



NOV 09 2010

Joseph Miller  
West Kern Water District  
PO Box 1105  
Taft, CA 93268

**Re: Notice of Preliminary Decision - Title V Permit Renewal  
District Facility # S-353  
Project # S-1072124**

Dear Mr. Miller:

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 for its well field station in Taft, California.

The notice of preliminary decision for this project will be published approximately three days from the date of this letter. Please submit your written comments on this project within the 30-day comment period which begins on the date of publication of the public notice.

Thank you for your cooperation in this matter. If you have any questions regarding this matter, please contact Mr. Jim Swaney, Permit Services Manager, at (559) 230-5900.

Sincerely,

David Warner  
Director of Permit Services

**Attachments**

C: John Yoshimura, Permit Services Engineer

**Seyed Sadredin**  
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



NOV 09 2010

Gerardo C. Rios, Chief  
Permits Office (AIR-3)  
U.S. EPA - Region IX  
75 Hawthorne St.  
San Francisco, CA 94105

**Re: Notice of Preliminary Decision – Title V Permit Renewal  
District Facility # S-353  
Project # S-1072124**

Dear Mr. Rios:

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 for its well field station in Taft, California.

The notice of preliminary decision for this project will be published approximately three days from the date of this letter. Please submit your written comments on this project within the 45-day comment period which begins on the date of publication of the public notice.

Thank you for your cooperation in this matter. If you have any questions regarding this matter, please contact Mr. Jim Swaney, Permit Services Manager, at (559) 230-5900.

Sincerely,

David Warner  
Director of Permit Services

**Attachments**

C: John Yoshimura, Permit Services Engineer

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Executive Director/Air Pollution Control Officer

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NOV 09 2010

Mike Tollstrup, Chief  
Project Assessment Branch  
Air Resources Board  
P O Box 2815  
Sacramento, CA 95812-2815

**Re: Notice of Preliminary Decision - Title V Permit Renewal  
District Facility # S-353  
Project # S-1072124**

Dear Mr. Tollstrup:

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 for its well field station in Taft, California.

The notice of preliminary decision for this project will be published approximately three days from the date of this letter. Please submit your written comments on this project within the 30-day comment period which begins on the date of publication of the public notice.

Thank you for your cooperation in this matter. If you have any questions regarding this matter, please contact Mr. Jim Swaney, Permit Services Manager, at (559) 230-5900.

Sincerely,

David Warner  
Director of Permit Services

Attachments

C: John Yoshimura, Permit Services Engineer

**Seyed Sadredin**  
Executive Director/Air Pollution Control Officer

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34946 Flyover Court  
Bakersfield, CA 93308-9725  
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Bakersfield Californian

**NOTICE OF PRELIMINARY DECISION  
FOR THE PROPOSED RENEWAL OF  
THE FEDERALLY MANDATED OPERATING PERMIT**

NOTICE IS HEREBY GIVEN that the San Joaquin Valley Air Pollution Control District solicits public comment on the proposed renewal of the Federally Mandated Operating Permit to West Kern Water District for its well field station in Taft, California.

The District's analysis of the legal and factual basis for this proposed action, project #S-1072124, is available for public inspection at [http://www.valleyair.org/notices/public\\_notices\\_idx.htm](http://www.valleyair.org/notices/public_notices_idx.htm) and the District office at the address below. There are no emission changes associated with this proposed action. This will be the public's only opportunity to comment on the specific conditions of the proposed renewal of the Federally Mandated Operating permit. If requested by the public, the District will hold a public hearing regarding issuance of this renewed permit. For additional information, please contact Mr. Jim Swaney, Permit Services Manager, at (559) 230-5900. Written comments on the proposed renewed permit must be submitted within 30 days of the publication date of this notice to DAVID WARNER, DIRECTOR OF PERMIT SERVICES, SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT, 1990 E. GETTYSBURG AVE, FRESNO, CALIFORNIA 93726-0244.

# SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT

Proposed Title V Permit Renewal Evaluation  
West Kern Water District  
Facility # S-353

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**TITLE V PERMIT RENEWAL EVALUATION**  
**West Kern Water District**

**Engineer:** John Yoshimura  
**Date:** 8/17/10

**Facility Number:** S-353  
**Facility Name:** West Kern Water District  
**Mailing Address:** PO Box 1105  
Taft, CA 93268

**Contact Name:** Joseph Miller  
**Phone:** (661) 763-3151 ext. 129

**Responsible Official:** Jerry Pearson  
**Title:** General Manager

**Project # :** S-1072124  
**Deemed Complete:** 5/18/07

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**I. PROPOSAL**

West Kern Water District's previous Title V permit renewal was finalized on October 22, 2003. The Title V permit expired on October 31, 2007. 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 initial Title V permit.

