr (HHV) General Electric LM 2500-33 21.5 MW Turbine with a fleat Recovery Boiler. Water Injection and SCR for NO. Control: Natural Gas-Fired</li> </ol>	3	Fuel Oil @ 1.080 hr/yr			
with Fuch Oil for Curtailment Situations					
	ROC	14.88 TPY	F	2,089.4 MMCF/Yr NG	
	NOx	33.38 TPY		Based on offsets provided	
	PM	8.73 111		& 2,004 Mgal/Yr FO	
	SOx	25.01 TPY	F	1,823.8 MMCF/Yr NG & 2,004 Mgal/Yr FO	
	CO	57.59 TPY	F	2,089,4 MMCF/Yr NG	
1 - 31 MMBTU/Ir Babcock & Wilcox Steam Boiler (FM-3029) with a Coen DAF low NO <sub>x</sub> Burner; Natural Gas-Fired with Epcl Oil for Curtailment Situations					
	ROC	*	F	15.5 MMCF/Yr NG	
	NOx	*	F	Included in offset provision stated above	
	PM	*	F	15.5 MMCF/Yr NG	
	CO	*	F	15.5 MMCF/Yr NG	
1 - 31 MMBTU/Hr Babcock & Wilcox Steam Boiler (FM-3030) with a Cocn DAF low NO <sub>x</sub> Burner; Natural Gas-Fired with Fuel Oil for Curtailment Situations	ROC NOx PM SOx	*	म् ग भ भ	*	
	CO		1	т	
<ol> <li>755 11P Detroit Dicsel Emergency Standby Engine, (565 Model 71637305, Serial No. 16VA19578, "Blackstart"</li> </ol>	5 KW)	20 Ilrs/Yr (for maintenance and testing)	D	20 Hrs/Yr	
<ul> <li>Instantal is Limit or Calculation Throughput Above</li> </ul>					
<ul> <li>Included in Limit or Calculation Throughput Above</li> </ul>					

3

VENTUR	A COUNTY	AIR PO	LLUTI	ON CON	TROL D	ISTRICT	ľ					
	Pe	rmit to O Permitte	perate N Id Emis	ia. 01267 siops								
MOUTED/VERVERVED.2639PERMIT.19917ABLES1267-181	1		I'ONS P	ER YEAI	ι			[]	OUNDS	FER HO	UR	_
Equipment	ROC	NOx	PM	50,	CO	NH <sub>1</sub>	ROC	NO,	PM	SO,	co	NH
		- 100										
1 - 255.7 MMBTU/Hr (111V) General Electric LM 2500-33 21.5 MW Turbine with a Heat Recovery Boiler. Water Injection and SCR for $NO_{\chi}$ Control: Natural Gas-Fired with Fuel Oil for Curtailment Situations	14,78	33.38	8.67	25.01	55,19	30 10	3.45	8,04	5.62	44,27	12.86	7 34
1 - 31 MMBTU/H: Babcock & Wilcox Steam Boiler (FM-3029) with a Coen DAF low NO <sub>x</sub> Burner; Natural Gas-Fired with Fuel Oil for Curtailment Situations	0,10	Η¢	0,06	+-0.01	2.40		0,79	9.12	0.88	10.73	19,31	
1 - 31 MMBTU/Ib Babcock & Wilcox Steam Boiler (FM-3030) with a Coen DAF low NO <sub>x</sub> Buraer, Natural Gas-Fired with Fuel Oil for Curtailment Situations		-	*	*	¥		•		*	*	*	
<ol> <li>755 HP Detroit Diesel Emergency Standby Engine, (565 KW) Model 71637305, Serial No. 16VA19578, "Blackstart"</li> </ol>	0,02	0 25	0.02	• 0.01	0.05		0,18	2,51	0.18	0,04	0.55	
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								I				
<ul> <li>Included in Emissions Above</li> </ul>												
												<u> </u>

#### TABLE NO. 4

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# Equipment and Emissions Summary Report Air Toxics 'Hot Spots' Report Greenhouse Gases Emissions Estimate

