



July 25, 2023

Mr. John Stuntebeck West Kern Water District P O Box 1105 Taft, CA 93268

Re: Notice of Preliminary Decision – Title V Permit Renewal Facility Number: S-348 Project Number: S-1221507

Dear Mr. Stuntebeck:

Enclosed for your review and comment is the District's analysis of the application to renew the Federally Mandated Operating Permit for West Kern Water District at the California Aqueduct near Highway 119 in Taft, California.

The notice of preliminary decision for this project has been posted on the District's website (<u>www.valleyair.org</u>). After addressing all comments made during the 30-day public notice and the 45-day EPA comment periods, the District intends to issue the renewed Federally Mandated Operating Permit. Please submit your written comments on this project within the 30-day public comment period, as specified in the enclosed public notice.

Thank you for your cooperation in this matter. If you have any questions, please contact Ms. Erin Scott, Permit Services Manager, at (661) 392-5500.

Sincerely,

Cin Set

Brian Clements Director of Permit Services

Enclosures

- cc: Courtney Graham, CARB (w/enclosure) via email
- cc: Laura Yannayon, EPA (w/enclosure) via EPS

Samir Sheikh Executive Director/Air Pollution Control Officer

Northern Region 4800 Enterprise Way Modesto, CA 95356-8718 Tel: (209) 557-6400 FAX: (209) 557-6475 Central Region (Main Office) 1990 E. Gettysburg Avenue Fresno, CA 93726-0244 Tel: (559) 230-6000 FAX: (559) 230-6061 Southern Region 34946 Flyover Court Bakersfield, CA 93308-9725 Tel: (661) 392-5500 FAX: (661) 392-5585

www.valleyair.org www.healthyairliving.com

SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT

Proposed Title V Permit Renewal Evaluation West Kern Water District S-348

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TITLE V PERMIT RENEWAL EVALUATION Water Storage District

Engineer: Homero Ramirez **Date:** July 11, 2023

Facility Number: Facility Name: Mailing Address:	S-348 West Kern Water District P O Box 1105 Taft, CA 93268
	John Stuntebeck (661) 763-3151
Responsible Official:	John Stuntebeck
Title:	Production Administrator
Project # :	S-1221507
Deemed Complete:	July 8, 2022

I. PROPOSAL

West Kern Water District (facility S-348) was first issued a Title V permit on May 1, 1998, which was last renewed on February 20, 2018. As required by District Rule 2520, the applicant is requesting a permit renewal. The existing Title V permit shall be reviewed and modified to reflect all applicable District and federal rules updated, removed, or added since the issuance of the last renewal of the Title V permit on February 20, 2018 to present.

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

II. FACILITY LOCATION

West Kern Water District (facility S-348), Station A, is located at the California Aqueduct near Highway 119 in Taft, CA.

III. EQUIPMENT LISTING

A detailed facility printout listing all permitted equipment at the facility is included as Attachment C.

IV. GENERAL PERMIT TEMPLATE USAGE

The applicant does not propose to use any model general permit templates.

V. SCOPE OF EPA AND PUBLIC REVIEW

The applicant is not requesting any model general permit templates. Therefore, all federally enforceable conditions in this current Title V permit will be subject to EPA and public review.

VI. FEDERALLY ENFORCEABLE REQUIREMENTS

A. Rules Updated Since February 20, 2018

- District Rule 2201, <u>New and Modified Stationary Source Review Rule</u> (amended August 15, 2019)
- District Rule 2520, <u>Federally Mandated Operating Permits</u> (amended August 15, 2019)
- District Rule 4601, <u>Architectural Coatings</u> (amended April 16, 2020)
- District Rule 4702, Internal Combustion Engines (amended August 19, 2021)
- 40 CFR 60 Subpart IIII, <u>Standards of Performance for Stationary</u> <u>Compression Ignition Internal Combustion Engines</u> (amended June 29, 2021; August 10, 2022; and January 24, 2023)
- 40 CFR 60 Subpart JJJJ, <u>Standards of Performance for Stationary Spark</u> <u>Ignition Internal Combustion Engines</u> (amended June 29, 2021; August 10, 2022; and January 24, 2023)
- 40 CFR 63 Subpart ZZZZ, <u>National Emission Standards for Hazardous Air</u> <u>Pollutants for Stationary Reciprocating Internal Combustion Engines</u> (amended November 19, 2020; December 4, 2020; August 10, 2022; and March 29, 2023)

- 40 CFR Part 82 Subpart B, <u>Servicing of Motor Vehicle Air Conditioners</u> (amended July 17, 2019; August 23, 2019; and March 24, 2021]
- 40 CFR Part 82 Subpart F, <u>Recycling and Emissions Reductions</u> (amended December 27, 2017 and April 10, 2020)

B. Rules Removed

There are no applicable rules that were removed since the last Title V renewal.

C. Rules Added Since February 20, 2018

There are no applicable rules that were added since the last Title V renewal.

D. Rules Not Updated Since February 20, 2018

- District Rule 1070, <u>Inspections</u> (amended December 17, 1992)
- District Rule 1080, <u>Stack Monitoring</u> (amended December 17, 1992)
- District Rule 1081, <u>Source Sampling</u> (amended December 16, 1993)
- District Rule 1100, Equipment Breakdown (amended December 17, 1992)¹
- District Rule 1160, Emission Statements (amended November 18, 1992)
- District Rule 2010, <u>Permits Required</u> (amended December 17, 1992)
- District Rule 2020, <u>Exemptions</u> (amended December 18, 2014)
- District Rule 2031, <u>Transfer of Permits (amended December 17, 1992)</u>
- District Rule 2040, <u>Applications</u> (amended December 17, 1992)
- District Rule 2070, <u>Standards for Granting Applications</u> (amended December 17, 1992)

¹ Although Rule 1100 was not amended, in accordance with EPA's SIP call and January 12, 2022 action, on February 17, 2022, the District rescinded from the San Joaquin Valley SIP the following county breakdown rules: Fresno County Rule 110, Kern County Rule 111, Kings County Rule 111, Madera County Rule 113, Stanislaus County Rule 110, and Tulare County Rule 111. Therefore, references to the abovementioned county breakdown rules are being removed from permits. For facility S-348 the listed county breakdown conditions being removed are found in facility-wide permit (S-348-0) in portions of conditions #1, 2, and 39.

- District Rule 2080, <u>Conditional Approval</u> (amended December 17, 1992)
- District Rule 4001, <u>New Source Performance Standards</u> (amended April 14, 1999)
- District Rule 4002, <u>National Emissions Standards for Hazardous Air</u> <u>Pollutants</u> (amended May 20, 2004)
- District Rule 4101, <u>Visible Emissions</u> (amended February 17, 2005)
- District Rule 4201, <u>Particulate Matter Concentration</u> (amended December 17, 1992)
- District Rule 4301, <u>Fuel Burning Equipment</u> (amended December 17, 1992)
- District Rule 4801, <u>Sulfur Compounds</u> (amended December 17, 1992)
- District Rule 8011, <u>Fugitive Dust General Requirements</u> (amended August 19, 2004)
- District Rule 8021, <u>Fugitive Dust Requirements for Control of Fine Particulate</u> <u>Matter (PM10) from Construction, Demolition, Excavation, and Extraction</u> <u>Activities</u> (amended August 19, 2004)
- District Rule 8031, <u>Fugitive Dust Requirements for Control of Fine Particulate</u> <u>Matter (PM10) from Handling and Storage of Bulk Materials</u> (amended August 19, 2004)
- District Rule 8041, <u>Fugitive Dust Requirements for Control of Fine Particulate</u> <u>Matter (PM10) from Carryout and Trackout</u> (amended August 19, 2004)
- District Rule 8051, <u>Fugitive Dust Requirements for Control of Fine Particulate</u> <u>Matter (PM10) from Open Area</u> (amended August 19, 2004)
- District Rule 8061, <u>Fugitive Dust Requirements for Control of Fine Particulate</u> <u>Matter (PM10) from Paved and Unpaved Roads</u> (amended August 19, 2004)
- District Rule 8071, <u>Fugitive Dust Requirements for Control of Fine Particulate</u> <u>Matter (PM10) from Unpaved Vehicle/Equipment Areas</u> (amended September 16, 2004)

- 40 CFR Part 61 Subpart M, <u>National Emission Standard for Asbestos</u> (amended July 20, 2004)
- 40 CFR Part 64, <u>Compliance Assurance Monitoring</u> (amended October 22, 1997)

VII. REQUIREMENTS NOT FEDERALLY ENFORCEABLE

For each Title V source, the District issues a single permit that contains the Federally Enforceable requirements, as well as the District-only requirements. The District-only requirements are not a part of the Title V Operating Permits. The terms and conditions that are part of the facility's Title V permit are designated as "Federally Enforceable Through Title V Permit".

For this facility, the following are not federally enforceable and will not be discussed in further detail:

A. Rules Added/Updated

There are no new rules that are not federally enforceable being added at this time.

B. Rules Not Updated

• District Rule 4102, Nuisance

The following conditions are based on District Rule 4102. No changes have been made to the rule, so they will not be discussed any further.

Permit Unit	Condition(s)
-0	42

VIII. PERMIT REQUIREMENTS

The purpose of this evaluation is to review changes to federally enforceable requirements; therefore, this compliance section will only address rules that have been amended or added since the issuance of the most recent renewal of this facility's Title V permit, which occurred on February 20, 2018.

A. District Rule 2201 - New and Modified Stationary Source Review Rule

District Rule 2201 has been amended since this facility's last Title V permit was issued. However, the requirements of this rule are only triggered at the time the source undergoes a modification. All applicable requirements from any NSR permit actions have already been incorporated into the current Title V permit. The updated requirements of this rule are therefore not applicable at this time.

However, administrative changes were made to the conditions listed below. The conditions reference "NSR Rule", but that reference has been replaced with "District Rule 2201" for the following conditions:

Permit Unit	Condition(s)
-6	3, 4, 5, 6

B. District Rule 2520 - Federally Mandated Operating Permits

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

C. District Rule 4601 – Architectural Coatings

This rule limits the emissions of VOCs from architectural coatings, and it specifies architectural coatings storage, cleanup, and labeling requirements.

This rule was amended on April 16, 2020. The amendments to the rule include the following:

- Numerous definitions were added, deleted or modified in order to make the amended rule harmonize with definitions and rule requirements presented in the California Air Resources Board (ARB) Suggested Control Measures (SCM).
- The amended rule implements the recommended VOC limits per the ARB SCM. The following changes were as follows: 15 coating categories were eliminated, 10 were added, 19 coatings categories remained unchanged, and the VOC content limits for 19 categories were lowered.
- The phrase "blends or repackages" was added to rule language to extend the applicability of rule language to facilities involved in those activities.
- A reporting requirement was added for any architectural coating that is sold in a container with a volume of one liter or less. The exemption for architectural coatings was further defined by adding "coatings that are supplied and offered

for sale" to current language, in order to make the rule consistent with the ARB SCM.

- Labeling requirements were updated to add new labeling standards consistent with new coatings categories per the SCM.
- A new section was added to include reporting requirements per the SCM. The SCM contains a new requirement to submit sales data. Collection of this data is authorized in the California Health and Safety Code which requires submission of data to estimate emissions.
- New sections were added to coincide with new coating categories pursuant to the ARB SCM.
- The compliance schedule was updated to account for the new amendments to rule language by adding the phrase "the dates specified within the text of the rule."

The only reference to this rule is in the facility-wide permit (S-1327-0), specifically by conditions #23 through #25 and #40. The following existing conditions have been revised as shown in strikethrough/underline to reflect the changes to rule 4601 as follows:

- 23. No person shall manufacture, blend, repackage, supply, sell, solicit or apply any architectural coating with a VOC content in excess of the corresponding limit specified in Table of Standards 1 effective until 12/30/10 or Table of Standards 2 effective on and after 1/1/11 Table 1 or Table 2 of District Rule 4601 (12/17/09 4/16/20) for use or sale within the District. [District Rule 4601]
- 24. All VOC-containing materials subject to Rule 4601 (12/17/09 <u>4</u>/16/20) shall be stored in closed containers when not in use. [District Rule 4601]
- 25. The permittee shall comply with all the Labeling and Test Methods requirements outlined in Rule 4601 sections 6.1 and 6.3 (12/17/09 4/16/20). [District Rule 4601]
- Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rules 1100, sections 6.1 and 7.0 (12/17/92); 2010, sections 3.0 and 4.0 (12/17/92); 2031 (12/17/92); 2040 (12/17/92); 2070, section 7.0 (12/17/92); 2080 (12/17/92); 4101 (2/17/05); 4601 (12/17/09 4/16/20); 8021 (8/19/2004); 8031 (8/19/2004); 8041 (8/19/2004); 8051 (8/19/2004); 8061 (8/19/2004); and 8071 (9/16/2004). A permit shield is granted from these requirements. [District Rule 2520]

Therefore, continued compliance with this rule is expected.

D. District Rule 4702 – Internal Combustion Engines

The purpose of this rule is to limit NOx, CO, VOC, PM, and SOx emissions from internal combustion (IC) engines. This rule applies to any IC engine rated at 25 brake horsepower or greater. This facility has engines under permits S-348-1 through S-348-6 that are subject to this rule.

District Rule 4702 was amended on August 19, 2021. The amended rule lowered NOx and VOC emissions from several categories of engines, established PM requirements for all categories of IC engines affected by the Rule, and it established SOx control requirements for agricultural engines.

S-348-6 is an emergency standby IC engine. Pursuant to Section 4.2, the only requirements that apply to emergency standby engines are the requirements of Section 5.10 (monitoring requirements) and 6.2.3 (annual operating records requirements), which were the same requirements of the previous version of the rule. There are no additional requirements that have been imposed on emergency standby engines. Therefore, continued compliance with the rule is expected for S-348-6.

The remaining five engines at this facility (S-348-1 through S-348-5) are rich-burn, natural gas-fired IC engines that are non-emergency and are part of a non-agricultural operations (Non-AO). These engines are currently subject to and in compliance with the emission limits in Table 2 (specifically Category 1.d.) as indicted in the table below that lists the current permit limits.