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 is located at section 21, Township 30S, Range 25E, 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

#### Rules Updated

- District Rule 2020, Exemptions  
(amended September 21, 2006 ⇒ amended December 20, 2007)
- District Rule 2201, New and Modified Stationary Source Review Rule  
(adopted September 19, 1991 ⇒ amended December 18, 2008)
- District Rule 4001, New Source Performance Standards  
(amended September 17, 1997 ⇒ amended April 14, 1999)
- District Rule 4002, National Emission Standards for Hazardous Air Pollutants (amended May 18, 2000 ⇒ amended May 20, 2004)
- District Rule 4101, Visible Emissions  
(amended November 15, 2001 ⇒ amended February 17, 2005)
- District Rule 4601, Architectural Coatings  
(amended October 31, 2007 ⇒ amended December 17, 2009)
- District Rule 4701, Internal Combustion Engines  
(amended December 19, 2002 ⇒ amended August 21, 2003)
- District Rule 4702, Internal Combustion Engines – Phase 2  
(adopted August 21, 2003 ⇒ amended January 18, 2007)
- District Rule 8011, General Requirements  
(Adopted November 15, 2001 ⇒ amended August 19, 2004)

- District Rule 8021, Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities  
(adopted November 15, 2001 ⇒ amended August 19, 2004)
- District Rule 8031, Bulk Materials  
(adopted November 15, 2001 ⇒ amended August 19, 2004)
- District Rule 8041, Carryout and Trackout  
(adopted November 15, 2001 ⇒ amended August 19, 2004)
- District Rule 8051, Open Areas  
(adopted November 15, 2001 ⇒ amended August 19, 2004)
- District Rule 8061, Paved and Unpaved Roads  
(adopted November 15, 2001 ⇒ amended August 19, 2004)
- District Rule 8071, Unpaved Vehicle/Equipment Traffic Areas  
(adopted November 15, 2001 ⇒ amended September 16, 2004)
- 40 CFR Part 60, Subpart JJJJ, Standards for Performance for Stationary Spark Ignition Internal Combustion Engine  
(amended July 11, 2006)
- 40 CFR Part 61, Subpart M, National Emission Standard for Asbestos  
(amended November 9, 2007)
- 40 CFR Part 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Emissions (RICE) (amended January 18, 2008)
- 40 CFR Part 82, Subpart B and Subpart F, Stratospheric Ozone  
(amended June 8, 2008)

#### **Rules Not Updated**

- District Rule 1100, Equipment Breakdown (amended December 17, 1992)
- District Rule 1160, Emission Statements (adopted November 18, 1992)
- District Rule 2010, Permits Required (amended December 17, 1992)
- District Rule 2031, Transfer of Permits (amended December 17, 1992)
- District Rule 2040, Applications (amended December 17, 1992)
- District Rule 2070, Standards for Granting Applications (amended December 17, 1992)



- District Rule 2080, Conditional Approval (amended December 17, 1992)
- District Rule 2520, Federally Mandated Operating Permits (adopted June 15, 1995 ⇒ amended June 21, 2001 )
- District Rule 4201, Particulate Matter Concentration (amended December 17, 1992)
- District Rule 4202, Particulate Matter - Emission Rate (amended December 17, 1992)
- District Rule 4801, Sulfur Compounds (amended December 17, 1992)
- 40 CFR Part 64, Compliance Assurance Monitoring (CAM)

## 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 Updated

Title 17 CCR, Section 93115 – Airborne Toxic Control Measure (ATCM) for Stationary Compression-Ignition (CI) Engines (amended October 18, 2007)

Conditions 3 and 11 through 14 of permit unit S-353-5-3 are based on requirements of Title 17 CCR, Section 93115, and will therefore not be discussed any further

### B. Rules Not Updated

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

Condition 2 of permit unit S-353-4-4 and '-5-3 were added to ensure compliance with Rule 4102. Condition 42 of permit unit '-0-2 and condition 2 of permit unit '-1-10, '-2-10, '-3-6 are based on District Rule 4102 and will therefore not be discussed any further.

## VIII. PERMIT REQUIREMENTS

The purpose of this evaluation is to review changes to federally enforceable requirements; therefore, this compliance section serves to address rules that have been amended or added since the issuance of the initial Title V permit. This section will also address rules not adequately addressed in the initial Title V project.

The renewed PTOs were also revised, if applicable, by removing the county rule references for the counties other than the one the facility is actually located in or by removing all county references as obsolete due to a governing District rule contained in the SIP. The following updated conditions reflect correct references:

- Conditions 1, 2, 22 and 39 on the draft facility-wide PTO (S-353-0-2) and conditions 14 and 15 on permit S-353-3-6.

### A. District Rule 2020 - Exemptions

District Rule 2020 lists equipment which are specifically exempt from obtaining permits and specifies recordkeeping requirements to verify such exemptions. The amendments to this rule do not have any affect on current permit requirements and will therefore not be addressed in this evaluation.

### B. District Rule 2201 - New and Modified Stationary Source Review Rule

District Rule 2201 has been amended since this facility's initial Title V permit was issued. This Title V permit renewal does not constitute a modification per section 3.26, defined as an action including at least one of the following items:

- 1) Any change in hours of operation, production rate, or method of operation of an existing emissions unit, which would necessitate a change in permit conditions.
- 2) Any structural change or addition to an existing emissions unit which would necessitate a change in permit conditions. Routine replacement shall not be considered to be a structural change.
- 3) An increase in emissions from an emissions unit caused by a modification of the Stationary Source when the emissions unit is not subject to a daily emissions limitation.
- 4) Addition of any new emissions unit which is subject to District permitting requirements.
- 5) A change in a permit term or condition proposed by an applicant to obtain an exemption from an applicable requirement to which the source would otherwise be subject.

Therefore, the updated requirements of this rule are not applicable at this time.

**C. District Rule 4001 - New Source Performance Standards (NSPS)**

**40 CFR 60 Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines**

§60.4230(a)(1) through (a)(5) specify the stationary spark ignition (SI) internal combustion engines (ICE) subject to the provisions of this subpart. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.

Section (a)(1) applies to stationary SI ICE with a maximum engine power less than or equal to 19 kilowatt (KW) (25 horsepower (HP)) that are manufactured on or after July 1, 2008. Permit units S-353-1-10, '-2-10, '-3-6, '-4-4 and '-5-3 each have maximum engine power greater than 25 bhp. Therefore, this section does not apply.