# Emission Summary

2012

Tuesday, June 19, 2018

	1 GAS 7	TURBINE	<b>Emission Factor</b>	Pounds per Year	Pounds per Hou
SCC	20100201	ELECTRIC GENERATN/NATURAL	GAS/TURBINE		
Annu	al Process R	ate: 1900 MILLION CUBI	C FEET		
	1150	PAHs, total, with individ. co	0.00115	2.185	0.0002875
	50000	Formaldehyde	0.173	328.7	0.04325
	71432	Benzene	0.01906	36.214	0.004765
	75070	Acetaldehyde	0.0173	32.87	0.004325
	91203	Naphthalene	0.00093	1.767	0.0002325
	107028	Acrolein	0.0017	3.23	0.000425
	108883	Toluene	0.1282	243.58	0.03205
	115071	Propylene	0.1824	346.56	0.0456
	1330207	Xylenes (mixed)	0.0298	56.62	0.00745
	<sup>2</sup> HRSG		<b>Emission Factor</b>	Pounds per Year	Pounds per Hou
SCC	20100201	ELECTRIC GENERATN/NATURAL	GAS/TURBINE		
Annu	al Process R	ate: 1900 MILLION CUBI	C FEET		
	7664417	Ammonia	7.1333	13553.27	1.783325
	<sup>3</sup> NH3 C	COMPRESSOR	Emission Factor	Pounds per Year	Pounds per Hou
SCC	20100201				
	20100201	ELECTRIC GENERATN/NATURAL	GAS/TURBINE		
Annu	al Process R	ELECTRIC GENERATN/NATURAL ate: 1900 MILLION CUBI	GAS/TURBINE C FEET		
Annu	20100201 1 <b>al Process R</b> 7664417	ELECTRIC GENERATN/NATURAL ate: 1900 MILLION CUBI Ammonia	GAS/TURBINE C FEET 3	6570	0.75
Annu	20100201 aal Process R 7664417 4 AUX 1	ELECTRIC GENERATN/NATURAL ate: 1900 MILLION CUBI Ammonia BOILER 1	GAS/TURBINE C FEET 3 Emission Factor	6570 Pounds per Year	0.75 Pounds per Hou
Annu	20100201 nal Process R 7664417 4 AUX 1 10100601	ELECTRIC GENERATN/NATURAL ate: 1900 MILLION CUBI Ammonia BOILER 1 ELECTRIC GENERATN/NATURAL	GAS/TURBINE C FEET 3 Emission Factor GAS/>100MMBTU/HR EX	6570 <b>Pounds per Year</b> TF	0.75 Pounds per Hou
Annu SCC Annu	20100201 nal Process R 7664417 4 AUX 1 10100601 nal Process R	ELECTRIC GENERATN/NATURAL ate: 1900 MILLION CUBI Ammonia BOILER 1 ELECTRIC GENERATN/NATURAL ate: 5.042 MILLION CUBI	GAS/TURBINE C FEET 3 Emission Factor GAS/>100MMBTU/HR EX C FEET BURNED	6570 <b>Pounds per Year</b> TF	0.75 Pounds per Hou
Annu SCC Annu	20100201 nal Process R 7664417 4 AUX 1 10100601 nal Process R 1150	ELECTRIC GENERATN/NATURAL ate: 1900 MILLION CUBI Ammonia BOILER 1 ELECTRIC GENERATN/NATURAL ate: 5.042 MILLION CUBI PAHs, total, with individ. co	GAS/TURBINE C FEET 3 Emission Factor GAS/>100MMBTU/HR EX C FEET BURNED 0.1964	6570 <b>Pounds per Year</b> TF 0.9902487	0.75 Pounds per Hou 0.00491
Annu SCC Annu	20100201 aal Process R 7664417 4 AUX 1 10100601 aal Process R 1150 50000	ELECTRIC GENERATN/NATURAL ate: 1900 MILLION CUBI Ammonia BOILER 1 ELECTRIC GENERATN/NATURAL ate: 5.042 MILLION CUBI PAHs, total, with individ. co Formaldehyde	GAS/TURBINE C FEET 3 Emission Factor GAS/>100MMBTU/HR EX C FEET BURNED 0.1964 0.0296	6570 <b>Pounds per Year</b> TTF 0.9902487 0.1492432	0.75 <b>Pounds per Hou</b> 0.00491 0.00074
Annu SCC Annu	20100201 nal Process R 7664417 4 AUX 1 10100601 nal Process R 1150 50000 71432	ELECTRIC GENERATN/NATURAL ate: 1900 MILLION CUBI Ammonia BOILER 1 ELECTRIC GENERATN/NATURAL ate: 5.042 MILLION CUBI PAHs, total, with individ. co Formaldehyde Benzene	GAS/TURBINE C FEET 3 Emission Factor GAS/>100MMBTU/HR EX C FEET BURNED 0.1964 0.0296 0.01333	6570 <b>Pounds per Year</b> TF 0.9902487 0.1492432 0.0672099	0.75 <b>Pounds per Hou</b> 0.00491 0.00074 0.0003325