Table 2: Emission Limits for a Spark-Ignited Internal Combustion Engine				
Rated at >50 bhp Used Exclusively in Non-AO (All ppmv limits are corrected				
to 15% oxygen on a dry basis). Emission Limits are effective according to				
the compliance schedule specified in Section 7.5, Table 7.				
Engine Type NOx Limit CO Limit VOC Limit				
1. Rich-burn	(ppmv)	(ppmv)	(ppmv)	

1. Rich-burn	(ppmv)	(ppmv)	(ppmv)
d. Rich-Burn Engine, not listed above	11	2000	250

Current Permit Limits			
Demarit Numerice a	NOx Limit	CO Limit	VOC Limit
Permit Number	(ppmv)	(ppmv)	(ppmv)
S-348-1-15	11	2000	125
S-348-2-15	11	2000	125
S-348-3-15	11	2000	125
S-348-4-12	11	2000	125
S-348-5-9	10.4	68.4	30

The amended rule has new emission requirements that are specified in Table 3 below that will apply pursuant to the compliance schedule specified in Section 7.5, Table 8.

Table 8: Compliance Schedule for Non-AO Spark-Ignited Engines Subject to Table 3 Emission Limits, and SOx Control and Monitoring Requirements			
Engines to be in Compliance at a Stationary Source	Emission Control Plan	ATC and Inspection and Monitoring Plan	Full Compliance
Engines subject to Table 3 emission limits	8/1/22	8/1/22	12/31/23

Table 3: Emission Limits for a Spark-Ignited Internal Combustion EngineRated at >50 bhp Used Exclusively in Non-AO (All ppmv limits are correctedto 15% oxygen on a dry basis). Emission Limits are effective according to			
the compliance schedule specified in Section 7.5, Table 8.			
Engine Type	NOx Limit	CO Limit	VOC Limit
1. Rich-burn	(ppmv)	(ppmv)	(ppmv)
d. Rich-Burn Engine, not listed above	11	2000	90

As is shown above, Table 3 has introduced lower VOC emission limits to the category of engines at this facility, lowering the VOC emissions from 250 to 90 ppmv. However, the current permit limits for engines S-348-1 through -4 are at 125 ppmv-VOC, greater than the applicable 90 ppmv-VOC limit of Table 3. Therefore, the VOC emissions limits for those four engines will need to be lowered by the full compliance date.

Normally, changing the emission limits on a permit would be done through an Authority to Construct application. However, for this project, the lowering of the VOC emission limit on the four permits will be accomplished and documented with this Title V Renewal application because the change will not result in change in the method of operation and the changes are administrative. According to the permittee, none of the engines will need to be physically modified to comply with the lower VOC limit. A review of the facility's source test results from the past few years indicates that the engines have been testing at much lower VOC emission rates than 90 ppmv. Source test results of the engine from May 25, 2022, which are found as Attachment D, indicate that the engines tested VOC emissions ranged from 0.8 to 9.9. ppmv-VOC for the engines at this facility.

Note that revising an emission limits to lower values to comply with Regulation IV rule is not considered an NSR modification (as defined in Rule 2201 Section 3.25) provided the unit currently meets the revised emission limits and there is no change in the method of operation needed. As mentioned above, the engines will comply with the lower VOC limits without a change in the method of operation.

Pursuant to the applicant's request, the VOC limits for the four engines (S-348-1 through -4) will be lowered to the new rule limit of 90 ppmv. Permit conditions will be changed as follows:

For S-348-1, -2, and -3:

Emissions from IC engine shall not exceed any of the following: NOx (as NO2)

 11 ppmv @ 15% O2 or 0.153 g-NOx/hp-hr, VOC – <u>90</u> 125 ppmv @ 15% O2
 or 0.606 g-VOC/hp-hr, CO - 2000 ppmv @ 15% O2 or 16.98 g-CO/hp-hr, PM10 - 0.204 g/hp-hr, or SOx (as SO2) - 0.0145 g/hp-hr. [District Rules 2201 and 4702]

For S-348-4:

- Emissions from this IC engine shall not exceed any of the following when fired on LPG: 11 ppmvd NOx @ 15% O2 or 0.15 g/bhp-hr, averaged over at least 15 minutes; 2000 ppmvd CO @ 15% O2 or 16.981 g/bhp-hr, averaged over at least 15 minutes; <u>90</u> 125 ppmvd VOC @ 15% O2 or 0.606 g/bhp-hr, averaged over at least 15 minutes; 0.075 g-PM10/hp-hr; 0.011 g-SOx /hp-hr. [District Rules 2201 and 4702]
- Emissions from this IC engine shall not exceed any of the following when fired on PUC-quality natural gas: 11 ppmvd NOx @ 15% O2 or 0.15 g/bhp-hr, averaged over at least 15 minutes; 2000 ppmvd CO @ 15% O2 or 16.981 g/bhp-hr, averaged over at least 15 minutes; <u>90</u> 125 ppmvd VOC @ 15% O2 or 0.606 g/bhp-hr, averaged over at least 15 minutes; 0.204 g-PM10/hp-hr; 0.0145 g-SOx /hp-hr. [District Rules 2201 and 4702]

The other change to Rule 4702 to that may affect this facility is the establishment of PM requirements for all categories of IC engines affected by the Rule with the addition of requirements of Section 5.8 (Particulate Matter (PM) Emission Control Requirements). Section 5.8.1 requires that spark-ignited engines comply with the requirements of Section 5.7 (Sulfur Oxides (SOx) Emission Control Requirements) on and after the compliance schedule specified in Section 5.2.4 and 7.0. Engines S-349-1 through -5 all currently comply with the requirements of Section 5.7 (specifically Section 5.7.1 and 5.7.2)² with the following condition that is currently found on each of the five permits:

For S-348-1 through -5:

3. Unit shall be fired on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight or on liquefied petroleum gas (LPG) with a sulfur content of less than or equal to 0.008% by weight. [Kern County Rule 407 and District Rules 2201, 4702 and 4801]

The remaining requirements of Rule 4702 have not been changed by the amended rule. Therefore, compliance with this rule is expected.

E. 40 CFR 60 Subpart IIII - <u>Standards of Performance for Stationary</u> <u>Compression Ignition Internal Combustion Engines</u>

This subpart applies to compression-ignited engines. All engines at the facility are spark-ignited IC engines. Therefore, this subpart does not apply.

F. 40 CFR 60 Subpart JJJJ - <u>Standards of Performance for Stationary Spark</u> <u>Ignition Internal Combustion Engines</u>

Pursuant to §60.4230, the provisions of this subpart apply to owners and operators of stationary, spark ignition (SI), internal combustion engines whose construction date began after June 12, 2006 or that were modified³ or reconstructed⁴ after that date.

All of this facility's SI IC engines commenced construction prior to June 12, 2006 and subsequently have not been modified or reconstructed. Therefore, this subpart does not apply.

² 5.7.1 Operate the engine exclusively on PUC-quality natural gas, commercial propane, butane, or liquefied petroleum gas, or a combination of such gases; or

^{5.7.2} Limit gaseous fuel sulfur content to no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet;

³ Modification is defined in 40 CFR 60.14 as any physical change in the method of operation of an affected facility which increases the amount of any pollutant emitted by such source or which results in the emission of air pollutant not previously emitted.

⁴ Reconstruction is defined in 40 CFR 60.15 as a modification to an existing facility to such an extent that the capital cost of the new or refurbished components exceeds 50 percent of the fixed capital cost of a comparable entirely new unit.

G. 40 CFR 63 Subpart ZZZZ - <u>National Emission Standards for Hazardous Air</u> <u>Pollutants for Stationary Reciprocating Internal Combustion Engines</u>

This subpart establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations.

The facility has six spark-ignited IC engines (S-348-1 through -6) that are subject to Subpart ZZZZ.

The updates to Subpart ZZZZ since the last permit renewal of February 20, 2018 are summarized below:

- The November 19, 2020 amendment finalized changes to the General Provisions that apply to NESHAP. These amendments implemented the plain language reading of the "major source" and "area source" definitions of section 112 of the Clean Air Act and provided that a major source can be reclassified to area source status at any time upon reducing its potential to emit HAP to below the major source thresholds. This rule also finalized amendments to clarify the compliance dates, notification, and recordkeeping requirements that apply to sources choosing to reclassify to area source status and to sources that revert back to major source status, including a requirement for electronic notification.
- The December 4, 2020 amendment updated many of EPA's existing gasoline, diesel, and other fuel quality programs to improve overall compliance assurance and maintain environmental performance. Existing fuel quality regulations were streamlined by removing expired provisions, eliminating redundant compliance provisions (e.g., duplicative registration requirements that are required by every EPA fuels program), removing unnecessary and out-of-date requirements, and replacing them with a single set of provisions and definitions that applies to all gasoline, diesel, and other fuel quality programs. This action did change the stringency of the existing fuel quality standards.
- The August 10, 2022 amendment changed the Code of Federal Regulations (CFR) to reflect a 2015 court decision regarding the NESHAP for Stationary RICE and the NSPS for Stationary Internal Combustion Engines (ICE). The court vacated provisions in the regulations specifying that emergency engines could operate for emergency demand response or during periods where there is a deviation of voltage or frequency. This amendment revises the RICE NESHAP and ICE NSPS to conform to the court's decision.

• The March 29, 2023 amendment promulgated corrections and updates to regulations for source testing of emissions under various rules. This final rule included corrections to typographical and technical errors, updates to outdated procedures, and revisions to add clarity and consistency with other monitoring requirements. The revisions improve the quality of data but do not impose new substantive requirements on source owners or operators.

The amendments to this subpart that are described above do not have any effect on the current permit requirements and will therefore not be addressed further in this evaluation. Therefore, continued compliance is expected.

H. 40 CFR 82 Subpart B – Servicing of Motor Vehicle Air Conditioners

The purpose of 40 CFR Part 82 Subpart B is to implement section 609 of the Clean Air Act, as amended regarding the servicing of motor vehicle air conditioners (MVACs), and to implement section 608 of the Clean Air Act regarding certain servicing, maintenance, repair and disposal of air conditioners in MVACs and MVAC-like appliances.

These regulations apply to any person performing service on a motor vehicle for consideration when this service involves the refrigerant in the motor vehicle air conditioner.

This subpart was amended on amended July 17, 2019, August 23, 2019, and March 24, 2021. The amendments to this subpart do not have any effect on the current permit requirements and will therefore not be addressed further in this evaluation. The following condition on the draft renewed permit is a mechanism to ensure compliance with the requirements of this subpart:

Permit Unit	Condition
-0 (facility-wide permit)	28

I. 40 CFR 82 Subpart F – <u>Recycling and Emissions Reductions</u>

The purpose of 40 CFR Part 82 Subpart F is to reduce emissions of class I and class II refrigerants and their substitutes to the lowest achievable level by maximizing the recapture and recycling of such refrigerants during the service, maintenance, repair, and disposal of appliances and restricting the sale of refrigerants consisting in whole or in part of a class I and class II ODS in accordance with Title VI of the Clean Air Act.

These regulations apply to any person servicing, maintaining, or repairing appliances. This subpart also applies to persons disposing of appliances,

including small appliances and motor vehicle air conditioners. In addition, this subpart applies to refrigerant reclaimers, technician certifying programs, appliance owners and operators, manufacturers of appliances, manufacturers of recycling and recovery equipment, approved recycling and recovery equipment testing organizations, persons selling class I or class II refrigerants or offering class I or class II refrigerants for sale, and persons purchasing class I or class I refrigerants.

This subpart was amended on December 27, 2017 and April 10, 2020. The amendments to this subpart do not have any effect on the current permit requirements and will therefore not be addressed further in this evaluation. The following condition on the draft renewed permit is a mechanism to ensure compliance with the requirements of this subpart:

Permit Unit	Condition
-0 (facility-wide permit)	27

IX. PERMIT SHIELD

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

A. Requirements Addressed by Model General Permit Templates

The applicant does not propose to use any model general permit templates.

B. Requirements not Addressed by Model General Permit Templates

West Kern Water District is not requesting any new permit shields within this Title V renewal project. In addition, West Kern Water District is not requesting any changes to the existing permit shield already included in their Title V operating permit. Therefore, all of the existing permit shields will be maintained on the revised permit for this renewal project.

West Kern Water District S-348 S-1221507

X. PERMIT CONDITIONS

See Attachment A - Draft Renewed Title V Operating Permit.