Section (a)(2) applies to stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) that are gasoline fueled or that are rich-burn engines fueled by liquefied petroleum gas (LPG), where the date of manufacture is:

- (i) On or after July 1, 2008; or
- (ii) On or after January 1, 2009, for emergency engines.

Permit unit S-353-4-4 is a rich-burn engine fueled by natural gas and LPG with a maximum engine rating over 25 bhp, but was manufactured before July 1, 2008. Permit unit '-1-10, '-2-10 and '-5-3 are rich-burn engines fueled by natural gas and propane. Permit unit '-3-6 is a lean-burn engine fueled by natural gas. Therefore, this section does not apply.

Section (a)(3) applies to stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) that are not gasoline fueled and are not rich burn engines fueled by LPG, where the manufacturer participates in the voluntary manufacturer certification program described in this subpart and where the date of manufacture is:

- (i) On or after July 1, 2007, for engines with a maximum engine power greater than or equal to 500 HP (except lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP);

- (ii) On or after January 1, 2008, for lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP;
- (iii) On or after July 1, 2008, for engines with a maximum engine power less than 500 HP; or
- (iv) On or after January 1, 2009, for emergency engines.

Permit units S-353-1-10 and '-2-10 have a maximum engine power less than 500 bhp, but were manufactured before July 1, 2008. Permit unit '-3-6 is a lean-burn engine with a maximum engine power greater than 500 bhp and less than 1,350 bhp, but was manufactured before January 1, 2008. Permit unit '-4-4 has a maximum engine power greater than 500 bhp, but was manufactured before July 1, 2008. Permit unit '-5-3 is an emergency engine, but was manufactured before January 1, 2009. Therefore, this section does not apply.

Section (a)(4) applies to stationary SI ICE that commence construction after June 12, 2006, where the stationary SI ICE are manufactured:

- (i) On or after July 1, 2007, for engines with a maximum engine power greater than or equal to 500 HP (except lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP);
- (ii) On or after January 1, 2008, for lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP;
- (iii) On or after July 1, 2008, for engines with a maximum engine power less than 500 HP; or
- (iv) On or after January 1, 2009, for emergency engines with a maximum engine power greater than 19 KW (25 HP).

Permit units S-353-1-10 and '-2-10 have a maximum engine power rating less than 500 bhp and were manufactured before July 1, 2008. Permit unit '-3-6 is a lean-burn engine with a maximum engine power greater than 500 bhp and less than 1,350 bhp, but was manufactured before January 1, 2008. Permit unit '-4-4 has a maximum engine power greater than 500 bhp, but was manufactured before July 1, 2007. Permit unit '-5-3 is an emergency engine, but was manufactured before January 1, 2009. Therefore, this section does not apply.

Section (a)(5) applies to stationary SI ICE that commence modification or reconstruction after June 12, 2006. Permit units S-353-1-10, '-2-10, '-3-6, '-4-4 and '-5-3 have not commenced modification or reconstruction after June 12, 2006. Therefore, this section does not apply.

Permit units S-353-1-10, '-2-10, '-3-6, '-4-4 and '-5-3 do not meet any of the applicability requirements listed in §60.4230(a)(1) through (a)(5). Therefore, the requirements of 40 CFR 60 Subpart JJJJ does not apply to these engines.

**D. District Rule 4002 – National Emission Standards for Hazardous Air Pollutants**

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

Subpart ZZZZ 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.

§63.6585(b) states, "A major source of HAP emissions is a plant site that emits or has the potential to emit any single HAP at a rate of 10 tons (9.07 megagrams) or more per year or any combination of HAP at a rate of 25 tons (22.68 megagrams) or more per year, except that for oil and gas production facilities, a major source of HAP emissions is determined for each surface site."

§63.6585(c) states, "An area source of HAP emissions is a source that is not a major source."

The facility is not a major source as defined in §63.6585(b). Therefore, this facility is an area source of HAP emissions.

§63.6590(a) states, "An affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand."

§63.6590(a)(1) defines the criteria for an existing stationary RICE as follows:

- (i) For stationary RICE with a site rating of more than 500 brake horsepower (HP) located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before December 19, 2002.

- (ii) For stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.
- (iii) For stationary RICE located at an area source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.
- (iv) A change in ownership of an existing stationary RICE does not make that stationary RICE a new or reconstructed stationary RICE.

This facility is an area source of HAP emissions. Permit units S-353-1-10, '-2-10, '-3-6, '-4-4 and '-5-3 at this facility have not commenced construction or reconstruction on or after June 12, 2006. Therefore, the engines at this facility meet the definition of an existing stationary RICE as defined in §63.6590(a)(1)(iii).

§63.6590(b)(3) states that an affected source which meets either of the criteria in paragraphs (b)(1)(i) through (ii) of this section does not have to meet the requirements of this subpart and of subpart A of this part except for the initial notification requirements of §63.6645(f). This criteria is summarized as follows:

A stationary RICE which is an existing spark ignition 4 stroke rich burn (4SRB) stationary RICE located at an area source of HAP emissions; an existing spark ignition 4SRB stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions; an existing spark ignition 2 stroke lean burn (2SLB) stationary RICE; an existing spark ignition 4 stroke lean burn (4SLB) stationary RICE; an existing compression ignition emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions; an existing spark ignition emergency or limited use stationary RICE; an existing limited use stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions; an existing stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis; or an existing stationary residential, commercial, or institutional emergency stationary RICE located at an area source of HAP emissions, does not have to meet the requirements of this subpart and of subpart A of this part. No initial notification is necessary.