Annu SCC Annu	20100201 nal Process R 7664417 4 AUX 1 10100601 nal Process R 1150 50000 71432 75070	ELECTRIC GENERATN/NATURAL ate: 1900 MILLION CUBI Ammonia BOILER 1 ELECTRIC GENERATN/NATURAL ate: 5.042 MILLION CUBI PAHs, total, with individ. co Formaldehyde Benzene Acetaldehyde	GAS/TURBINE C FEET 3 Emission Factor GAS/>100MMBTU/HR EX C FEET BURNED 0.1964 0.0296 0.01333 0.0258	6570 <b>Pounds per Year</b> TF 0.9902487 0.1492432 0.0672099 0.1300836	0.75 <b>Pounds per Hou</b> 0.00491 0.00074 0.00033325 0.000645
Annu SCC Annu	20100201 nal Process R 7664417 4 AUX 1 10100601 nal Process R 1150 50000 71432 75070 91203	ELECTRIC GENERATN/NATURAL ate: 1900 MILLION CUBI Ammonia BOILER 1 ELECTRIC GENERATN/NATURAL ate: 5.042 MILLION CUBI PAHs, total, with individ. co Formaldehyde Benzene Acetaldehyde Naphthalene	GAS/TURBINE C FEET 3 Emission Factor GAS/>100MMBTU/HR EX C FEET BURNED 0.1964 0.0296 0.01333 0.0258 0.1785	6570 Pounds per Year TTF 0.9902487 0.1492432 0.0672099 0.1300836 0.899997	0.75 <b>Pounds per Hou</b> 0.00491 0.00074 0.00033325 0.000645 0.0044625
Annu	20100201 nal Process R 7664417 4 AUX 1 10100601 nal Process R 1150 50000 71432 75070 91203 107028	ELECTRIC GENERATN/NATURAL ate: 1900 MILLION CUBI Ammonia BOILER 1 ELECTRIC GENERATN/NATURAL ate: 5.042 MILLION CUBI PAHs, total, with individ. co Formaldehyde Benzene Acetaldehyde Naphthalene Acrolein	GAS/TURBINE C FEET 3 Emission Factor GAS/>100MMBTU/HR EX C FEET BURNED 0.1964 0.0296 0.01333 0.0258 0.1785 0.011	6570 <b>Pounds per Year</b> TF 0.9902487 0.1492432 0.0672099 0.1300836 0.899997 0.055462	0.75 <b>Pounds per Hou</b> 0.00491 0.00074 0.00033325 0.000645 0.00044625 0.000275
Annu	20100201 nal Process R 7664417 4 AUX 1 10100601 nal Process R 1150 50000 71432 75070 91203 107028 108883	ELECTRIC GENERATN/NATURAL ate: 1900 MILLION CUBH Ammonia BOILER 1 ELECTRIC GENERATN/NATURAL ate: 5.042 MILLION CUBH PAHs, total, with individ. co Formaldehyde Benzene Acetaldehyde Naphthalene Acrolein Toluene	GAS/TURBINE C FEET 3 Emission Factor GAS/>100MMBTU/HR EX C FEET BURNED 0.1964 0.0296 0.01333 0.0258 0.1785 0.011 0.0043	6570 <b>Pounds per Year</b> TTF 0.9902487 0.1492432 0.0672099 0.1300836 0.899997 0.055462 0.0216806	0.75 <b>Pounds per Hou</b> 0.00491 0.00074 0.00033325 0.000645 0.00044625 0.000275 0.0001075
Annu	20100201 nal Process R 7664417 4 AUX 1 10100601 nal Process R 1150 50000 71432 75070 91203 107028 108883 115071	ELECTRIC GENERATN/NATURAL ate: 1900 MILLION CUBI Ammonia BOILER 1 ELECTRIC GENERATN/NATURAL ate: 5.042 MILLION CUBI PAHs, total, with individ. co Formaldehyde Benzene Accetaldehyde Naphthalene Acrolein Toluene Propylene	GAS/TURBINE C FEET 3 Emission Factor GAS/>100MMBTU/HR EX C FEET BURNED 0.1964 0.0296 0.01333 0.0258 0.1785 0.011 0.0043 0.1984	6570 Pounds per Year TF 0.9902487 0.1492432 0.0672099 0.1300836 0.899997 0.055462 0.0216806 1.000333	0.75 Pounds per Hou 0.00491 0.00074 0.0003325 0.000645 0.00044625 0.000275 0.0001075 0.00496