ATTACHMENTS

- A. Draft Renewed Title V Operating Permit
- B. Previous Title V Operating Permit
- C. Detailed Summary List of Facility Permits
- D. Engine Source Test Results

ATTACHMENT A

Draft Renewed Title V Operating Permit

San Joaquin Valley Air Pollution Control District

FACILITY: S-348-0-4



FACILITY-WIDE REQUIREMENTS

- 1. The owner or operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, 6.1; County Rules 110 (San Joaquin); 109 (Merced)] Federally Enforceable Through Title V Permit
- 2. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0; County Rules 110 (San Joaquin); 109 (Merced)] Federally Enforceable Through Title V Permit
- 3. {4364} The owner or operator of any stationary source operation that emits more than 25 tons per year of nitrogen oxides or reactive organic compounds, shall provide the District annually with a written statement in such form and at such time as the District prescribes, showing actual emissions of nitrogen oxides and reactive organic compounds from that source. [District Rule 1160, 5.0] Federally Enforceable Through Title V Permit
- 4. {4365} Any person building, altering or replacing any operation, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, shall first obtain an Authority to Construct (ATC) from the District unless exempted by District Rule 2020 (12/20/07). [District Rule 2010, 3.0 and 4.0; and 2020] Federally Enforceable Through Title V Permit
- 5. {4366} The permittee must comply with all conditions of the permit including permit revisions originated by the District. All terms and conditions of a permit that are required pursuant to the Clean Air Act (CAA), including provisions to limit potential to emit, are enforceable by the EPA and Citizens under the CAA. Any permit noncompliance constitutes a violation of the CAA and the District Rules and Regulations, and is grounds for enforcement action, for permit termination, revocation, reopening and reissuance, or modification; or for denial of a permit renewal application. [District Rules 2070, 7.0; 2080; and 2520, 9.8.1 and 9.13.1] Federally Enforceable Through Title V Permit
- 6. {4367} A Permit to Operate or an Authority to Construct shall not be transferred unless a new application is filed with and approved by the District. [District Rule 2031] Federally Enforceable Through Title V Permit
- 7. {4368} Every application for a permit required under Rule 2010 (12/17/92) shall be filed in a manner and form prescribed by the District. [District Rule 2040] Federally Enforceable Through Title V Permit
- 8. {4369} The operator shall maintain records of required monitoring that include: 1) the date, place, and time of sampling or measurement; 2) the date(s) analyses were performed; 3) the company or entity that performed the analysis; 4) the analytical techniques or methods used; 5) the results of such analysis; and 6) the operating conditions at the time of sampling or measurement. [District Rule 2520, 9.4.1] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

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

Facility-wide Requirements for S-348-0-4 (continued)

- 9. The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. The records shall be maintained and retained at the West Kern Water District office and shall be made available for District inspection upon request. Support information includes copies of all reports required by the permit and, for continuous monitoring instrumentation, all calibration and maintenance records and all original strip-chart recordings. [District Rules 2201, 2520, 9.4.2 and 4702] Federally Enforceable Through Title V Permit
- 10. {4371} The operator shall submit reports of any required monitoring at least every six months unless a different frequency is required by an applicable requirement. All instances of deviations from permit requirements must be clearly identified in such reports. [District Rule 2520, 9.5.1] Federally Enforceable Through Title V Permit
- 11. {4372} Deviations from permit conditions must be promptly reported, including deviations attributable to upset conditions, as defined in the permit. For the purpose of this condition, promptly means as soon as reasonably possible, but no later than 10 days after detection. The report shall include the probable cause of such deviations, and any corrective actions or preventive measures taken. All required reports must be certified by a responsible official consistent with section 10.0 of District Rule 2520 (6/21/01). [District Rules 2520, 9.5.2 and 1100, 7.0] Federally Enforceable Through Title V Permit
- 12. {4373} If for any reason a permit requirement or condition is being challenged for its constitutionality or validity by a court of competent jurisdiction, the outcome of such challenge shall not affect or invalidate the remainder of the conditions or requirements in that permit. [District Rule 2520, 9.7] Federally Enforceable Through Title V Permit
- 13. {4374} It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. [District Rule 2520, 9.8.2] Federally Enforceable Through Title V Permit
- 14. {4375} The permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [District Rule 2520, 9.8.3] Federally Enforceable Through Title V Permit
- 15. {4376} The permit does not convey any property rights of any sort, or any exclusive privilege. [District Rule 2520, 9.8.4] Federally Enforceable Through Title V Permit
- 16. {4377} The Permittee shall furnish to the District, within a reasonable time, any information that the District may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the District copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to EPA along with a claim of confidentiality. [District Rule 2520, 9.8.5] Federally Enforceable Through Title V Permit
- 17. {4378} The permittee shall pay annual permit fees and other applicable fees as prescribed in Regulation III of the District Rules and Regulations. [District Rule 2520, 9.9] Federally Enforceable Through Title V Permit
- 18. {4379} Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to enter the permittee's premises where a permitted source is located or emissions related activity is conducted, or where records must be kept under condition of the permit. [District Rule 2520, 9.13.2.1] Federally Enforceable Through Title V Permit
- 19. {4380} Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit. [District Rule 2520, 9.13.2.2] Federally Enforceable Through Title V Permit
- 20. {4381} Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to inspect at reasonable times any facilities, equipment, practices, or operations regulated or required under the permit. [District Rule 2520, 9.13.2.3] Federally Enforceable Through Title V Permit

Location:

Facility-wide Requirements for S-348-0-4 (continued)

- 21. {4382} Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. [District Rule 2520, 9.13.2.4] Federally Enforceable Through Title V Permit
- 22. {4383} No air contaminants shall be discharged into the atmosphere for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker than Ringelmann #1 or equivalent to 20% opacity and greater, unless specifically exempted by District Rule 4101 (02/17/05). If the equipment or operation is subject to a more stringent visible emission standard as prescribed in a permit condition, the more stringent visible emission limit shall supersede this condition. [District Rule 4101, and County Rules 401 (in all eight counties in the San Joaquin Valley)] Federally Enforceable Through Title V Permit
- 23. No person shall manufacture, blend, repackage, supply, sell, solicit or apply any architectural coating with a VOC content in excess of the corresponding limit specified in Table 1 or Table 2 of District Rule 4601 (4/16/20) for use or sale within the District. [District Rule 4601] Federally Enforceable Through Title V Permit
- 24. All VOC-containing materials subject to Rule 4601 (4/16/20) shall be stored in closed containers when not in use. [District Rule 4601] Federally Enforceable Through Title V Permit
- 25. The permittee shall comply with all the Labeling and Test Methods requirements outlined in Rule 4601 sections 6.1 and 6.3 (4/16/20). [District Rule 4601] Federally Enforceable Through Title V Permit
- 26. {4387} With each report or document submitted under a permit requirement or a request for information by the District or EPA, the permittee shall include a certification of truth, accuracy, and completeness by a responsible official. [District Rule 2520, 9.13.1 and 10.0] Federally Enforceable Through Title V Permit
- 27. {4388} If the permittee performs maintenance on, or services, repairs, or disposes of appliances, the permittee shall comply with the standards for Recycling and Emissions Reduction pursuant to 40 CFR Part 82, Subpart F. [40 CFR 82 Subpart F] Federally Enforceable Through Title V Permit
- 28. {4389} If the permittee performs service on motor vehicles when this service involves the ozone-depleting refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the standards for Servicing of Motor Vehicle Air Conditioners pursuant to all the applicable requirements as specified in 40 CFR Part 82, Subpart B. [40 CFR Part 82, Subpart B] Federally Enforceable Through Title V Permit
- 29. {4390} Disturbances of soil related to any construction, demolition, excavation, extraction, or other earthmoving activities shall comply with the requirements for fugitive dust control in District Rule 8021 unless specifically exempted under Section 4.0 of Rule 8021 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8021] Federally Enforceable Through Title V Permit
- 30. {4391} Outdoor handling, storage and transport of any bulk material which emits dust shall comply with the requirements of District Rule 8031, unless specifically exempted under Section 4.0 of Rule 8031 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8031] Federally Enforceable Through Title V Permit
- {4392} An owner/operator shall prevent or cleanup any carryout or trackout in accordance with the requirements of District Rule 8041 Section 5.0, unless specifically exempted under Section 4.0 of Rule 8041 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8041] Federally Enforceable Through Title V Permit
- {4393} Whenever open areas are disturbed, or vehicles are used in open areas, the facility shall comply with the requirements of Section 5.0 of District Rule 8051, unless specifically exempted under Section 4.0 of Rule 8051 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8051] Federally Enforceable Through Title V Permit
- 33. {4394} Any paved road or unpaved road shall comply with the requirements of District Rule 8061 unless specifically exempted under Section 4.0 of Rule 8061 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8061] Federally Enforceable Through Title V Permit

Facility-wide Requirements for S-348-0-4 (continued)

- 34. {4395} Any unpaved vehicle/equipment area that anticipates more than 50 Average annual daily Trips (AADT) shall comply with the requirements of Section 5.1.1 of District Rule 8071. Any unpaved vehicle/equipment area that anticipates more than 150 vehicle trips per day (VDT) shall comply with the requirements of Section 5.1.2 of District Rule 8071. On each day that 25 or more VDT with 3 or more axles will occur on an unpaved vehicle/equipment traffic area, the owner/operator shall comply with the requirements of Section 5.1.3 of District Rule 8071. On each day when a special event will result in 1,000 or more vehicles that will travel/park on an unpaved area, the owner/operator shall comply with the requirements of Section 5.1.4 of District Rule 8071. All sources shall comply with the requirements of Section 5.0 of District Rule 8071 unless specifically exempted under Section 4.0 of Rule 8071 (9/16/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8071] Federally Enforceable Through Title V Permit
- 35. {4396} Any owner or operator of a demolition or renovation activity, as defined in 40 CFR 61.141, shall comply with the applicable inspection, notification, removal, and disposal procedures for asbestos containing materials as specified in 40 CFR 61.145 (Standard for Demolition and Renovation). [40 CFR 61 Subpart M] Federally Enforceable Through Title V Permit
- 36. {4397} The permittee shall submit certifications of compliance with the terms and standards contained in Title V permits, including emission limits, standards and work practices, to the District and the EPA annually (or more frequently as specified in an applicable requirement or as specified by the District). The certification shall include the identification of each permit term or condition, the compliance status, whether compliance was continuous or intermittent, the methods used for determining the compliance status, and any other facts required by the District to determine the compliance status of the source. [District Rule 2520, 9.16] Federally Enforceable Through Title V Permit
- 37. {4398} The permittee shall submit an application for Title V permit renewal to the District at least six months, but not greater than 18 months, prior to the permit expiration date. [District Rule 2520, 5.2] Federally Enforceable Through Title V Permit
- 38. {4399} When a term is not defined in a Title V permit condition, the definition in the rule cited as the origin and authority for the condition in a Title V permits shall apply. [District Rule 2520, 9.1.1] Federally Enforceable Through Title V Permit
- 39. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: Rule 401 (Madera, Fresno, Kern, Kings, San Joaquin, Stanislaus, Tulare and Merced), Rule 110 (San Joaquin), Rule 109 (Merced), and Rule 202 (Fresno, Kern, Tulare, Kings, Madera, Stanislaus, Merced, San Joaquin). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 40. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rules 1100, sections 6.1 and 7.0 (12/17/92); 2010, sections 3.0 and 4.0 (12/17/92); 2031 (12/17/92); 2040 (12/17/92); 2070, section 7.0 (12/17/92); 2080 (12/17/92); 4101 (2/17/05); 4601 (4/16/20); 8021 (8/19/2004); 8031 (8/19/2004); 8041 (8/19/2004); 8051 (8/19/2004); 8061 (8/19/2004); and 8071 (9/16/2004). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
- 41. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report begin May 1 of every year, unless alternative dates are approved by the District Compliance Division. These reports are due within 30 days after the end of the reporting period. [District Rule 2520] Federally Enforceable Through Title V Permit
- 42. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

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

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-348-1-16

Location:

EXPIRATION D

SECTION: 05 **TOWNSHIP:** 31S RANGE: 25E

EQUIPMENT DESCRIPTION:

778 BHP NATURAL GAS/LPG FIRED IC ENGINE, UNIT A-2 (LIMITED TO MAXIMUM 610 BHP) EQUIPPED WITH NON-SELECTIVE CATALYTIC REDUCTION POWERING A WATER PUMP

PERMIT UNIT REQUIREMENTS

- 1. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
- Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 2. consecutive minutes. [Kern County Rule 407 and District rule 4801] Federally Enforceable Through Title V Permit
- 3. Unit shall be fired on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight or on liquefied petroleum gas (LPG) with a sulfur content of less than or equal to 0.008% by weight. [Kern County Rule 407 and District Rules 2201, 4702 and 4801] Federally Enforceable Through Title V Permit
- If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District 4. Rule 2520] Federally Enforceable Through Title V Permit
- 5. If the engine is fired on natural gas but not PUC-regulated natural gas, then the sulfur content of the natural gas fired in the IC engine shall be determined using ASTM Method D 1072, D 3031, D 4084 or D 3246. [District Rule 2520] Federally Enforceable Through Title V Permit
- The sulfur content of each delivery of liquefied petroleum gas being fired in the IC engine shall be determined using 6. ASTM method D2784. An equivalent test method may be accepted with prior written District approval. [District Rule 2520] Federally Enforceable Through Title V Permit
- 7. If the engine is fired on natural gas but not PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520] Federally Enforceable Through Title V Permit
- 8. IC engine shall be equipped with controller which readily indicates air/fuel ratio setting within tolerance limits as recommended by the catalyst system supplier. [District Rule 2201] Federally Enforceable Through Title V Permit
- 9. The engine shall be equipped with a positive crankcase ventilation (PCV) system or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 11. All exhaust emissions shall exit through the catalytic converter. [District Rule 2201] Federally Enforceable Through Title V Permit



Permit Unit Requirements for S-348-1-16 (continued)

- 12. Emissions from IC engine shall not exceed any of the following: NOx (as NO2) 11 ppmv @ 15% O2 or 0.153 g-NOx/hp-hr, VOC - 90 ppmv @ 15% O2, CO - 2000 ppmv @ 15% O2 or 16.98 g-CO/hp-hr, PM10 - 0.204 g/hp-hr, or SOx (as SO2) - 0.0145 g/hp-hr. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
- 13. For reoccurring emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. NOx, CO and VOC concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702] Federally Enforceable Through Title V Permit
- 14. Source testing to measure natural gas-combustion NOx, CO and VOC emissions from this engine shall be conducted not less than once every 24 months. [District Rule 4702] Federally Enforceable Through Title V Permit
- 15. Source testing shall be District witnessed or authorized and conducted by an ARB certified testing contractor. [District Rule 1081] Federally Enforceable Through Title V Permit
- 16. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 17. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 18. The following test methods shall be used: NOX (ppmv) EPA Method 7E or ARB Method 100; CO (ppmv) EPA Method 10 or ARB Method 100; stack gas oxygen EPA Method 3 or 3A or ARB Method 100; VOC (ppmv) EPA Method 25A or 25B, or ARB Method 100. EPA approved alternative test methods may also be used to satisfy the source testing requirements of this permit with prior written approval from the APCO. [District Rules 1081 and 4702] Federally Enforceable Through Title V Permit
- 19. The permittee shall monitor and record the stack concentration of NOx, CO, and O2, using a portable emission monitor that meets District specifications, at least once every calendar quarter (in which a source test is not performed and the engine is operated) or, if the engine is operated less than 120 calendar days in a calendar year, at least once during that calendar year (in which a source test is not performed and the engine is operated). Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last calendar quarter. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702] Federally Enforceable Through Title V Permit
- 20. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit
- 21. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4702] Federally Enforceable Through Title V Permit
- 22. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4702] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-348-1-16 (continued)