Permit units S-353-1-10, '-2-10 and '-4-4 are existing spark ignition 4SRB stationary RICE located at an area source of HAP emissions, permit unit '-3-6 is an existing spark ignition 4SLB stationary RICE, and permit unit '-5-3 is an existing spark ignition emergency stationary RICE. Therefore, these engines

do not have to meet the requirements of this subpart and of subpart A of this part, and no initial notification is necessary.

**E. District Rule 4101 - Visible Emissions**

District Rule 4101 has been submitted to the EPA to replace SIP approved Rule 401 (all counties of the SJVUAPCD). EPA made a preliminary determination that District Rule 4101 is "more stringent" than the county versions previously referenced, per correspondence dated August 20, 1996.

Section 5.0 prohibits the discharge of any air contaminant for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker in shade as that designated as No. 1 on the Ringelmann Chart; or is of such opacity as to obscure an observer's view to a degree equal to or greater than the smoke described in Section 5.1 of Rule 4101. Condition 22 of permit S-353-0-2, condition 1 of permits '-1-10, '-2-10, '-3-6, '-4-4 and condition 2 of permit '-5-3 ensure compliance.

**F. District Rule 4601 - Architectural Coatings**

The latest version of District Rule 4601 (amended 12/17/09) has not been SIP approved. Attachment C contains the streamlining of the SIP approved District Rule 4601 (10/31/01) to the current District Rule 4601 to show the current rule is as stringent if not more than the SIP approved version. Conditions 23 through 25 on the facility wide permit (S-353-0-2) demonstrate compliance with the requirements of the latest version of this rule.

**G. District Rule 4701 - Internal Combustion Engines - Phase 1**

The purpose of this rule is to limit the emissions of nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), and volatile organic compounds (VOC) from internal combustion engines. Except as provided in Section 4.0, the provisions of this rule apply to any internal combustion engine, rated greater than 50 bhp, that requires a Permit to Operate (PTO).

There are three natural-gas/propane fired IC engines (permit units S-353-1-10, '-2-10 and '-5-3), one natural gas/LPG fired IC engine ('-4-4) and one natural gas-fired IC engine ('-3-6) permitted at West Kern Water District. Pursuant to Section 2.0 of District Rule 4701, the engines are subject to District Rule 4701 - *Internal Combustion Engines - Phase 1*. In addition, the engines are subject to District Rule 4702 - *Internal Combustion Engines - Phase 2*.

The five IC engines are in compliance with the emissions limits listed in Table 1, Section 5.1 of District Rule 4702 and with all other requirements from District Rule 4702. Since the emissions limits of District Rule 4702 and all other requirements are equivalent or more stringent than District Rule 4701 requirements, compliance with 4702 rule requirements will satisfy requirements of District Rule 4701.

Therefore, the five permitted IC engines comply with District Rule 4701 requirements and no further discussion is required.

**H. District Rule 4702 – Internal Combustion Engines – Phase 2**

The purpose of this rule is to limit the emissions of nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), and volatile organic compounds (VOC) from spark-ignited internal combustion engines.

This rule applies to any spark-ignited internal combustion engine with a rated brake horsepower greater than 50 horsepower and that requires a Permit-to-Operate (PTO).

Section 5.1 requires that the owner of an internal combustion engine shall not operate it in such a manner that results in emissions exceeding the limits in the Engine Emission Limits table below for the appropriate engine type, according to the compliance schedule listed in Section 7.0. An engine shall be restricted by permit condition to emissions limits, in ppmv (corrected to 15% oxygen on a dry basis), that meet or exceed the following applicable emission limits pursuant to Section 5.1 or Section 8.2.

Rule 4702 Emission Limits			
Engine Type	NO <sub>x</sub> Emission Limit (ppmv @ 15% O <sub>2</sub> , dry)	CO Emission Limit (ppmv @ 15% O <sub>2</sub> , dry)	VOC Emission Limit (ppmv @ 15% O <sub>2</sub> , dry)
1. c. Rich Burn, All Other Engine	25 ppmv or 96% reduction	2,000 ppmv	250 ppmv
2. b. Lean Burn, All Other Engine	65 ppmv or 90% reduction	2,000 ppmv	750 ppmv

**S-353-1-10 (Rich-burn)**

- the proposed NO<sub>x</sub> emission factor is 25 ppmvd @ 3% O<sub>2</sub> (0.303 g/hp-hr).
- the proposed CO emission factor is 2,000 ppmvd @ 3% O<sub>2</sub> (14.779 g/hp-hr).



- the proposed VOC emission factor is 125 ppmvd @ 3% O<sub>2</sub> (0.528 g/hp-hr).

**S-353-2-10 (Rich-burn)**

- the proposed NO<sub>x</sub> emission factor is 25 ppmvd @ 3% O<sub>2</sub> (0.303 g/hp-hr).
- the proposed CO emission factor is 2,000 ppmvd @ 3% O<sub>2</sub> (14.779 g/hp-hr).
- the proposed VOC emission factor is 125 ppmvd @ 3% O<sub>2</sub> (0.528 g/hp-hr).

**S-353-3-6 (Lean-burn)**

- the proposed NO<sub>x</sub> emission factor is 65 ppmvd @ 3% O<sub>2</sub> (0.777 g/hp-hr).
- the proposed CO emission factor is 642 ppmvd @ 3% O<sub>2</sub> (2.65 g/hp-hr).
- the proposed VOC emission factor is 350 ppmvd @ 3% O<sub>2</sub> (1.455 g/hp-hr).