1267

### TRUSTEES OF CSU-CSUCI SITE AUTH.

	5 AUX	BOILER 2	<b>Emission Factor</b>	Pounds per Year	Pounds per Hou
SCC	10100601	ELECTRIC GENERATN/NATU	RAL GAS/>100MMBTU/HR EX	TF	
Annu	al Process R	ate: 5.042 MILLION C	UBIC FEET BURNED		
	1151	PAHs, total, w/o individ. co	0.1964	0.9902487	0.00491
	50000	Formaldehyde	0.0296	0.1492432	0.00074
	71432	Benzene	0.0133	0.0670586	0.0003325
	75070	Acetaldehyde	0.0258	0.1300836	0.000645
	91203	Naphthalene	0.1785	0.899997	0.0044625
	107028	Acrolein	0.011	0.055462	0.000275
	108883	Toluene	0.0043	0.0216806	0.0001075
	115071	Propylene	0.1984	1.000333	0.00496
	1330207	Xylenes (mixed)	0.0016	0.0080672	0.00004
	6 ACID	TANK HCL	Emission Factor	Pounds per Year	Pounds per Hou
SCC	30187002	FIXED ROOF TANKS/HYDROG	CHLORIC ACID/WORKING LOS	SS	
Annu	al Process R	ate: 294340 1000 GALL	ONS THROUGHPUT		
	7647010	Hydrochloric acid	0.000079	46.2445	0.1185
	7 CAUS	TIC TANK	Emission Factor	Pounds per Year	Pounds per Hou
SCC	30187098	FIXED ROOF TANKS/SPECIFY	LIQUID/WORKING LOSS		
Аппи	al Process R	ate: 262620 1000 GALL	ONS THROUGHPUT		
	1310732	Sodium hydroxide	0.00009	23.6358	0.0234
	<sup>8</sup> GAS G	COMPRESSOR	Emission Factor	Pounds per Year	Pounds per Hou
SCC	20100201	ELECTRIC GENERATN/NATU	RAL GAS/TURBINE		
Annu	al Process R	ate: 1900 MILLION C	UBIC FEET		