- 23. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
- 24. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702] Federally Enforceable Through Title V Permit
- 25. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
- 26. The engine shall be operated and maintained in proper operating condition according to the manufacturer's specifications. [District Rule 4702] Federally Enforceable Through Title V Permit
- 27. The engine shall be operated such that the O2 sensor output voltage is within 0.6 volts DC 1.0 volts DC as necessary to meet the air/fuel ratio setting. [40 Part CFR 64] Federally Enforceable Through Title V Permit
- 28. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 29. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 30. If the District or EPA determines that a Quality improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 31. The permittee shall record the O2 sensor reading (in millivolts) on a daily basis. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 32. The portable analyzer shall be calibrated in accordance with manufacturer guidelines and District policy SSP-1810. [District Rule 1081] Federally Enforceable Through Title V Permit
- 33. Upon detecting any excursion from the acceptable range of millivolt readings, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable. [40 CFR 64] Federally Enforceable Through Title V Permit
- 34. If the IC engine is fired on LPG, the permittee shall maintain annual records of the fuel supplier invoices for LPG and the corresponding certified sulfur content. [District Rule 2520] Federally Enforceable Through Title V Permit
- 35. Compliance with permit conditions in the Title V permit shall be deemed compliance with the applicable requirements of District Rule 4201. A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
- 36. Engine shall be equipped with an RPM indicator. [District Rule 2201] Federally Enforceable Through Title V Permit
- 37. Maximum engine speed shall not exceed 1000 rpm. [District Rule 2201] Federally Enforceable Through Title V Permit
- 38. The engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 39. The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-348-1-16 (continued)

- 40. The engine's oil and filter shall be changed every 2,160 hours of operation or every 12 months, whichever comes first. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 41. The engine's spark plugs shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 42. The engine's hoses and belts shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 43. The permittee shall maintain monthly records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of action taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 44. The permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d of Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-348-2-16

Location:

EXPIRATION D

SECTION: 05 **TOWNSHIP:** 31S RANGE: 25E

EQUIPMENT DESCRIPTION:

778 BHP NATURAL GAS/LPG FIRED IC ENGINE, UNIT A-3 (LIMITED TO 610 BHP MAXIMUM) EQUIPPED WITH NON-SELECTIVE CATALYTIC REDUCTION POWERING A WATER PUMP

PERMIT UNIT REQUIREMENTS

- 1. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
- Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 2. consecutive minutes. [Kern County Rule 407 and District rule 4801] Federally Enforceable Through Title V Permit
- 3. Unit shall be fired on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight or on liquefied petroleum gas (LPG) with a sulfur content of less than or equal to 0.008% by weight. [Kern County Rule 407 and District Rules 2201, 4702 and 4801] Federally Enforceable Through Title V Permit
- If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District 4. Rule 2520] Federally Enforceable Through Title V Permit
- 5. If the engine is fired on natural gas but not PUC-regulated natural gas, then the sulfur content of the natural gas fired in the IC engine shall be determined using ASTM Method D 1072, D 3031, D 4084 or D 3246. [District Rule 2520] Federally Enforceable Through Title V Permit
- The sulfur content of each delivery of liquefied petroleum gas being fired in the IC engine shall be determined using 6. ASTM method D2784. An equivalent test method may be accepted with prior written District approval. [District Rule 2520] Federally Enforceable Through Title V Permit
- 7. If the engine is fired on natural gas but not PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520] Federally Enforceable Through Title V Permit
- 8. IC engine shall be equipped with controller which readily indicates air/fuel ratio setting within tolerance limits as recommended by the catalyst system supplier. [District Rule 2201] Federally Enforceable Through Title V Permit
- 9. The engine shall be equipped with a positive crankcase ventilation (PCV) system or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 11. All exhaust emissions shall exit through the catalytic converter. [District Rule 2201] Federally Enforceable Through Title V Permit



Permit Unit Requirements for S-348-2-16 (continued)

- 12. Emissions from IC engine shall not exceed any of the following: NOx (as NO2) 11 ppmv @ 15% O2 or 0.153 g-NOx/hp-hr, VOC - 90 ppmv @ 15% O2, CO - 2000 ppmv @ 15% O2 or 16.98 g-CO/hp-hr, PM10 - 0.204 g/hp-hr, or SOx (as SO2) - 0.0145 g/hp-hr. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
- 13. For reoccurring emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. NOx, CO and VOC concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702] Federally Enforceable Through Title V Permit
- 14. Source testing to measure natural gas-combustion NOx, CO and VOC emissions from this engine shall be conducted not less than once every 24 months. [District Rule 4702] Federally Enforceable Through Title V Permit
- 15. Source testing shall be District witnessed or authorized and conducted by an ARB certified testing contractor. [District Rule 1081] Federally Enforceable Through Title V Permit
- 16. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 17. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 18. The following test methods shall be used: NOX (ppmv) EPA Method 7E or ARB Method 100; CO (ppmv) EPA Method 10 or ARB Method 100; stack gas oxygen EPA Method 3 or 3A or ARB Method 100; VOC (ppmv) EPA Method 25A or 25B, or ARB Method 100. EPA approved alternative test methods may also be used to satisfy the source testing requirements of this permit with prior written approval from the APCO. [District Rules 1081 and 4702] Federally Enforceable Through Title V Permit
- 19. The permittee shall monitor and record the stack concentration of NOx, CO, and O2, using a portable emission monitor that meets District specifications, at least once every calendar quarter (in which a source test is not performed and the engine is operated) or, if the engine is operated less than 120 calendar days in a calendar year, at least once during that calendar year (in which a source test is not performed and the engine is operated). Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last calendar quarter. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702] Federally Enforceable Through Title V Permit
- 20. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit
- 21. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4702] Federally Enforceable Through Title V Permit
- 22. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4702] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-348-2-16 (continued)

- 23. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
- 24. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702] Federally Enforceable Through Title V Permit
- 25. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
- 26. The engine shall be operated and maintained in proper operating condition according to the manufacturer's specifications. [District Rule 4702] Federally Enforceable Through Title V Permit
- 27. The engine shall be operated such that the O2 sensor output voltage is within 0.6 volts DC 1.0 volts DC as necessary to meet the air/fuel ratio setting. [40 Part CFR 64] Federally Enforceable Through Title V Permit
- 28. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 29. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 30. If the District or EPA determines that a Quality improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 31. The permittee shall record the O2 sensor reading (in millivolts) on a daily basis. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 32. The portable analyzer shall be calibrated in accordance with manufacturer guidelines and District policy SSP-1810. [District Rule 1081] Federally Enforceable Through Title V Permit
- 33. Upon detecting any excursion from the acceptable range of millivolt readings, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable. [40 CFR 64] Federally Enforceable Through Title V Permit
- 34. If the IC engine is fired on LPG, the permittee shall maintain annual records of the fuel supplier invoices for LPG and the corresponding certified sulfur content. [District Rule 2520] Federally Enforceable Through Title V Permit
- 35. Compliance with permit conditions in the Title V permit shall be deemed compliance with the applicable requirements of District Rule 4201. A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
- 36. Engine shall be equipped with an RPM indicator. [District Rule 2201] Federally Enforceable Through Title V Permit
- 37. Maximum engine speed shall not exceed 1000 rpm. [District Rule 2201] Federally Enforceable Through Title V Permit
- 38. The engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 39. The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-348-2-16 (continued)

- 40. The engine's oil and filter shall be changed every 2,160 hours of operation or every 12 months, whichever comes first. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 41. The engine's spark plugs shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 42. The engine's hoses and belts shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 43. The permittee shall maintain monthly records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of action taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 44. The permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d of Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-348-3-16

Location:

EXPIRATION D

SECTION: 05 **TOWNSHIP:** 31S RANGE: 25E

EQUIPMENT DESCRIPTION:

778 BHP NATURAL GAS/LPG FIRED IC ENGINE, UNIT A-4 (LIMITED TO MAXIMUM 610 BHP) EQUIPPED WITH NON-SELECTIVE CATALYTIC REDUCTION POWERING A WATER PUMP

PERMIT UNIT REQUIREMENTS

- 1. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
- Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 2. consecutive minutes. [Kern County Rule 407 and District rule 4801] Federally Enforceable Through Title V Permit
- 3. Unit shall be fired on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight or on liquefied petroleum gas (LPG) with a sulfur content of less than or equal to 0.008% by weight. [Kern County Rule 407 and District Rules 2201, 4702 and 4801] Federally Enforceable Through Title V Permit
- If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District 4. Rule 2520] Federally Enforceable Through Title V Permit
- 5. If the engine is fired on natural gas but not PUC-regulated natural gas, then the sulfur content of the natural gas fired in the IC engine shall be determined using ASTM Method D 1072, D 3031, D 4084 or D 3246. [District Rule 2520] Federally Enforceable Through Title V Permit
- The sulfur content of each delivery of liquefied petroleum gas being fired in the IC engine shall be determined using 6. ASTM method D2784. An equivalent test method may be accepted with prior written District approval. [District Rule 2520] Federally Enforceable Through Title V Permit
- 7. If the engine is fired on natural gas but not PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520] Federally Enforceable Through Title V Permit
- 8. IC engine shall be equipped with controller which readily indicates air/fuel ratio setting within tolerance limits as recommended by the catalyst system supplier. [District Rule 2201] Federally Enforceable Through Title V Permit
- 9. The engine shall be equipped with a positive crankcase ventilation (PCV) system or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 11. All exhaust emissions shall exit through the catalytic converter. [District Rule 2201] Federally Enforceable Through Title V Permit



Permit Unit Requirements for S-348-3-16 (continued)

- 12. Emissions from IC engine shall not exceed any of the following: NOx (as NO2) 11 ppmv @ 15% O2 or 0.153 g-NOx/hp-hr, VOC - 90 ppmv @ 15% O2, CO - 2000 ppmv @ 15% O2 or 16.98 g-CO/hp-hr, PM10 - 0.204 g/hp-hr, or SOx (as SO2) - 0.0145 g/hp-hr. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
- 13. For reoccurring emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. NOx, CO and VOC concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702] Federally Enforceable Through Title V Permit
- 14. Source testing to measure natural gas-combustion NOx, CO and VOC emissions from this engine shall be conducted not less than once every 24 months. [District Rule 4702] Federally Enforceable Through Title V Permit
- 15. Source testing shall be District witnessed or authorized and conducted by an ARB certified testing contractor. [District Rule 1081] Federally Enforceable Through Title V Permit
- 16. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 17. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 18. The following test methods shall be used: NOX (ppmv) EPA Method 7E or ARB Method 100; CO (ppmv) EPA Method 10 or ARB Method 100; stack gas oxygen EPA Method 3 or 3A or ARB Method 100; VOC (ppmv) EPA Method 25A or 25B, or ARB Method 100. EPA approved alternative test methods may also be used to satisfy the source testing requirements of this permit with prior written approval from the APCO. [District Rules 1081 and 4702] Federally Enforceable Through Title V Permit
- 19. The permittee shall monitor and record the stack concentration of NOx, CO, and O2, using a portable emission monitor that meets District specifications, at least once every calendar quarter (in which a source test is not performed and the engine is operated) or, if the engine is operated less than 120 calendar days in a calendar year, at least once during that calendar year (in which a source test is not performed and the engine is operated). Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last calendar quarter. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702] Federally Enforceable Through Title V Permit
- 20. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit
- 21. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4702] Federally Enforceable Through Title V Permit
- 22. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4702] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-348-3-16 (continued)

- 23. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
- 24. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702] Federally Enforceable Through Title V Permit
- 25. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
- 26. The engine shall be operated and maintained in proper operating condition according to the manufacturer's specifications. [District Rule 4702] Federally Enforceable Through Title V Permit
- 27. The engine shall be operated such that the O2 sensor output voltage is within 0.6 volts DC 1.0 volts DC as necessary to meet the air/fuel ratio setting. [40 Part CFR 64] Federally Enforceable Through Title V Permit
- 28. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 29. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 30. If the District or EPA determines that a Quality improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 31. The permittee shall record the O2 sensor reading (in millivolts) on a daily basis. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 32. The portable analyzer shall be calibrated in accordance with manufacturer guidelines and District policy SSP-1810. [District Rule 1081] Federally Enforceable Through Title V Permit
- 33. Upon detecting any excursion from the acceptable range of millivolt readings, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable. [40 CFR 64] Federally Enforceable Through Title V Permit
- 34. If the IC engine is fired on LPG, the permittee shall maintain annual records of the fuel supplier invoices for LPG and the corresponding certified sulfur content. [District Rule 2520] Federally Enforceable Through Title V Permit
- 35. Compliance with permit conditions in the Title V permit shall be deemed compliance with the applicable requirements of District Rule 4201. A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
- 36. Engine shall be equipped with an RPM indicator. [District Rule 2201] Federally Enforceable Through Title V Permit
- 37. Maximum engine speed shall not exceed 1000 rpm. [District Rule 2201] Federally Enforceable Through Title V Permit
- 38. The engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 39. The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-348-3-16 (continued)

- 40. The engine's oil and filter shall be changed every 2,160 hours of operation or every 12 months, whichever comes first. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 41. The engine's spark plugs shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 42. The engine's hoses and belts shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 43. The permittee shall maintain monthly records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of action taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 44. The permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d of Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-348-4-13

Location:

EXPIRATION D

SECTION: 32 TOWNSHIP: 31S RANGE: 24E

EQUIPMENT DESCRIPTION:

778 HP NATURAL GAS FIRED IC ENGINE WITH LPG AS BACK-UP FUEL, UNIT A-5 EQUIPPED WITH NON-SELECTIVE CATALYTIC REDUCTION POWERING A WATER PUMP