**S-353-4-4 (Rich-burn)**

- the proposed NO<sub>x</sub> emission factor is 10.4 ppmvd @ 3% O<sub>2</sub> (0.15 g/hp-hr).
- the proposed CO emission factor is 68.4 ppmvd @ 3% O<sub>2</sub> (0.6 g/hp-hr).
- the proposed VOC emission factor is 30 ppmvd @ 3% O<sub>2</sub> (0.15 g/hp-hr).

Therefore, continued compliance with Section 5.1 of District Rule 4702 is expected.

A permit condition listing the emissions limits will be listed on permit as shown in the DEL section above.

Section 5.2 requires that all continuous emission monitoring systems (CEMS) emissions measurements shall be averaged over a period of 15 consecutive minutes. Any 15-consecutive minute block average CEMS measurement exceeding the applicable emission limits of this rule shall constitute a violation of this rule. Permit units S-353-1-10, '2-10, '3-6 and '4-4 do not have a CEMS installed; therefore this section of the Rule is not applicable.

Section 5.6 requires that the owner of an engine (excluding those engines subject to Section 4.2 or Section 4.3 unless otherwise specified) subject to the requirements of this rule meet the following requirements:

For each engine with a rated brake horsepower of 1,000 hp or greater and which is permitted to operate more than 2,000 hours per calendar year, or with an external emission control device, shall either install, operate, and maintain continuous monitoring equipment for NO<sub>x</sub>, CO, and oxygen, as identified in Rule 1080 (Stack Monitoring), or install, operate, and maintain APCO-approved alternate monitoring. The monitoring system may be a continuous emissions monitoring system (CEMS), a parametric emissions

monitoring system (PEMS), or an alternative monitoring system approved by the APCO. APCO-approved alternate monitoring shall consist of one or more of the following:

- Periodic NO<sub>x</sub> and CO emission concentrations,
- Engine exhaust oxygen concentration,
- Air-to-fuel ratio,
- Flow rate of reducing agents added to engine exhaust,
- Catalyst inlet and exhaust temperature,
- Catalyst inlet and exhaust oxygen concentration,
- Other operational characteristics.

The applicant has chosen to meet this section of the Rule by proposing a pre-approved alternate emissions monitoring plan A for engines with and without external controls. Plan A for engines with external controls specifies that the permittee perform periodic NO<sub>x</sub>, CO, and O<sub>2</sub> emissions concentrations as specified in District Policy SSP-1810, dated 4/29/04. Therefore, the following condition will be listed on permits S-353-1-10, '-2-10 and '-4-4 to ensure compliance:

- {3205} The permittee shall monitor and record the stack concentration of NO<sub>x</sub>, CO, and O<sub>2</sub> at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. 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 month. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702]

Plan A for engines without external controls specifies that the permittee perform periodic O<sub>2</sub> emissions concentrations as specified in District Policy SSP-1810, dated 4/29/04. The following condition is listed on permit S-353-3-6 and continued compliance is expected:

- The permittee shall monitor and record the stack concentration of O<sub>2</sub> at least once every month using a portable emission monitor that meets District specifications. [In-stack O<sub>2</sub> monitors may be allowed if approved by the APCO.] 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 1 day of restarting the engine unless monitoring has been performed within the last month. [District Rule 4701, 5.4, District Rule 4702, 5.6]

Section 5.6.6 requires that for each engine, including an engine subject to Section 4.2, install and operate a nonresettable fuel meter and a nonresettable elapsed operating time meter. In lieu of installing a nonresettable fuel meter, the owner or operator may use an alternative device, method, or technique in determining monthly fuel consumption provided that the alternative is approved by the APCO. The owner or operator shall maintain these required meters in proper operating condition. The fuel meter shall be calibrated periodically per the recommendations of the manufacturer. The engines permitted under S-353-1-10, '-2-10, and '-3-6 already have a nonresettable fuel meter and a nonresettable elapsed operating time meter installed. Permit unit '-4-4 will need to install a nonresettable fuel meter and a nonresettable elapsed operating time meter to be in compliance with this section. Therefore, the following condition will be included to ensure compliance:

- {3377} This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702]

Section 5.6.7 requires that for each engine, the permittee shall implement the Inspection and Monitoring (I&M) plan submitted to and approved by the APCO pursuant to Section 6.5.

Section 5.6.8 requires that for each engine, the operator collect data through the I&M plan in a form approved by the APCO.

Section 5.6.9 requires that each engine, use a portable NO<sub>x</sub> analyzer to take NO<sub>x</sub> emission readings to verify compliance with the emission requirements of Section 5.1 or Section 8.2 during each calendar quarter in which a source test is not performed. All emission readings shall be taken with the engine 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. All NO<sub>x</sub> emissions readings shall be reported to the APCO in a manner approved by the APCO. NO<sub>x</sub> emission readings taken pursuant to this section 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. The following condition is already listed on permits S-353-1-10, '-2-10, '-3-6; the condition will be placed on permit '-4-4 to ensure compliance:

- {2994} 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 Rules 4701 and 4702]

Section 6.1 requires that the owner of an engine to submit to the APCO an emission control plan of all actions to be taken to satisfy the emission requirements of Section 5.1 and the compliance schedules of Section 7.0. West Kern Water District has already satisfied the requirement.