	<sup>9</sup> DIESE	EL GENERATOR	<b>Emission Factor</b>	Pounds per Year	Pounds per Hou
SCC	20100102	ELECTRIC GENERATN/DIST.OIL	DIESEL/RECIPROCATING		
Annua	Process R	ate: 0.78 1000 GALLON	S BURNED		
	1151	PAHs, total, w/o individ. co	0.0559	0.0436	0.0017
	50000	Formaldehyde	1.7261	1.346	0.0518
	71432	Benzene	0.1863	0.145	0.0056
	75070	Acetaldehyde	0.7833	0.611	0.0235
	91203	Naphthalene	0.019	0.0154	0.0006
	106990	1,3-Butadiene	0.2174	0.1696	0.0065
	107028	Acrolein	0.0339	0.0264	0.001
	108883	Toluene	0.1054	0.0822	0.0032
	108907	Chlorobenzene	0.0002	0.000156	0.000006
	115071	Propylene	0.467	0.3643	0.014
	1330207	Xylenes (mixed)	0.0424	0.0331	0.0013
	7439921	Lead	0.0083	0.0065	0.000249
	7439965	Manganese	0.0031	0.00242	0.00009
	7439976	Mercury	0.002	0.0016	0.00006
	7440020	Nickel	0.0039	0.00304	0.000117
	7440382	Arsenic	0.0016	0.0012	0.000048
	7440417	Beryllium	0.0016	0.0012	0.000048
	7440439	Cadmium	0.0015	0.0012	0.000045
	7440508	Copper	0.0041	0.0032	0.000123
	7440666	Zinc	0.0224	0.0175	0.000672
	7647010	Hydrochloric acid	0.1863	0.145	0.0056
	7782492	Selenium	0.0022	0.00172	0.000066
1	8540299	Chromium, hexavalent (& c	0.0002	0.000156	0.000006
	11 AMM	ONIA TANK	Emission Factor	Pounds per Year	Pounds per Hor
CC	30187098	FIXED ROOF TANKS/SPECIFY LI	QUID/WORKING LOSS		-
Annua	l Process R	ate: 164250 1000 GALLON	S THROUGHPUT		
	7664417	Ammonia	0.0001	16.425	0.002

# emission totals

1267	2012 TRUSTEES OF	CSU-CSUCI SITE AUTH	
CAS Number	Pollutant Name	lbs/yr	lbs/hr
1150	PAHs, total, with individ.	3.1752487	0.0051975
1151	PAHs, total, w/o individ.	1.0338487	0.00661
50000	Formaldehyde	330.3444864	0.09653
71432	Benzene	37.63326845	0.01118075
75070	Acetaldehyde	33.7411672	0.029115
91203	Naphthalene	3.582394	0.0097575
106990	1,3-Butadiene	0.1696	0.0065
107028	Acrolein	3.367324	0.001975
108883	Toluene	243.7055612	0.035465
108907	Chlorobenzene	0.000156	0.000006
115071	Propylene	348.924966	0.06952
1310732	Sodium hydroxide	23.6358	0.0234
1330207	Xylenes (mixed)	56.6692344	0.00883
7439921	Lead	0.0065	0.000249
7439965	Manganese	0.00242	0.00009
7439976	Мегсигу	0.0016	0.00006
7440020	Nickel	0.00304	0.000117
7440382	Arsenic	0.0012	0.000048
7440417	Beryllium	0.0012	0.000048
7440439	Cadmium	0.0012	0.000045
7440508	Copper	0.0032	0.000123
7440666	Zinc	0.0175	0.000672
7647010	Hydrochloric acid	46.3895	0.1241
7664417	Ammonia	20139.695	2.535325
7782492	Selenium	0.00172	0.000066
18540299	Chromium, hexavalent (&	0.000156	0.000006

From:	Russell Kingsley (RKingsley@YorkeEngr.com)
To:	Smith, Jeff
Cc:	Bradford Boyes (BBoyes@YorkeEngr.com)
Subject:	Title V Permit Renewal Assistance
Date:	Tuesday, September 4, 2018 1:57:51 PM
Attachments:	GHG Combustion Emissions Calculator(Channel Islands Power 8-29-18).xlsx

Jeff -

We have gone through the numbers provided, PTO 01267 Table 3 throughput limits, and the District's narrative that estimated the CO<sub>2</sub>-only PTE at 151,440 short tons/yr (ignores CH<sub>4</sub> and N<sub>2</sub>O) and we were able to confirm that number to within 0.2% which represents rounding errors. This result is supported by the GHG Combustion Emissions Calculator tool (attached), which includes CH<sub>4</sub> and N<sub>2</sub>O, a marginal 0.13% higher value (which is why the District ignores CH<sub>4</sub> and N<sub>2</sub>O).