PERMIT UNIT REQUIREMENTS

- 1. Particulate emissions shall not exceed 0.1 gr/dscf at the point of discharge. [District Rule 4201] Federally Enforceable Through Title V Permit
- Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 2. consecutive minutes. [District Rule 4801 and Rule 407 (Kern)] Federally Enforceable Through Title V Permit
- 3. Unit shall be fired on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight, or on liquefied propane gas (LPG) with a sulfur content equal to or less than 0.008% by weight. [District Rules 4702 and 4801 and Rule 407 (Kern)] Federally Enforceable Through Title V Permit
- 4. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520] Federally Enforceable Through Title V Permit
- 5. If the engine is fired on natural gas that is not PUC-regulated, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM methods D1072, D3246, or D4084, or Double GC for H2S and mercaptans. [District Rule 2520] Federally Enforceable Through Title V Permit
- The sulfur content of each delivery of liquefied petroleum gas being fired in the IC engine shall be determined using 6. ASTM method D2784. An equivalent test method may be accepted with prior written District approval. [District Rule 2520] Federally Enforceable Through Title V Permit
- 7. If the engine is fired on natural gas that is not PUC-regulated, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520] Federally Enforceable Through Title V Permit
- 8. IC engine shall be equipped with a controller which readily indicates air/fuel ratio setting within tolerance limits as recommended by the catalyst system supplier. [District Rule 2201] Federally Enforceable Through Title V Permit
- 9. The engine shall be equipped with a positive crankcase ventilation (PCV) system or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
- 11. All exhaust emissions shall exit through catalytic converter. [District Rule 2201] Federally Enforceable Through Title V Permit



Permit Unit Requirements for S-348-4-13 (continued)

- 12. Emissions from this IC engine shall not exceed any of the following when fired on LPG: 11 ppmvd NOx @ 15% O2 or 0.15 g/bhp-hr, averaged over at least 15 minutes; 2000 ppmvd CO @ 15% O2 or 16.981 g/bhp-hr, averaged over at least 15 minutes; 90 ppmvd VOC @ 15% O2, averaged over at least 15 minutes; 0.075 g-PM10/hp-hr; 0.011 g-SOx /hp-hr. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
- 13. Emissions from this IC engine shall not exceed any of the following when fired on PUC-quality natural gas: 11 ppmvd NOx @ 15% O2 or 0.15 g/bhp-hr, averaged over at least 15 minutes; 2000 ppmvd CO @ 15% O2 or 16.981 g/bhp-hr, averaged over at least 15 minutes; 90 ppmvd VOC @ 15% O2, averaged over at least 15 minutes; 0.204 g-PM10/hp-hr; 0.0145 g-SOx /hp-hr. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
- 14. For reoccurring emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. NOx, CO and VOC concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702] Federally Enforceable Through Title V Permit
- 15. Source testing to measure natural gas-combustion NOx, CO and VOC emissions from this engine shall be conducted not less than once every 24 months. [District Rule 4702] Federally Enforceable Through Title V Permit
- 16. Source testing shall be District witnessed or authorized and conducted by an ARB certified testing contractor. [District Rule 1081] Federally Enforceable Through Title V Permit
- 17. Source testing for District Rule 4702 compliance shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 18. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 19. The following test methods shall be used: NOX (ppmv) EPA Method 7E or ARB Method 100; CO (ppmv) EPA Method 10 or ARB Method 100; stack gas oxygen EPA Method 3 or 3A or ARB Method 100; VOC (ppmv) EPA Method 25A or 25B, or ARB Method 100. EPA approved alternative test methods may also be used to satisfy the source testing requirements of this permit with prior written approval from the APCO. [District Rule 4702] Federally Enforceable Through Title V Permit
- 20. The permittee shall monitor and record the stack concentration of NOx, CO, and O2, using a portable emission monitor that meets District specifications, at least once every calendar quarter (in which a source test is not performed and the engine is operated) or, if the engine is operated less than 120 calendar days in a calendar year, at least once during that calendar year (in which a source test is not performed and the engine is operated). Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last calendar quarter. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702] Federally Enforceable Through Title V Permit
- 21. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit
- 22. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings evenly spaced out over the 15 consecutive-minute period [District Rule 4702] Federally Enforceable Through Title V Permit PERMITUNIN REQUIREMENTS CONTINUE ON NEXT PAGE

Permit Unit Requirements for S-348-4-13 (continued)

- 23. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4702] Federally Enforceable Through Title V Permit
- 24. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702] Federally Enforceable Through Title V Permit
- 25. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702] Federally Enforceable Through Title V Permit
- 26. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
- 27. The engine shall be operated and maintained in proper operating condition according to the manufacturer's specifications. [District Rule 4702] Federally Enforceable Through Title V Permit
- 28. The engine shall be operated such that the O2 sensor output voltage is within 0.6 volts DC 1.0 volts DC as necessary to meet the air/fuel ratio setting. [40 CFR 64] Federally Enforceable Through Title V Permit
- 29. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR 64.7] Federally Enforceable Through Title V Permit
- 30. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR 64.9] Federally Enforceable Through Title V Permit
- 31. If the District or EPA determines that a Quality Improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR 64.7 and 64.8] Federally Enforceable Through Title V Permit
- 32. The permittee shall record the O2 sensor reading (in millivolts) on a daily basis. [40 CFR 64.3] Federally Enforceable Through Title V Permit
- 33. The portable analyzer shall be calibrated in accordance with manufacturer guidelines and District policy SSP-1810. [District Rule 1081] Federally Enforceable Through Title V Permit
- 34. Upon detecting any excursion from the acceptable range of millivolt readings, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable. [40 CFR 64.7] Federally Enforceable Through Title V Permit
- 35. Operator shall maintain records of hours of operation when firing on propane. [District Rule 4701] Federally Enforceable Through Title V Permit
- 36. Operator shall maintain supplier invoices for each delivery of liquefied petroleum gas including the corresponding certified sulfur content for a period of at least five years. [District Rule 2520] Federally Enforceable Through Title V Permit
- 37. Compliance with permit conditions in the Title V permit shall be deemed compliance with the applicable requirements of SJVUAPCD Rule 4201, Kern County Rule 407, and the subsumed requirements of Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-348-4-13 (continued)

- 38. The engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 39. The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 40. The engine's oil and filter shall be changed every 2,160 hours of operation or every 12 months, whichever comes first. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 41. The engine's spark plugs shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 42. The engine's hoses and belts shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 43. The permittee shall maintain monthly records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of action taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 44. The permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d of Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must change the oil within 2 days or before the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

PERMIT UNIT: S-348-5-10

EXPIRATION D

SECTION: NE 5 TOWNSHIP: 31S RANGE: 25E

EQUIPMENT DESCRIPTION:

840 BHP WAUKESHA MODEL F3524 GSI NATURAL GAS AND LPG-FIRED IC ENGINE, A2-4 EQUIPPED WITH NON-SELECTIVE CATALYTIC REDUCTION POWERING A WATER PUMP

PERMIT UNIT REQUIREMENTS

- 1. Particulate emissions shall not exceed 0.1 gr/dscf at the point of discharge. [District Rule 4201] Federally Enforceable Through Title V Permit
- 2. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Rule 407 (Kern)] Federally Enforceable Through Title V Permit
- 3. Unit shall be fired on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight, or on liquefied propane gas (LPG) with a sulfur content equal to or less than 0.008% by weight. [District Rules 4702 and 4801 and Rule 407 (Kern)] Federally Enforceable Through Title V Permit
- 4. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520] Federally Enforceable Through Title V Permit
- 5. If the engine is fired on natural gas that is not PUC-regulated, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM methods D1072, D3246, or D4084, or Double GC for H2S and mercaptans. [District Rule 2520] Federally Enforceable Through Title V Permit
- 6. The sulfur content of each delivery of liquefied petroleum gas being fired in the IC engine shall be determined using ASTM method D2784. An equivalent test method may be accepted with prior written District approval. [District Rule 2520] Federally Enforceable Through Title V Permit
- 7. If the engine is fired on natural gas that is not PUC-regulated, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520] Federally Enforceable Through Title V Permit
- 8. IC engine shall be equipped with a controller which readily indicates air/fuel ratio setting within tolerance limits as recommended by the catalyst system supplier. [District Rule 2201] Federally Enforceable Through Title V Permit
- 9. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
- 10. All exhaust emissions shall exit through catalytic converter. [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. Emissions from this IC engine shall not exceed any of the following limits: 10.4 ppmvd NOx @ 15% O2 or 0.15 g/bhp-hr, averaged over at least 15 minutes; 68.4 ppmvd CO @ 15% O2 or 0.60 g/bhp-hr, averaged over at least 15 minutes; 30 ppmvd VOC @ 15% O2 or 0.15 g/bhp-hr, averaged over at least 15 minutes; 0.175 g-PM10/hp-hr; 0.012 g-SOx /hp-hr. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-348-5-10 (continued)

- 12. For reoccurring emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. NOx, CO and VOC concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702] Federally Enforceable Through Title V Permit
- 13. Source testing to measure natural gas-combustion NOx, CO and VOC emissions from this engine shall be conducted not less than once every 24 months. [District Rule 4702] Federally Enforceable Through Title V Permit
- 14. Source testing shall be District witnessed or authorized and conducted by an ARB certified testing contractor. [District Rule 1081] Federally Enforceable Through Title V Permit
- 15. Source testing for District Rule 4702 compliance shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 16. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 17. The following test methods shall be used: NOX (ppmv) EPA Method 7E or ARB Method 100; CO (ppmv) EPA Method 10 or ARB Method 100; stack gas oxygen EPA Method 3 or 3A or ARB Method 100; VOC (ppmv) EPA Method 25A or 25B, or ARB Method 100. EPA approved alternative test methods may also be used to satisfy the source testing requirements of this permit with prior written approval from the APCO. [District Rule 4702] Federally Enforceable Through Title V Permit
- 18. The permittee shall monitor and record the stack concentration of NOx, CO, and O2, using a portable emission monitor that meets District specifications, at least once every calendar quarter (in which a source test is not performed and the engine is operated) or, if the engine is operated less than 120 calendar days in a calendar year, at least once during that calendar year (in which a source test is not performed and the engine is operated). Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last calendar quarter. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702] Federally Enforceable Through Title V Permit
- 19. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit
- 20. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings evenly spaced out over the 15 consecutive-minute period. [District Rule 4702] Federally Enforceable Through Title V Permit
- 21. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4702] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-348-5-10 (continued)

- 22. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702] Federally Enforceable Through Title V Permit
- 23. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702] Federally Enforceable Through Title V Permit
- 24. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
- 25. The engine shall be operated and maintained in proper operating condition according to the manufacturer's specifications. [District Rule 4702] Federally Enforceable Through Title V Permit
- 26. The engine shall be operated such that the O2 sensor output voltage is within 0.6 volts DC 1.0 volts DC as necessary to meet the air/fuel ratio setting. [40 CFR 64] Federally Enforceable Through Title V Permit
- 27. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR 64.7] Federally Enforceable Through Title V Permit
- 28. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR 64.9] Federally Enforceable Through Title V Permit
- 29. If the District or EPA determines that a Quality Improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR 64.7 and 64.8] Federally Enforceable Through Title V Permit
- 30. The permittee shall record the O2 sensor reading (in millivolts) on a daily basis. [40 CFR 64.3] Federally Enforceable Through Title V Permit
- 31. The portable analyzer shall be calibrated in accordance with manufacturer guidelines and District policy SSP-1810. [District Rule 1081] Federally Enforceable Through Title V Permit
- 32. Upon detecting any excursion from the acceptable range of millivolt readings, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable. [40 CFR 64.7] Federally Enforceable Through Title V Permit
- 33. Operator shall maintain supplier invoices for each delivery of liquefied petroleum gas including the corresponding certified sulfur content for a period of at least five years. [District Rule 2520] Federally Enforceable Through Title V Permit
- 34. Compliance with permit conditions in the Title V permit shall be deemed compliance with the applicable requirements of SJVUAPCD Rule 4201, Kern County Rule 407, and the subsumed requirements of Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
- 35. The engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 36. The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- The engine's oil and filter shall be changed every 2,160 hours of operation or every 12 months, whichever comes first.
 [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-348-5-10 (continued)

- 38. The engine's spark plugs shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 39. The engine's hoses and belts shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 40. The permittee shall maintain monthly records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of action taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 41. The permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d of Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

PERMIT UNIT: S-348-6-5

EXPIRATION DA

SECTION: NE5 TOWNSHIP: 31S RANGE: 25E

EQUIPMENT DESCRIPTION:

76 HP FORD MODEL ESG642 NATURAL GAS/PROPANE-FIRED EMERGENCY IC ENGINE POWERING AN ELECTRICAL GENERATOR (PUMP STATION A2)

PERMIT UNIT REQUIREMENTS

- 1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- 2. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kern County Rule 407 and District rule 4801] Federally Enforceable Through Title V Permit
- NOx emissions shall not exceed 0.0003 lb/hp-hr or 0.136 g-NOx/hp-hr or 39.7 ppm @ 15% O2; SOX emissions shall not exceed 0.009 g-SOx/hp-hr; PM10 emissions shall not exceed 0.033 g-PM10/hp-hr; CO emissions shall not exceed 0.599 g-CO/hp-hr; VOC emissions shall not exceed 0.0599 g-VOC/hp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. This engine shall be equipped with an operational non-selective catalyst installed on the exhaust stack. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. This engine shall only be fired on PUC quality natural gas, LPG or propane. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. This engine shall be equipped with either a positive crankcase ventilation (PCV) system that recirculates crankcase emissions into the air intake system for combustion, or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 8. An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. An engine shall be considered to be an emergency standby engine if it is used to supply power while maintenance is performed or repairs are made to the primary power supply. [District Rule 4702] Federally Enforceable Through Title V Permit
- 9. This engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 100 hours per calendar year. [District Rule 4702 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 10. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, and the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.). For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702 and 2520, 9.4 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

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

Facility Name: WEST KERN WATER DISTRICT Location: STATION A, HWY 119 & CA AQUEDUCT, TAFT, CA 93268

Permit Unit Requirements for S-348-6-5 (continued)