Section 6.2 requires that except for engines subject to Section 4.0, the owner of an engine subject to the requirements of this rule shall maintain an engine operating log to demonstrate compliance with this rule. This information shall be retained for a period of at least five years, shall be readily available, and be made available to the APCO upon request. The engine operating log shall include, on a monthly basis, the following information:

- Total hours of operation,
- Type and quantity (cubic feet of gas or gallons of liquid) of fuel used,
- Maintenance or modifications performed,
- Monitoring data,
- Compliance source test results, and
- Any other information necessary to demonstrate compliance with this rule.

The following condition is already listed on permits S-353-1-10, '-2-10 and '-3-6; the condition will be placed on permit unit '-4-4 to ensure compliance:

- {3211} 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 and quantity (cubic feet of gas or gallons of liquid) of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rules 4701 and 4702]

Section 6.2.2 requires that the data collected pursuant to the requirements of Section 5.6 shall be maintained for at least five years, shall be readily

available, and made available to the APCO upon request. Therefore, the following condition will be placed on permits S-353-1-10, '-2-10, '-3-6 and '-4-4 to ensure compliance:

- {3213} All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 4701 and 4702]

Section 6.3 requires that the owner of an engine subject to the emission limits in Section 5.1 or the requirements of Section 8.2, shall:

Demonstrate compliance with applicable limits by the applicable date specified in Section 7.6 and at least once every 24 months thereafter, in accordance with the test methods in Section 6.4.

Conduct emissions source testing with the engine operating either at conditions representative of normal operations or conditions specified in the Permit-to-Operate. For emissions source testing performed pursuant to Section 6.3.1 for the purpose of determining compliance with an applicable standard or numerical limitation, the arithmetic average of three (3) 30-consecutive-minute test runs shall apply. If two (2) of three (3) runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. VOC shall be reported as methane. VOC, NO<sub>x</sub>, and CO concentrations shall be reported in ppmv, corrected to 15 percent oxygen. For engines that comply with a percent reduction limit in Table 1, the percent reduction of NO<sub>x</sub> emissions shall also be reported.

In addition to other information, the source test protocol shall describe which critical parameters will be measured and how the appropriate range for these parameters shall be established. The range for these parameters shall be incorporated into the I&M plan.

The following conditions will be listed on permits S-353-1-10, '-2-10 and '-4-4 to ensure compliance:

- {3207} Source testing to measure natural gas-combustion NO<sub>x</sub>, CO, and VOC emissions from this unit shall be measured not less than once every 24 months. [District Rules 4701 and 4702]
- {3208} 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 Rules 4701 and 4702]

Section 6.3.5 states that engines fired exclusively with PUC quality natural gas shall not be subject to the reoccurring source test requirements for VOC emissions. Permit unit S-353-3-6 is fired exclusively on PUC quality natural gas, therefore, the following condition will be listed on permit '-3-6.

- {3207} Source testing to measure natural gas-combustion NO<sub>x</sub> and CO emissions from this unit shall be measured not less than once every 24 months. [District Rules 4701 and 4702]

In addition, a permit condition will be placed on permits S-353-1-10, '-2-10, '-3-6 and '-4-4 as follows:

- {3209} For 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. VOC emissions shall be reported as methane. VOC, NO<sub>x</sub>, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rules 4701 and 4702]

Section 6.4 requires that the compliance with the requirements of Section 5.0 shall be determined in accordance with the following test procedures or any other method approved by EPA and the APCO:

- Oxides of nitrogen - EPA Method 7E, or ARB Method 100.
- Carbon monoxide - EPA Method 10, or ARB Method 100.
- Stack gas oxygen - EPA Method 3 or 3A, or ARB Method 100.
- Volatile organic compounds - EPA Method 25A or 25B, or ARB Method 100.
- Operating horsepower determination - any method approved by EPA and the APCO.

The following condition will be listed on the permits to ensure compliance:

The following condition will be listed on permits S-353-1-10, '-2-10, '-3-6 and '-4-4 to ensure compliance:

- {3210} The following test methods shall be used: NO<sub>x</sub> (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, and VOC (ppmv) - EPA Method 25A or 25B, ARB Method 100 or other District approved test method. [District Rules 1081, 4701, and 4702]

Section 6.5 requires that the owner of an engine subject to the emission limits in Section 5.1 or the requirements of Section 8.2, shall submit to the APCO for approval, an I&M plan that specifies all actions to be taken to satisfy the following requirements and the requirements of Section 5.6. The actions to be identified in the I&M plan shall include, but are not limited to, the following:

Section 6.5.2 specifies procedures requiring the owner or operator to establish ranges for control equipment parameters, engine operating parameters, and engine exhaust oxygen concentrations that source testing has shown result in pollutant concentrations within the rule limits.

Section 6.5.3 specifies procedures for monthly inspections as approved by the APCO. The applicable control equipment parameters and engine operating parameters will be inspected and monitored monthly in conformance with a regular inspection schedule listed in the I&M plan. The alternate monitoring program was implemented to ensure compliance with Sections 6.5.1 and 6.5.2 of the Rule. The following condition is already listed on permits S-353-1-10, '-2-10 and '-3-6; the condition will be placed on permit '-4-4 to ensure compliance:

- {3205} The permittee shall monitor and record the stack concentration of NO<sub>x</sub>, CO, and O<sub>2</sub> at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. 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 month. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702]

Section 6.5.4 specifies procedures for the corrective actions on the noncompliant parameter(s) that the owner or operator will take when an engine is found to be operating outside the acceptable range for control equipment parameters, engine operating parameters, and engine exhaust NO<sub>x</sub>, CO, VOC, or oxygen concentrations.