To summarize:

PTO 01267 GH	PTO 01267 GHG (as CO <sub>2</sub> ) Potential to Emit Summary				
Source	Fuel	MT/yr	Short tons/yr		
Turbing 255.7 mmBTU/br	Natural Gas	116,319	128,218		
	Fuel Oil (Diesel)	20,454	22,546		
Boilers, 2 x 31 mmBTU/hr	Natural Gas	863	951		
Emergency Generator, 755 BHP	Fuel Oil (Diesel)	11	12		
Facility Total	All	137,647	151,728		
VCAPCD Ca	VCAPCD Calculated Total				
Diff	Difference				

In conclusion, the GHG PTE of 151,440 short tons/yr  $CO_2$  contained in the District evaluation is consistent with the throughput limits contained in Table 3 of PTO 01267.

# **Compliance** Plan

### Ventura County Air Pollution Control District PART 70 PERMIT APPLICATION FORM Compliance Plan - Reissuance Form TVAF35

A Compliance Plan is a description of the compliance status of the source with respect to all applicable requirements. See Rule 33.2.A.7 for further information. Review the current Part 70 Permit Table 1, "Periodic Monitoring Summary" and Table 2, "Permitted Equipment and Applicable Requirements." These requirements include all applicable VCAPCD Rules (specific and general), California ARB ATCMs, and/or federal NSPS or NESHAP regulations. As directed in the Reissuance Instructions, provide changes to these tables as necessary.

1. <u>Current Requirements</u>: Is the source operating in compliance with all applicable requirements as listed and/or referenced in the current Part 70 Permit Table 1 and Table 2?

🛛 Yes 🗆 No

Will the stationary source continue to comply with all applicable requirements as listed and/or referenced in the current Part 70 Permit Table 1 and Table 2?

⊠ Yes □ No

2. <u>Requirements with a future effective date :</u> Are there any applicable requirements that will become effective during the Part 70 Permit five year term?

🗆 Yes 🖾 No

If yes, provide a narrative of such requirement(s) and a statement that the source will meet such requirements on a timely basis.

3. <u>Current Requirements - not in compliance:</u> Are there any applicable requirements for which the stationary source is not operating in compliance?

🗆 Yes 🕱 No

If yes, provide a narrative description of the compliance status and how compliance will be achieved.

#### Certification by Responsible Official

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in this Compliance Plan (with references to the current Part 70 Permit Tables 1 and 2) are true, accurate, and complete.

Signature and Title of Responsible Official:	VP BUSINESS &	Date:
Signature:	Title: FINANCIAL AFFAIRS	9/14/R

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# **Compliance** Certification

### Ventura County Air Pollution Control District PART 70 PERMIT APPLICATION FORM Compliance Certification - Reissuance Form TVAF45

A Compliance Certification shall identify each applicable requirement or condition of the Part 70 Permit, the compliance status of the stationary source, whether the compliance was continuous or intermittent since the last certification, and the method(s) used to determine compliance. In addition, the certification shall indicate the stationary source's compliance status with any applicable enhanced monitoring and compliance certification requirement of the federal Clean Air Act. (Rule 33.9.B)

A reference to a Compliance Certification that has been submitted to the District Compliance Division no more than 18 months prior and no less than 6 months prior to the expiration date of the current permit may be submitted to fulfill this requirement.