- 11. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702] Federally Enforceable Through Title V Permit
- 12. This engine shall not be used to produce power for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract. [District Rule 4702] Federally Enforceable Through Title V Permit
- 13. Compliance with permit conditions in the Title V permit shall be deemed compliance with the applicable requirements of District Rule 4201. A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
- 14. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 15. On and after October 19, 2013, the permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- On and after October 19, 2013, the engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 17. On and after October 19, 2013, the engine's oil and filter shall be changed every 500 hours of operation or every 12 months, whichever comes first. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 18. The permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d of Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- On and after October 19, 2013, the engine's air filter shall be inspected every 1,000 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 20. On and after October 19, 2013, the engine's hoses and belts shall be inspected every 500 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 21. On and after October 19, 2013, the permittee shall maintain monthly records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of action taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [District Rule 1070 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

ATTACHMENT B

Previous Title V Operating Permit

FACILITY: S-348-0-3

EXPIRATION DATE: 10/31/2022

FACILITY-WIDE REQUIREMENTS

- The owner or operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, 6.1; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit
- 2. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit
- 3. The owner or operator of any stationary source operation that emits more than 25 tons per year of nitrogen oxides or reactive organic compounds, shall provide the District annually with a written statement in such form and at such time as the District prescribes, showing actual emissions of nitrogen oxides and reactive organic compounds from that source. [District Rule 1160, 5.0] Federally Enforceable Through Title V Permit
- 4. Any person building, altering or replacing any operation, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, shall first obtain an Authority to Construct (ATC) from the District unless exempted by District Rule 2020 (12/20/07). [District Rule 2010, 3.0 and 4.0; and 2020] Federally Enforceable Through Title V Permit
- 5. The permittee must comply with all conditions of the permit including permit revisions originated by the District. All terms and conditions of a permit that are required pursuant to the Clean Air Act (CAA), including provisions to limit potential to emit, are enforceable by the EPA and Citizens under the CAA. Any permit noncompliance constitutes a violation of the CAA and the District Rules and Regulations, and is grounds for enforcement action, for permit termination, revocation, reopening and reissuance, or modification; or for denial of a permit renewal application. [District Rules 2070, 7.0; 2080; and 2520, 9.8.1 and 9.13.1] Federally Enforceable Through Title V Permit
- 6. A Permit to Operate or an Authority to Construct shall not be transferred unless a new application is filed with and approved by the District. [District Rule 2031] Federally Enforceable Through Title V Permit
- 7. Every application for a permit required under Rule 2010 (12/17/92) shall be filed in a manner and form prescribed by the District. [District Rule 2040] Federally Enforceable Through Title V Permit
- 8. The operator shall maintain records of required monitoring that include: 1) the date, place, and time of sampling or measurement; 2) the date(s) analyses were performed; 3) the company or entity that performed the analysis; 4) the analytical techniques or methods used; 5) the results of such analysis; and 6) the operating conditions at the time of sampling or measurement. [District Rule 2520, 9.4.1] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

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

Facility-wide Requirements for S-348-0-3 (continued)

- 9. The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. The records shall be maintained and retained at the West Kern Water District office and shall be made available for District inspection upon request. Support information includes copies of all reports required by the permit and, for continuous monitoring instrumentation, all calibration and maintenance records and all original strip-chart recordings. [District Rules 2201, 2520, 9.4.2 and 4702] Federally Enforceable Through Title V Permit
- 10. The operator shall submit reports of any required monitoring at least every six months unless a different frequency is required by an applicable requirement. All instances of deviations from permit requirements must be clearly identified in such reports. [District Rule 2520, 9.5.1] Federally Enforceable Through Title V Permit
- 11. Deviations from permit conditions must be promptly reported, including deviations attributable to upset conditions, as defined in the permit. For the purpose of this condition, promptly means as soon as reasonably possible, but no later than 10 days after detection. The report shall include the probable cause of such deviations, and any corrective actions or preventive measures taken. All required reports must be certified by a responsible official consistent with section 10.0 of District Rule 2520 (6/21/01). [District Rules 2520, 9.5.2 and 1100, 7.0] Federally Enforceable Through Title V Permit
- 12. If for any reason a permit requirement or condition is being challenged for its constitutionality or validity by a court of competent jurisdiction, the outcome of such challenge shall not affect or invalidate the remainder of the conditions or requirements in that permit. [District Rule 2520, 9.7] Federally Enforceable Through Title V Permit
- 13. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. [District Rule 2520, 9.8.2] Federally Enforceable Through Title V Permit
- 14. The permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [District Rule 2520, 9.8.3] Federally Enforceable Through Title V Permit
- 15. The permit does not convey any property rights of any sort, or any exclusive privilege. [District Rule 2520, 9.8.4] Federally Enforceable Through Title V Permit
- 16. The Permittee shall furnish to the District, within a reasonable time, any information that the District may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the District copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to EPA along with a claim of confidentiality. [District Rule 2520, 9.8.5] Federally Enforceable Through Title V Permit
- 17. The permittee shall pay annual permit fees and other applicable fees as prescribed in Regulation III of the District Rules and Regulations. [District Rule 2520, 9.9] Federally Enforceable Through Title V Permit
- 18. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to enter the permittee's premises where a permitted source is located or emissions related activity is conducted, or where records must be kept under condition of the permit. [District Rule 2520, 9.13.2.1] Federally Enforceable Through Title V Permit
- 19. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit. [District Rule 2520, 9.13.2.2] Federally Enforceable Through Title V Permit
- 20. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to inspect at reasonable times any facilities, equipment, practices, or operations regulated or required under the permit. [District Rule 2520, 9.13.2.3] Federally Enforceable Through Title V Permit
- 21. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. [District Rule 2520, 9.13.2.4] Federally Enforceable Through Title V Permit FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

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

Facility-wide Requirements for S-348-0-3 (continued)

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

Facility-wide Requirements for S-348-0-3 (continued)

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

PERMIT UNIT: S-348-1-15

EXPIRATION DATE: 10/31/2022

SECTION: 05 TOWNSHIP: 31S RANGE: 25E

EQUIPMENT DESCRIPTION:

778 BHP NATURAL GAS/LPG FIRED IC ENGINE, UNIT A-2 (LIMITED TO MAXIMUM 610 BHP) EQUIPPED WITH NON-SELECTIVE CATALYTIC REDUCTION POWERING A WATER PUMP

PERMIT UNIT REQUIREMENTS

- 1. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
- 2. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kern County Rule 407 and District rule 4801] Federally Enforceable Through Title V Permit
- 3. Unit shall be fired on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight or on liquefied petroleum gas (LPG) with a sulfur content of less than or equal to 0.008% by weight. [Kern County Rule 407 and District Rules 2201, 4702 and 4801] Federally Enforceable Through Title V Permit
- 4. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520] Federally Enforceable Through Title V Permit
- If the engine is fired on natural gas but not PUC-regulated natural gas, then the sulfur content of the natural gas fired in the IC engine shall be determined using ASTM Method D 1072, D 3031, D 4084 or D 3246. [District Rule 2520] Federally Enforceable Through Title V Permit
- 6. The sulfur content of each delivery of liquefied petroleum gas being fired in the IC engine shall be determined using ASTM method D2784. An equivalent test method may be accepted with prior written District approval. [District Rule 2520] Federally Enforceable Through Title V Permit
- 7. If the engine is fired on natural gas but not PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520] Federally Enforceable Through Title V Permit
- 8. IC engine shall be equipped with controller which readily indicates air/fuel ratio setting within tolerance limits as recommended by the catalyst system supplier. [District Rule 2201] Federally Enforceable Through Title V Permit
- 9. The engine shall be equipped with a positive crankcase ventilation (PCV) system or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 11. All exhaust emissions shall exit through the catalytic converter. [District Rule 2201] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-348-1-15 (continued)

- Emissions from IC engine shall not exceed any of the following: NOx (as NO2) 11 ppmv @ 15% O2 or 0.153 g-NOx/hp-hr, VOC 125 ppmv @ 15% O2 or 0.606 g-VOC/hp-hr, CO 2000 ppmv @ 15% O2 or 16.98 g-CO/hp-hr, PM10 0.204 g/hp-hr, or SOx (as SO2) 0.0145 g/hp-hr. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
- 13. For reoccurring emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. NOx, CO and VOC concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702] Federally Enforceable Through Title V Permit
- 14. Source testing to measure natural gas-combustion NOx, CO and VOC emissions from this engine shall be conducted not less than once every 24 months. [District Rule 4702] Federally Enforceable Through Title V Permit
- 15. Source testing shall be District witnessed or authorized and conducted by an ARB certified testing contractor. [District Rule 1081] Federally Enforceable Through Title V Permit
- 16. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 17. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 18. The following test methods shall be used: NOX (ppmv) EPA Method 7E or ARB Method 100; CO (ppmv) EPA Method 10 or ARB Method 100; stack gas oxygen EPA Method 3 or 3A or ARB Method 100; VOC (ppmv) EPA Method 25A or 25B, or ARB Method 100. EPA approved alternative test methods may also be used to satisfy the source testing requirements of this permit with prior written approval from the APCO. [District Rules 1081 and 4702] Federally Enforceable Through Title V Permit
- 19. The permittee shall monitor and record the stack concentration of NOx, CO, and O2, using a portable emission monitor that meets District specifications, at least once every calendar quarter (in which a source test is not performed and the engine is operated) or, if the engine is operated less than 120 calendar days in a calendar year, at least once during that calendar year (in which a source test is not performed and the engine is operated). Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last calendar quarter. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702] Federally Enforceable Through Title V Permit
- 20. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit
- 21. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4702] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-348-1-15 (continued)

- 22. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4702] Federally Enforceable Through Title V Permit
- 23. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
- 24. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702] Federally Enforceable Through Title V Permit
- 25. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
- 26. The engine shall be operated and maintained in proper operating condition according to the manufacturer's specifications. [District Rule 4702] Federally Enforceable Through Title V Permit
- 27. The engine shall be operated such that the O2 sensor output voltage is within 0.6 volts DC 1.0 volts DC as necessary to meet the air/fuel ratio setting. [40 Part CFR 64] Federally Enforceable Through Title V Permit
- 28. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 29. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 30. If the District or EPA determines that a Quality improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 31. The permittee shall record the O2 sensor reading (in millivolts) on a daily basis. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 32. The portable analyzer shall be calibrated in accordance with manufacturer guidelines and District policy SSP-1810. [District Rule 1081] Federally Enforceable Through Title V Permit
- 33. Upon detecting any excursion from the acceptable range of millivolt readings, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable. [40 CFR 64] Federally Enforceable Through Title V Permit
- 34. If the IC engine is fired on LPG, the permittee shall maintain annual records of the fuel supplier invoices for LPG and the corresponding certified sulfur content. [District Rule 2520] Federally Enforceable Through Title V Permit
- 35. Compliance with permit conditions in the Title V permit shall be deemed compliance with the applicable requirements of District Rule 4201. A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
- 36. Engine shall be equipped with an RPM indicator. [District Rule 2201] Federally Enforceable Through Title V Permit
- 37. Maximum engine speed shall not exceed 1000 rpm. [District Rule 2201] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-348-1-15 (continued)

- 38. The engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 39. The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 40. The engine's oil and filter shall be changed every 2,160 hours of operation or every 12 months, whichever comes first. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 41. The engine's spark plugs shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 42. The engine's hoses and belts shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 43. The permittee shall maintain monthly records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of action taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 44. The permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d of Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

PERMIT UNIT: S-348-2-15

EXPIRATION DATE: 10/31/2022

SECTION: 05 TOWNSHIP: 31S RANGE: 25E

EQUIPMENT DESCRIPTION:

778 BHP NATURAL GAS/LPG FIRED IC ENGINE, UNIT A-3 (LIMITED TO 610 BHP MAXIMUM) EQUIPPED WITH NON-SELECTIVE CATALYTIC REDUCTION POWERING A WATER PUMP

PERMIT UNIT REQUIREMENTS

- 1. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
- 2. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kern County Rule 407 and District rule 4801] Federally Enforceable Through Title V Permit
- 3. Unit shall be fired on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight or on liquefied petroleum gas (LPG) with a sulfur content of less than or equal to 0.008% by weight. [Kern County Rule 407 and District Rules 2201, 4702 and 4801] Federally Enforceable Through Title V Permit
- 4. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520] Federally Enforceable Through Title V Permit
- If the engine is fired on natural gas but not PUC-regulated natural gas, then the sulfur content of the natural gas fired in the IC engine shall be determined using ASTM Method D 1072, D 3031, D 4084 or D 3246. [District Rule 2520] Federally Enforceable Through Title V Permit
- 6. The sulfur content of each delivery of liquefied petroleum gas being fired in the IC engine shall be determined using ASTM method D2784. An equivalent test method may be accepted with prior written District approval. [District Rule 2520] Federally Enforceable Through Title V Permit
- 7. If the engine is fired on natural gas but not PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520] Federally Enforceable Through Title V Permit
- 8. IC engine shall be equipped with controller which readily indicates air/fuel ratio setting within tolerance limits as recommended by the catalyst system supplier. [District Rule 2201] Federally Enforceable Through Title V Permit
- 9. The engine shall be equipped with a positive crankcase ventilation (PCV) system or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 11. All exhaust emissions shall exit through the catalytic converter. [District Rule 2201] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-348-2-15 (continued)

- Emissions from IC engine shall not exceed any of the following: NOx (as NO2) 11 ppmv @ 15% O2 or 0.153 g-NOx/hp-hr, VOC 125 ppmv @ 15% O2 or 0.606 g-VOC/hp-hr, CO 2000 ppmv @ 15% O2 or 16.98 g-CO/hp-hr, PM10 0.204 g/hp-hr, or SOx (as SO2) 0.0145 g/hp-hr. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
- 13. For reoccurring emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. NOx, CO and VOC concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702] Federally Enforceable Through Title V Permit
- 14. Source testing to measure natural gas-combustion NOx, CO and VOC emissions from this engine shall be conducted not less than once every 24 months. [District Rule 4702] Federally Enforceable Through Title V Permit
- 15. Source testing shall be District witnessed or authorized and conducted by an ARB certified testing contractor. [District Rule 1081] Federally Enforceable Through Title V Permit
- 16. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 17. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 18. The following test methods shall be used: NOX (ppmv) EPA Method 7E or ARB Method 100; CO (ppmv) EPA Method 10 or ARB Method 100; stack gas oxygen EPA Method 3 or 3A or ARB Method 100; VOC (ppmv) EPA Method 25A or 25B, or ARB Method 100. EPA approved alternative test methods may also be used to satisfy the source testing requirements of this permit with prior written approval from the APCO. [District Rules 1081 and 4702] Federally Enforceable Through Title V Permit
- 19. The permittee shall monitor and record the stack concentration of NOx, CO, and O2, using a portable emission monitor that meets District specifications, at least once every calendar quarter (in which a source test is not performed and the engine is operated) or, if the engine is operated less than 120 calendar days in a calendar year, at least once during that calendar year (in which a source test is not performed and the engine is operated). Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last calendar quarter. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702] Federally Enforceable Through Title V Permit
- 20. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit
- 21. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4702] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-348-2-15 (continued)