Section 6.5.5 specifies procedures for the owner or operator to notify the APCO when an engine is found to be operating outside the acceptable range for control equipment parameters, engine operating parameters, and engine exhaust NO<sub>x</sub>, CO, VOC, or oxygen concentrations.

The following condition is already listed on permits S-353-1-10, '-2-10, '-3-6 and '-4-4, therefore, continued compliance with this section is expected:

- {2993} If either the NO<sub>x</sub> or CO concentrations corrected to 15% O<sub>2</sub>, 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 the performing the notification and testing required by this condition. [District Rules 4701 and 4702]

Section 6.5.6 specifies procedures for preventive and corrective maintenance performed for the purpose of maintaining an engine in proper operating condition. The following condition is already listed on permits S-353-1-10, '-2-10 and '-3-6; the condition will be placed on permit '-4-4 to ensure compliance:

- {3202} This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified on the Inspection and Monitoring (I&M) plan submitted to the District. [District Rule 4702]

Section 6.5.7 specifies procedures and a schedule for using a portable NO<sub>x</sub> analyzer to take NO<sub>x</sub> emission readings pursuant to Section 5.6.9. The following condition is already listed permits S-353-1-10, '-2-10 and '-3-6; the condition will be placed on permit '-4-4 to ensure compliance:

- {2994} 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 Rules 4701 and 4702]

Section 6.5.8 specifies procedures for collecting and recording required data and other information in a form approved by the APCO including, but not limited to, data collected through the I&M plan and the monitoring systems described in Sections 5.6.1 and 5.6.2. Data collected through the I&M plan shall have retrieval capabilities as approved by the APCO. West Kern Water District has already proposed an alternate monitoring program that will ensure compliance with this Section of the Rule. The following condition is already listed on permits S-353-1-10, '-2-10, '-3-6 and '-4-4 and continued compliance is expected:

- {2995} The permittee shall maintain records of: (1) the date and time of NO<sub>x</sub>, CO, and O<sub>2</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NO<sub>x</sub> and CO concentrations corrected to 15% O<sub>2</sub>, (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 Rules 4701 and 4702]

Section 6.5.9 specifies procedures for revising the I&M plan. The I&M plan shall be updated to reflect any change in operation. The I&M plan shall be updated prior to any planned change in operation. An engine owner that changes significant I&M plan elements must notify the District no later than seven days after the change and must submit an updated I&M plan to the APCO no later than 14 days after the change for approval. The date and time of the change to the I&M plan shall be recorded in the engine operating log. For new engines and modifications to existing engines, the I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit-to-Operate. The owner of an engine may request a change to the I&M plan at any time. The following condition is already listed on permits S-353-1-10, '-2-10 and '-3-6; the condition will be placed on permit '-4-4 to ensure compliance:

- {3212} 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]

Section 7.6 requires that the owner of an engine subject to the requirements of this rule not operate the engine beyond the compliance dates outlined in the compliance schedule. The conditions listed above ensure the engines are in compliance with all the requirements of Rule 4702.

Section 8.0 allows that an owner may comply with the NO<sub>x</sub> emission requirements of Section 5.1 for a group of engines by meeting the requirements in this Rule. An owner that is subject to the requirements below shall also comply with all the applicable requirements of Sections 5.0, 6.0, and 7.0. An engine that is not subject to Section 5.1 is not eligible for inclusion in an AECF.

The engines are already in compliance. Therefore, this Section of the Rule is not applicable to the engine involved with this project.

### **S-353-5-3**

The purpose of this rule is to limit the emissions of nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), and volatile organic compounds (VOC) from internal combustion engines.

This rule applies to any internal combustion engine with a rated brake horsepower greater than 50 horsepower.

Pursuant to Section 4.3, except for the requirements of Section 6.2.3, the requirements of this rule shall not apply to an internal combustion engine that meets the following conditions:

- 1) The engine is operated exclusively to preserve or protect property, human life, or public health during a disaster or state of emergency, such as a fire or flood, and
- 2) Except for operations associated with Section 4.3.1.1, the engine is limited to operate no more than 100 hours per calendar year as determined by an operational nonresettable elapsed operating time meter, for periodic maintenance, periodic readiness testing, and readiness testing during and after repair work of the engine, and
- 3) The engine is operated with a nonresettable elapsed operating time meter. In lieu of installing a nonresettable time meter, the owner of an engine may use an alternative device, method, or technique, in determining operating time provided that the alternative is approved by the APCO. The owner of the engine shall properly maintain and operate the time meter or alternative device in accordance with the manufacturer's instructions.

Therefore, the emergency IC engine involved with this project will only have to meet the requirements of Section 6.2.3 of this Rule.