This application references the most recent Compliance Certification for the stationary source that was submitted to the VCAPCD Compliance Division. The most recent Compliance Certification was submitted on:

04 / 27 / 2018 (Most recent Compliance Certification submittal date)

#### Certification by Responsible Official

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in this Compliance Certification Cover Sheet are true, accurate, and complete.

Signature and Title of Responsible Official:	VP BUSINESS &	Date:
Signature: Title:	FINANCIAL AFFAIRS	9/14/R

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# **Insignificant** Activities

### Ventura County Air Pollution Control District INSIGNIFICANT ACTIVITIES (EXEMPT EQUIPMENT)

Part 70 Permit No. 01267

INSIGNIFICANT ACTIVITIES (EXEMPT EMISSION UNITS)	BASIS FOR EXEMPTION (Size/Production Rate)	RULE 23 CITATION
1 – Waste Oil Aboveground Storage Tank (300 Gallons)	Reactive organic compound liquid with a modified Reid vapor pressure of 0.5 psia or less	23.F.21 (71.2.G.1.a and 71.2.G.1.b)
3 – Lube Oil Systems (1 – 150 gal, 1 – 160 gal, 1 – 900 gal)	Reactive organic compound liquid with a modified Reid vapor pressure of 0.5 psia or less	23.F.21 (71.2.G.1.a and 71.2.G.1.b)
1 – Cleaner	Cleaning agents certified by the SCAQMD as Clean Air Solvents	23.F.10.a

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#### Insignificant Activities Part 70 Permit Reissuance Application Form Written Statement

The list of insignificant activities from the current Part 70 Permit has been reviewed and the following changes are required:

The following equipment should be added to the Exempt Equipment List.

INSIGNIFICANT	BASIS FOR EXEMPTION	<b>RULE 23 CITATION</b>
ACTIVITIES (EXEMPT		
EMISSIONS UNITS)		
Pressure Washer with 11	<50 HP	23.D.6
HP Gasoline Engine		
Portable Welder with 9 HP	<50 HP	23.D.6
Gasoline Engine		
Leaf Blower with .25 HP	<50 HP	23.D.6
Gasoline Engine		
Weedeater with CARB	<50 HP	23.D.6
Compliant Gasoline Engine		
Tractor with 22 HP	<50 HP	23.D.6
Gasoline Engine		

### **Compliance Assurance Monitoring Applicability**

#### Compliance Assurance Monitoring Part 70 Permit Reissuance Application Form

40 CFR Part 64 Compliance Assurance Monitoring (CAM) requirements were reviewed. CAM Requirements apply to any pollutant specific emission unit (PSUE) at a major source that is required to obtain a Part 70 Permit if the unit satisfies all of the following criteria:

- The unit is subject to an emission limitation or standard for an applicable regulated air pollutant;
- The unit uses a control device to achieve compliance with any such emission limitation or standard; and
- The unit has a pre-control device potential to emit (uncontrolled emissions) of the applicable regulated air pollutant equal to or greater than:
  - 25 tons per year ROC, or
  - 25 tons per year of NOx, or
  - 100 tons per year of PM<sub>10</sub>, or
  - 100 tons per year of SOx, or
  - 100 tons per year of CO.

A PSEU refers to an emission unit treated separately for each regulated air pollutant. In determining the pre-control device potential to emit from a PSEU, limits on hours of operation, throughput, or fuel consumption may be used provided that the limit is contained in a Part 70 Permit Condition.

Part 64 also contains a number of exemptions. The following are some examples of emission limitations or standards explicitly exempt from CAM requirements:

- Ones proposed by EPA after November 15, 1990, including NSPS and MACT standards;
- Ones for which a Part 70 Permit already specifies a continuous compliance determination method, as defined in 40 CFR Part 64.1;
- An emission cap that meets the requirements specified in 40 CFR Part 70.4(b)(12); and
- Acid Rain Program requirements of Title IV.

In addition, control devices equipped with continuous emissions monitors required by Ventura County APCD Rule 59, Rule 74.23, or Rule 103 are exempt from CAM under the continuous compliance determination method exemption.