- 22. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4702] Federally Enforceable Through Title V Permit
- 23. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
- 24. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702] Federally Enforceable Through Title V Permit
- 25. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
- 26. The engine shall be operated and maintained in proper operating condition according to the manufacturer's specifications. [District Rule 4702] Federally Enforceable Through Title V Permit
- 27. The engine shall be operated such that the O2 sensor output voltage is within 0.6 volts DC 1.0 volts DC as necessary to meet the air/fuel ratio setting. [40 Part CFR 64] Federally Enforceable Through Title V Permit
- 28. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 29. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 30. If the District or EPA determines that a Quality improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 31. The permittee shall record the O2 sensor reading (in millivolts) on a daily basis. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 32. The portable analyzer shall be calibrated in accordance with manufacturer guidelines and District policy SSP-1810. [District Rule 1081] Federally Enforceable Through Title V Permit
- 33. Upon detecting any excursion from the acceptable range of millivolt readings, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable. [40 CFR 64] Federally Enforceable Through Title V Permit
- 34. If the IC engine is fired on LPG, the permittee shall maintain annual records of the fuel supplier invoices for LPG and the corresponding certified sulfur content. [District Rule 2520] Federally Enforceable Through Title V Permit
- 35. Compliance with permit conditions in the Title V permit shall be deemed compliance with the applicable requirements of District Rule 4201. A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
- 36. Engine shall be equipped with an RPM indicator. [District Rule 2201] Federally Enforceable Through Title V Permit
- 37. Maximum engine speed shall not exceed 1000 rpm. [District Rule 2201] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-348-2-15 (continued)

- 38. The engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 39. The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 40. The engine's oil and filter shall be changed every 2,160 hours of operation or every 12 months, whichever comes first. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 41. The engine's spark plugs shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 42. The engine's hoses and belts shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 43. The permittee shall maintain monthly records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of action taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 44. The permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d of Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

PERMIT UNIT: S-348-3-15

EXPIRATION DATE: 10/31/2022

SECTION: 05 TOWNSHIP: 31S RANGE: 25E

EQUIPMENT DESCRIPTION:

778 BHP NATURAL GAS/LPG FIRED IC ENGINE, UNIT A-4 (LIMITED TO MAXIMUM 610 BHP) EQUIPPED WITH NON-SELECTIVE CATALYTIC REDUCTION POWERING A WATER PUMP

PERMIT UNIT REQUIREMENTS

- 1. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
- 2. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kern County Rule 407 and District rule 4801] Federally Enforceable Through Title V Permit
- 3. Unit shall be fired on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight or on liquefied petroleum gas (LPG) with a sulfur content of less than or equal to 0.008% by weight. [Kern County Rule 407 and District Rules 2201, 4702 and 4801] Federally Enforceable Through Title V Permit
- 4. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520] Federally Enforceable Through Title V Permit
- 5. If the engine is fired on natural gas but not PUC-regulated natural gas, then the sulfur content of the natural gas fired in the IC engine shall be determined using ASTM Method D 1072, D 3031, D 4084 or D 3246. [District Rule 2520] Federally Enforceable Through Title V Permit
- 6. The sulfur content of each delivery of liquefied petroleum gas being fired in the IC engine shall be determined using ASTM method D2784. An equivalent test method may be accepted with prior written District approval. [District Rule 2520] Federally Enforceable Through Title V Permit
- 7. If the engine is fired on natural gas but not PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520] Federally Enforceable Through Title V Permit
- 8. IC engine shall be equipped with controller which readily indicates air/fuel ratio setting within tolerance limits as recommended by the catalyst system supplier. [District Rule 2201] Federally Enforceable Through Title V Permit
- 9. The engine shall be equipped with a positive crankcase ventilation (PCV) system or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 11. All exhaust emissions shall exit through the catalytic converter. [District Rule 2201] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-348-3-15 (continued)

- Emissions from IC engine shall not exceed any of the following: NOx (as NO2) 11 ppmv @ 15% O2 or 0.153 g-NOx/hp-hr, VOC 125 ppmv @ 15% O2 or 0.606 g-VOC/hp-hr, CO 2000 ppmv @ 15% O2 or 16.98 g-CO/hp-hr, PM10 0.204 g/hp-hr, or SOx (as SO2) 0.0145 g/hp-hr. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
- 13. For reoccurring emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. NOx, CO and VOC concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702] Federally Enforceable Through Title V Permit
- 14. Source testing to measure natural gas-combustion NOx, CO and VOC emissions from this engine shall be conducted not less than once every 24 months. [District Rule 4702] Federally Enforceable Through Title V Permit
- 15. Source testing shall be District witnessed or authorized and conducted by an ARB certified testing contractor. [District Rule 1081] Federally Enforceable Through Title V Permit
- 16. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 17. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 18. The following test methods shall be used: NOX (ppmv) EPA Method 7E or ARB Method 100; CO (ppmv) EPA Method 10 or ARB Method 100; stack gas oxygen EPA Method 3 or 3A or ARB Method 100; VOC (ppmv) EPA Method 25A or 25B, or ARB Method 100. EPA approved alternative test methods may also be used to satisfy the source testing requirements of this permit with prior written approval from the APCO. [District Rules 1081 and 4702] Federally Enforceable Through Title V Permit
- 19. The permittee shall monitor and record the stack concentration of NOx, CO, and O2, using a portable emission monitor that meets District specifications, at least once every calendar quarter (in which a source test is not performed and the engine is operated) or, if the engine is operated less than 120 calendar days in a calendar year, at least once during that calendar year (in which a source test is not performed and the engine is operated). Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last calendar quarter. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702] Federally Enforceable Through Title V Permit
- 20. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit
- 21. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4702] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-348-3-15 (continued)

- 22. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4702] Federally Enforceable Through Title V Permit
- 23. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
- 24. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702] Federally Enforceable Through Title V Permit
- 25. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
- 26. The engine shall be operated and maintained in proper operating condition according to the manufacturer's specifications. [District Rule 4702] Federally Enforceable Through Title V Permit
- 27. The engine shall be operated such that the O2 sensor output voltage is within 0.6 volts DC 1.0 volts DC as necessary to meet the air/fuel ratio setting. [40 Part CFR 64] Federally Enforceable Through Title V Permit
- 28. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 29. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 30. If the District or EPA determines that a Quality improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 31. The permittee shall record the O2 sensor reading (in millivolts) on a daily basis. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 32. The portable analyzer shall be calibrated in accordance with manufacturer guidelines and District policy SSP-1810. [District Rule 1081] Federally Enforceable Through Title V Permit
- 33. Upon detecting any excursion from the acceptable range of millivolt readings, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable. [40 CFR 64] Federally Enforceable Through Title V Permit
- 34. If the IC engine is fired on LPG, the permittee shall maintain annual records of the fuel supplier invoices for LPG and the corresponding certified sulfur content. [District Rule 2520] Federally Enforceable Through Title V Permit
- 35. Compliance with permit conditions in the Title V permit shall be deemed compliance with the applicable requirements of District Rule 4201. A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
- 36. Engine shall be equipped with an RPM indicator. [District Rule 2201] Federally Enforceable Through Title V Permit
- 37. Maximum engine speed shall not exceed 1000 rpm. [District Rule 2201] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-348-3-15 (continued)

- 38. The engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 39. The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 40. The engine's oil and filter shall be changed every 2,160 hours of operation or every 12 months, whichever comes first. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 41. The engine's spark plugs shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 42. The engine's hoses and belts shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 43. The permittee shall maintain monthly records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of action taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 44. The permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d of Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

PERMIT UNIT: S-348-4-12

EXPIRATION DATE: 10/31/2022

SECTION: 32 TOWNSHIP: 31S RANGE: 24E

EQUIPMENT DESCRIPTION:

778 HP NATURAL GAS FIRED IC ENGINE WITH LPG AS BACK-UP FUEL, UNIT A-5 EQUIPPED WITH NON-SELECTIVE CATALYTIC REDUCTION POWERING A WATER PUMP

PERMIT UNIT REQUIREMENTS

- 1. Particulate emissions shall not exceed 0.1 gr/dscf at the point of discharge. [District Rule 4201] Federally Enforceable Through Title V Permit
- 2. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Rule 407 (Kern)] Federally Enforceable Through Title V Permit
- 3. Unit shall be fired on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight, or on liquefied propane gas (LPG) with a sulfur content equal to or less than 0.008% by weight. [District Rules 4702 and 4801 and Rule 407 (Kern)] Federally Enforceable Through Title V Permit
- 4. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520] Federally Enforceable Through Title V Permit
- 5. If the engine is fired on natural gas that is not PUC-regulated, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM methods D1072, D3246, or D4084, or Double GC for H2S and mercaptans. [District Rule 2520] Federally Enforceable Through Title V Permit
- 6. The sulfur content of each delivery of liquefied petroleum gas being fired in the IC engine shall be determined using ASTM method D2784. An equivalent test method may be accepted with prior written District approval. [District Rule 2520] Federally Enforceable Through Title V Permit
- 7. If the engine is fired on natural gas that is not PUC-regulated, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520] Federally Enforceable Through Title V Permit
- 8. IC engine shall be equipped with a controller which readily indicates air/fuel ratio setting within tolerance limits as recommended by the catalyst system supplier. [District Rule 2201] Federally Enforceable Through Title V Permit
- 9. The engine shall be equipped with a positive crankcase ventilation (PCV) system or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
- 11. All exhaust emissions shall exit through catalytic converter. [District Rule 2201] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-348-4-12 (continued)

- 12. Emissions from this IC engine shall not exceed any of the following when fired on LPG: 11 ppmvd NOx @ 15% O2 or 0.15 g/bhp-hr, averaged over at least 15 minutes; 2000 ppmvd CO @ 15% O2 or 16.981 g/bhp-hr, averaged over at least 15 minutes; 125 ppmvd VOC @ 15% O2 or 0.606 g/bhp-hr, averaged over at least 15 minutes; 0.075 g-PM10/hp-hr; 0.011 g-SOx /hp-hr. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
- 13. Emissions from this IC engine shall not exceed any of the following when fired on PUC-quality natural gas: 11 ppmvd NOx @ 15% O2 or 0.15 g/bhp-hr, averaged over at least 15 minutes; 2000 ppmvd CO @ 15% O2 or 16.981 g/bhp-hr, averaged over at least 15 minutes; 125 ppmvd VOC @ 15% O2 or 0.606 g/bhp-hr, averaged over at least 15 minutes; 0.204 g-PM10/hp-hr; 0.0145 g-SOx /hp-hr. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
- 14. For reoccurring emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. NOx, CO and VOC concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702] Federally Enforceable Through Title V Permit
- 15. Source testing to measure natural gas-combustion NOx, CO and VOC emissions from this engine shall be conducted not less than once every 24 months. [District Rule 4702] Federally Enforceable Through Title V Permit
- 16. Source testing shall be District witnessed or authorized and conducted by an ARB certified testing contractor. [District Rule 1081] Federally Enforceable Through Title V Permit
- 17. Source testing for District Rule 4702 compliance shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 18. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 19. The following test methods shall be used: NOX (ppmv) EPA Method 7E or ARB Method 100; CO (ppmv) EPA Method 10 or ARB Method 100; stack gas oxygen EPA Method 3 or 3A or ARB Method 100; VOC (ppmv) EPA Method 25A or 25B, or ARB Method 100. EPA approved alternative test methods may also be used to satisfy the source testing requirements of this permit with prior written approval from the APCO. [District Rule 4702] Federally Enforceable Through Title V Permit
- 20. The permittee shall monitor and record the stack concentration of NOx, CO, and O2, using a portable emission monitor that meets District specifications, at least once every calendar quarter (in which a source test is not performed and the engine is operated) or, if the engine is operated less than 120 calendar days in a calendar year, at least once during that calendar year (in which a source test is not performed and the engine is operated). Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last calendar quarter. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702] Federally Enforceable Through Title V Permit
- 21. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-348-4-12 (continued)

- 22. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings evenly spaced out over the 15 consecutive-minute period. [District Rule 4702] Federally Enforceable Through Title V Permit
- 23. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4702] Federally Enforceable Through Title V Permit
- 24. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702] Federally Enforceable Through Title V Permit
- 25. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702] Federally Enforceable Through Title V Permit
- 26. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
- 27. The engine shall be operated and maintained in proper operating condition according to the manufacturer's specifications. [District Rule 4702] Federally Enforceable Through Title V Permit
- 28. The engine shall be operated such that the O2 sensor output voltage is within 0.6 volts DC 1.0 volts DC as necessary to meet the air/fuel ratio setting. [40 CFR 64] Federally Enforceable Through Title V Permit
- 29. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR 64.7] Federally Enforceable Through Title V Permit
- 30. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR 64.9] Federally Enforceable Through Title V Permit
- 31. If the District or EPA determines that a Quality Improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR 64.7 and 64.8] Federally Enforceable Through Title V Permit
- 32. The permittee shall record the O2 sensor reading (in millivolts) on a daily basis. [40 CFR 64.3] Federally Enforceable Through Title V Permit
- 33. The portable analyzer shall be calibrated in accordance with manufacturer guidelines and District policy SSP-1810. [District Rule 1081] Federally Enforceable Through Title V Permit
- 34. Upon detecting any excursion from the acceptable range of millivolt readings, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable. [40 CFR 64.7] Federally Enforceable Through Title V Permit
- 35. Operator shall maintain records of hours of operation when firing on propane. [District Rule 4701] Federally Enforceable Through Title V Permit
- 36. Operator shall maintain supplier invoices for each delivery of liquefied petroleum gas including the corresponding certified sulfur content for a period of at least five years. [District Rule 2520] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-348-4-12 (continued)