Based on the definition of control device as defined in 40 CFR Part 64.1, the CAM Plan Instructions provided by the VCAAPCD indicate that the following control devices currently operating in Ventura County are Potentially subject to CAM requirements:

- Catalytic converters on rich burn natural gas fired engines for the control of NOx;
- Water injection systems and selective catalytic reduction (SCR) systems on gas turbines;

- Flue Gas Recirculation (FGR) systems on boilers, steam generators and process heaters;
- Carbon adsorption systems;
- Baghouses.

The CAM Plan Instructions also indicate that the following air pollution control strategies in operation at facilities in Ventura County do not fit the 40 CFR Part 64.1 definition of control device:

- Low NOx burners (without FGR) on boilers, steam generators, and process heaters;
- Lean burn technology on natural gas fired engines;
- Floating roof tanks;
- Low sulfur fuels;
- Low vapor pressure and low ROC content requirements;
- Vapor recovery system on storage tanks that comply with Rule 71.1.B.1.a by directing all vapors to a fuel gas system, a sales gas system, or to a flare; as there is not an associated emissions limitation; and
- Vapor recovery and disposal systems on glycol dehydrators that comply with Rule 71.5.B.1 by directing all vapors to a fuel gas system or a sales gas system, or to a flare, incinerator, thermal oxidizer, or reboiler; as there is not an associated emission limitation.

The table below lists the PSEU's at the facility and summarized CAM applicability.

PSEU	Emission Limitation or Standard	Control Device	Pre- Control Emissions	Subject to CAM Requirements			
21.5 MW turbine with Heat Recovery Boiler, Water Injection, & SCR for NOx control. Natural gas fired with fuel oil for curtailment situations.	Yes	Yes	N/A	NO (pursuant to Part 64.2(b)(vi))			
31.0 MMBTU/Hr Babcock & Wilcox Boiler (FM-3029) with a Coen DAF low NOx burner. Natural gas fired with fuel oil for curtailment situations.	Yes	Yes	NOX < 25 tpy	NO			
31.0 MMBTU/Hr Babcock & Wilcox Boiler (FM-3030) with a Coen DAF low NOx burner. Natural gas fired with fuel oil for curtailment situations.	Yes	Yes	NOX < 25 tpy	NO			
800 HP Diesel Engine for Emergency Generator (permit exempt)	NO	NO	N/A	NO			
Parts Cleaner (permit exempt)	NO	NO	N/A	NO			

#### CAM Applicability Review for Trustees of CSU and CSUCI Site Authority Facility

N/A = Not Applicable

Based on the analysis presented in the table, none of the PSEU's located at the facility trigger CAM requirements.

#### Trustees of CSU and CSUCI Site Authority Title V Permit Reissuance Application Compliance Assurance Monitoring applicability Analysis

Equipment	Control Device	Uncontrolled Emission factor NOx (lb/MMSCF) <sup>(1)</sup>	Uncontrolled PTE NOx (tpy) <sup>(1)</sup>	Controlled PTE NOx (tpy) <sup>(2)</sup>	CAM Threshold (typ) <sup>(3)</sup>	Trigger CAM?
31 MMBTU / Hr Boiler (FM-3029)	Low NOx Burner	100	13.31	6.78	25	NO
31 MMBTU / Hr Boiler (FM-3030)	Low NOx Burner	100	13.31	6.78	25	NO

Notes:

- 1) Uncontrolled emission factor and PTE based on AP-42 Table 1-4.1.
- 2) Controlled PTE based on NOx permitted emission limit of 40 ppm.
- 3) Major source threshold for NOx in VCAPCD.

#### **Emission Factor Calculation**

Pollutant	Molecular Weight (lb/lb-mole)	PPM at 3% O2	F factor – Natural Gas	Emission Factor (LB/MMBTU)	Emission Factor (LB/MMSCF)
NOx	46	40	8710	0.05	50.9

Source: 40 CFR Part 60 Method 19