- 37. Compliance with permit conditions in the Title V permit shall be deemed compliance with the applicable requirements of SJVUAPCD Rule 4201, Kern County Rule 407, and the subsumed requirements of Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
- 38. The engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 39. The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- The engine's oil and filter shall be changed every 2,160 hours of operation or every 12 months, whichever comes first.
 [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 41. The engine's spark plugs shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 42. The engine's hoses and belts shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 43. The permittee shall maintain monthly records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of action taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 44. The permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d of Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

PERMIT UNIT: S-348-5-9

EXPIRATION DATE: 10/31/2022

SECTION: NE 5 TOWNSHIP: 31S RANGE: 25E

EQUIPMENT DESCRIPTION:

840 BHP WAUKESHA MODEL F3524 GSI NATURAL GAS AND LPG-FIRED IC ENGINE, A2-4 EQUIPPED WITH NON-SELECTIVE CATALYTIC REDUCTION POWERING A WATER PUMP

PERMIT UNIT REQUIREMENTS

- 1. Particulate emissions shall not exceed 0.1 gr/dscf at the point of discharge. [District Rule 4201] Federally Enforceable Through Title V Permit
- 2. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Rule 407 (Kern)] Federally Enforceable Through Title V Permit
- 3. Unit shall be fired on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight, or on liquefied propane gas (LPG) with a sulfur content equal to or less than 0.008% by weight. [District Rules 4702 and 4801 and Rule 407 (Kern)] Federally Enforceable Through Title V Permit
- 4. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520] Federally Enforceable Through Title V Permit
- 5. If the engine is fired on natural gas that is not PUC-regulated, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM methods D1072, D3246, or D4084, or Double GC for H2S and mercaptans. [District Rule 2520] Federally Enforceable Through Title V Permit
- 6. The sulfur content of each delivery of liquefied petroleum gas being fired in the IC engine shall be determined using ASTM method D2784. An equivalent test method may be accepted with prior written District approval. [District Rule 2520] Federally Enforceable Through Title V Permit
- 7. If the engine is fired on natural gas that is not PUC-regulated, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520] Federally Enforceable Through Title V Permit
- 8. IC engine shall be equipped with a controller which readily indicates air/fuel ratio setting within tolerance limits as recommended by the catalyst system supplier. [District Rule 2201] Federally Enforceable Through Title V Permit
- 9. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
- 10. All exhaust emissions shall exit through catalytic converter. [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. Emissions from this IC engine shall not exceed any of the following limits: 10.4 ppmvd NOx @ 15% O2 or 0.15 g/bhp-hr, averaged over at least 15 minutes; 68.4 ppmvd CO @ 15% O2 or 0.60 g/bhp-hr, averaged over at least 15 minutes; 30 ppmvd VOC @ 15% O2 or 0.15 g/bhp-hr, averaged over at least 15 minutes; 0.175 g-PM10/hp-hr; 0.012 g-SOx /hp-hr. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-348-5-9 (continued)

- 12. For reoccurring emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. NOx, CO and VOC concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702] Federally Enforceable Through Title V Permit
- 13. Source testing to measure natural gas-combustion NOx, CO and VOC emissions from this engine shall be conducted not less than once every 24 months. [District Rule 4702] Federally Enforceable Through Title V Permit
- 14. Source testing shall be District witnessed or authorized and conducted by an ARB certified testing contractor. [District Rule 1081] Federally Enforceable Through Title V Permit
- 15. Source testing for District Rule 4702 compliance shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 16. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 17. The following test methods shall be used: NOX (ppmv) EPA Method 7E or ARB Method 100; CO (ppmv) EPA Method 10 or ARB Method 100; stack gas oxygen EPA Method 3 or 3A or ARB Method 100; VOC (ppmv) EPA Method 25A or 25B, or ARB Method 100. EPA approved alternative test methods may also be used to satisfy the source testing requirements of this permit with prior written approval from the APCO. [District Rule 4702] Federally Enforceable Through Title V Permit
- 18. The permittee shall monitor and record the stack concentration of NOx, CO, and O2, using a portable emission monitor that meets District specifications, at least once every calendar quarter (in which a source test is not performed and the engine is operated) or, if the engine is operated less than 120 calendar days in a calendar year, at least once during that calendar year (in which a source test is not performed and the engine is operated). Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last calendar quarter. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702] Federally Enforceable Through Title V Permit
- 19. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit
- 20. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings evenly spaced out over the 15 consecutive-minute period. [District Rule 4702] Federally Enforceable Through Title V Permit
- 21. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4702] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-348-5-9 (continued)

- 22. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702] Federally Enforceable Through Title V Permit
- 23. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702] Federally Enforceable Through Title V Permit
- 24. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
- 25. The engine shall be operated and maintained in proper operating condition according to the manufacturer's specifications. [District Rule 4702] Federally Enforceable Through Title V Permit
- 26. The engine shall be operated such that the O2 sensor output voltage is within 0.6 volts DC 1.0 volts DC as necessary to meet the air/fuel ratio setting. [40 CFR 64] Federally Enforceable Through Title V Permit
- 27. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR 64.7] Federally Enforceable Through Title V Permit
- 28. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR 64.9] Federally Enforceable Through Title V Permit
- 29. If the District or EPA determines that a Quality Improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR 64.7 and 64.8] Federally Enforceable Through Title V Permit
- 30. The permittee shall record the O2 sensor reading (in millivolts) on a daily basis. [40 CFR 64.3] Federally Enforceable Through Title V Permit
- 31. The portable analyzer shall be calibrated in accordance with manufacturer guidelines and District policy SSP-1810. [District Rule 1081] Federally Enforceable Through Title V Permit
- 32. Upon detecting any excursion from the acceptable range of millivolt readings, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable. [40 CFR 64.7] Federally Enforceable Through Title V Permit
- 33. Operator shall maintain supplier invoices for each delivery of liquefied petroleum gas including the corresponding certified sulfur content for a period of at least five years. [District Rule 2520] Federally Enforceable Through Title V Permit
- 34. Compliance with permit conditions in the Title V permit shall be deemed compliance with the applicable requirements of SJVUAPCD Rule 4201, Kern County Rule 407, and the subsumed requirements of Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
- 35. The engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 36. The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- The engine's oil and filter shall be changed every 2,160 hours of operation or every 12 months, whichever comes first.
 [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-348-5-9 (continued)

- 38. The engine's spark plugs shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 39. The engine's hoses and belts shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 40. The permittee shall maintain monthly records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of action taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 41. The permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d of Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

PERMIT UNIT: S-348-6-4

EXPIRATION DATE: 10/31/2022

SECTION: NE5 TOWNSHIP: 31S RANGE: 25E

EQUIPMENT DESCRIPTION:

76 HP FORD MODEL ESG642 NATURAL GAS/PROPANE-FIRED EMERGENCY IC ENGINE POWERING AN ELECTRICAL GENERATOR (PUMP STATION A2)

PERMIT UNIT REQUIREMENTS

- 1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- 2. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kern County Rule 407 and District rule 4801] Federally Enforceable Through Title V Permit
- 3. NOx emissions shall not exceed 0.0003 lb/hp-hr or 0.136 g-NOx/hp-hr or 39.7 ppm @ 15% O2; SOX emissions shall not exceed 0.009 g-SOx/hp-hr; PM10 emissions shall not exceed 0.033 g-PM10/hp-hr; CO emissions shall not exceed 0.599 g-CO/hp-hr; VOC emissions shall not exceed 0.0599 g-VOC/hp-hr. [District NSR Rule] Federally Enforceable Through Title V Permit
- 4. This engine shall be equipped with an operational non-selective catalyst installed on the exhaust stack. [District NSR Rule] Federally Enforceable Through Title V Permit
- 5. This engine shall only be fired on PUC quality natural gas, LPG or propane. [District NSR Rule] Federally Enforceable Through Title V Permit
- 6. This engine shall be equipped with either a positive crankcase ventilation (PCV) system that recirculates crankcase emissions into the air intake system for combustion, or a crankcase emissions control device of at least 90% control efficiency. [District NSR Rule] Federally Enforceable Through Title V Permit
- 7. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 8. An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. An engine shall be considered to be an emergency standby engine if it is used to supply power while maintenance is performed or repairs are made to the primary power supply. [District Rule 4702] Federally Enforceable Through Title V Permit
- 9. This engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 100 hours per calendar year. [District Rule 4702 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 10. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, and the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.). For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702 and 2520, 9.4 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-348-6-4 (continued)

- 11. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702] Federally Enforceable Through Title V Permit
- 12. This engine shall not be used to produce power for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract. [District Rule 4702] Federally Enforceable Through Title V Permit
- 13. Compliance with permit conditions in the Title V permit shall be deemed compliance with the applicable requirements of District Rule 4201. A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
- 14. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 15. On and after October 19, 2013, the permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- On and after October 19, 2013, the engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 17. On and after October 19, 2013, the engine's oil and filter shall be changed every 500 hours of operation or every 12 months, whichever comes first. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 18. The permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d of Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- On and after October 19, 2013, the engine's air filter shall be inspected every 1,000 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 20. On and after October 19, 2013, the engine's hoses and belts shall be inspected every 500 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 21. On and after October 19, 2013, the permittee shall maintain monthly records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of action taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [District Rule 1070 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

ATTACHMENT C

Detailed Summary List of Facility Permits

SJVUAPCD SOUTHERN

Detailed Facility Report For Facility=348 and excluding Deleted Permits Sorted by Facility Name and Permit Number

WEST KERN WATE STATION A HWY 119 & CA AQU TAFT, CA 93268			FAC STAT TELE		S 348 A 6617633151		TYPE: TitleV EXPIRE ON: 10/31/2022 TOXIC ID: 60358 AREA: 6 / INSP. DATE: 03/24
PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-348-1-15	778 BHP ICE	3020-10 D	1	577.00	577.00	A	778 BHP NATURAL GAS/LPG FIRED IC ENGINE, UNIT A-2 (LIMITED TO MAXIMUM 610 BHP) EQUIPPED WITH NON-SELECTIVE CATALYTIC REDUCTION POWERING A WATER PUMP
S-348-2-15	778 BHP ICE	3020-10 D	1	577.00	577.00	A	778 BHP NATURAL GAS/LPG FIRED IC ENGINE, UNIT A-3 (LIMITED TO 610 BHP MAXIMUM) EQUIPPED WITH NON-SELECTIVE CATALYTIC REDUCTION POWERING A WATER PUMP
S-348-3-15	778 BHP ICE	3020-10 D	1	577.00	577.00	A	778 BHP NATURAL GAS/LPG FIRED IC ENGINE, UNIT A-4 (LIMITED TO MAXIMUM 610 BHP) EQUIPPED WITH NON-SELECTIVE CATALYTIC REDUCTION POWERING A WATER PUMP
S-348-4-12	778 BHP ICE	3020-10 D	1	577.00	577.00	A	778 HP NATURAL GAS FIRED IC ENGINE WITH LPG AS BACK-UP FUEL, UNIT A-5 EQUIPPED WITH NON-SELECTIVE CATALYTIC REDUCTION POWERING A WATER PUMP
S-348-5-9	840 BHP ICE	3020-10 E	1	723.00	723.00	A	840 BHP WAUKESHA MODEL F3524 GSI NATURAL GAS AND LPG- FIRED IC ENGINE, A2-4 EQUIPPED WITH NON-SELECTIVE CATALYTIC REDUCTION POWERING A WATER PUMP
S-348-6-4	76 HP ICE	3020-10 A	1	98.00	98.00	A	76 HP FORD MODEL ESG642 NATURAL GAS/PROPANE-FIRED EMERGENCY IC ENGINE POWERING AN ELECTRICAL GENERATOR (PUMP STATION A2)

Number of Facilities Reported: 1

1

7/11/23 9:14 am

ATTACHMENT D

Engine Source Test Results

1 Unit Total	Test T	racking	Periodic Test	Setup	Test E	quipment Details	Ì	est Result Details
Add New Unit Save Cancel 1 Unit Total Add New Unit Save Cancel sults For: STATION A A1-2 Sults For: STATION A A1-2 t Units Limit Result Failed 02 Correction (%) # Runs Description ppm 2000.0 658.0 3 3 ppm 11.0 0.4 3	Represen	tative Test ———						
I Unit Total sults For: STATION A A1-2 t Units Limit Result Failed 02 Correction (%) # Runs Description ppm 2000.0 658.0 3 3 3 ppm 11.0 0.4 3 3	Unit Identi	fication:	Description:			7	a	
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t Units Limit Result Failed 02 Correction (%) # Runs Description ppm 2000.0 658.0	1	1 Unit Total	-]		
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ppin 123.0 0.3 🔲 3								
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	VOC							

Description: Add New Unit Save Cancel Total Station & A1-3 Station & A1-3 Station & Besult Failed 02 Correction (%) # Runs Description Units Limit Result Failed 02 Correction (%) # Runs Description 0 2000.0 531.0 3 3 3	Test Tr	racking	Periodic Test	Setup	Test E	quipment Details	Ì	est Result Details
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Units Limit Result Failed 02 Correction (%) # Runs Description 0 2000.0 531.0 3		1 Unit Total	-]		
n 11.0 1.1 🗆 3	Pollutant	Units	Limit		Failed	02 Correction (%)	and the second	Description
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1 120.0 3.3 🔲 3	UX	ppm	11.0	1.1				
	0C	DDM	125.0	9.9			3	
	VOx	ppm	11.0	1.1				
	00	ppm	125.0	9.9			3	

Representative Test Description: STATION A A1-4	lestin	racking	Periodic Test	Setup	Test E	quipment Details	Ì	est Result Details
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	/0C	ppm	125.0	0.8			3	
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	Test T	racking	Periodic Test	Setup	Test E	quipment Details	ÌĪ	est Result Details
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