Section 6.2.3 requires that an owner claiming an exemption under Section 4.2 or Section 4.3 shall maintain annual operating records. This information shall be retained for at least five years, shall be readily available, and submitted to the APCO upon request and at the end of each calendar year in a manner and form approved by the APCO. Therefore, the following conditions will be placed on permit unit S-353-5-3 to ensure compliance:

- This engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. For testing purposes, the engine shall only be operated the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 - "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems", 1998 edition. Total hours of operation for all maintenance, testing, and required regulatory purposes shall not exceed 100 hours per calendar year. [District Rule 4702 and 17 CCR 93115] Y
- The permittee shall maintain monthly records of hours of emergency and non-emergency operation. Records shall include the date, the number of hours of operation, and the purpose of the operation (e.g., 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 17 CCR 93115] Y
- The permittee shall maintain monthly records of the type of fuel purchased [District Rule 4702 and 17 CCR 93115]
- All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702 and 17 CCR 93115] Y
- {3403} This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702 and 17 CCR 93115] N
- {3807} 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.  
[District Rule 4702]

**I. District Rule 8011 - General Requirements**

The purpose of Regulation VIII (Fugitive PM10 Prohibitions) is to reduce ambient concentrations of fine particulate matter (PM10) by requiring actions to prevent, reduce or mitigate anthropogenic fugitive dust emissions. The Rules contained in this Regulation have been developed pursuant to United States Environmental Protection Agency guidance for Serious PM10 Nonattainment Areas. The rules are applicable to specified anthropogenic fugitive dust sources. Fugitive dust contains PM10 and particles larger than PM10. Controlling fugitive dust emissions when visible emissions are detected will not prevent all PM10 emissions, but will substantially reduce PM10 emissions.

The provisions of this rule are applicable to specified outdoor fugitive dust sources. The definitions, exemptions, requirements, administrative requirements, recordkeeping requirements, and test methods set forth in this rule are applicable to all Rules under Regulation VIII (Fugitive PM10 Prohibitions) of the Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District.

Conditions 29 through 34 of permit unit S-353-0-2 ensure compliance.

**J. District Rule 8021 - Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities**

The purpose of this rule is to limit fugitive dust emissions from construction, demolition, excavation, extraction, and other earthmoving activities.

This rule applies to any construction, demolition, excavation, extraction, and other earthmoving activities, including, but not limited to, land clearing, grubbing, scraping, travel on site, and travel on access roads to and from the site. This rule also applies to the construction of new landfill disposal sites or modification to existing landfill disposal sites prior to commencement of landfilling activities.

Section 5.0 requires that no person shall perform any construction, demolition, excavation, extraction, or other earthmoving activities unless the appropriate requirements in sections 5.1 and 5.2 are sufficiently implemented to limit VDE to 20% opacity. In addition to the requirements of this rule, a person shall comply with all other applicable requirements of Regulation VIII.

Condition 29 of permit unit S-353-0-2 ensures compliance.

**K. District Rule 8031 - Bulk Materials**

The purpose of this rule is to limit fugitive dust emissions from the outdoor handling, storage, and transport of bulk materials.

This rule applies to the outdoor handling, storage, and transport of any bulk material.

Section 5.0 requires that no person shall perform any outdoor handling, storage, and transport of bulk materials unless the appropriate requirements in Table 8031-1 of this rule are sufficiently implemented to limit VDE to 20% opacity or to comply with the conditions for a stabilized surface as defined in Rule 8011. In addition to the requirements of this rule, a person shall comply with all other applicable requirements of Regulation VIII.

Condition 30 of permit unit S-353-0-2 ensures compliance.

**L. District Rule 8041 - Carryout and Trackout**

The purpose of this rule is to limit fugitive dust emissions from carryout and trackout.

This rule applies to all sites that are subject to Rules 8021 (Construction, Demolition, Excavation, Extraction, and other Earthmoving Activities), 8031 (Bulk Materials), and 8071 (Unpaved Vehicle and Equipment Traffic Areas) where carryout or trackout has occurred or may occur.

Section 5.0 requires that an owner/operator shall sufficiently prevent or cleanup carryout and trackout as specified in sections 5.1 through 5.8. In addition to the requirements of this rule, a person shall comply with all other applicable requirements of Regulation VIII. The use of blower devices, or dry rotary brushes or brooms, for removal of carryout and trackout on public roads is expressly prohibited. The removal of carryout and trackout from paved public roads does not exempt an owner/operator from obtaining state or local agency permits which may be required for the cleanup of mud and dirt on paved public roads.

Condition 31 of permit unit S-353-0-2 ensures compliance.

**M. District Rule 8051 - Open Areas**

The purpose of this rule is to limit fugitive dust emissions from open areas.

This rule applies to any open area having 3.0 acres or more of disturbed surface area, that has remained undeveloped, unoccupied, unused, or vacant for more than seven days.

Section 5.0 requires that whenever open areas are disturbed or vehicles are used in open areas, the owner/operator shall implement one or a combination of control measures indicated in Table 8051-1 to comply with the conditions of a stabilized surface at all times and to limit VDE to 20% opacity. In addition to the requirements of this rule, a person shall comply with all other applicable requirements of Regulation VIII.

Condition 32 of permit unit S-353-0-2 ensures compliance.

**N. District Rule 8061 - Paved and Unpaved Roads**

The purpose of this rule is to limit fugitive dust emissions from paved and unpaved roads by implementing control measures and design criteria.

This rule applies to any new or existing public or private paved or unpaved road, road construction project, or road modification project.

Condition 33 of permit unit S-353-0-2 ensures compliance.

**O. District Rule 8071 - Unpaved Vehicle/Equipment Traffic Area**

The purpose of this rule is to limit fugitive dust emissions from unpaved vehicle and equipment traffic areas by implementing control measures and design criteria.

This rule applies to any unpaved vehicle/equipment traffic area of 1.0 acre or larger.

Condition 34 of permit unit S-353-0-2 ensures compliance.

**P. 40 CFR Part 64 – Compliance Assurance Monitoring (CAM)**

40 CFR Part 64 requires Compliance Assurance Monitoring (CAM) for units that meet the following three criteria:

- 1) the unit must have an emission limit for the pollutant;
- 2) the unit must have add-on controls for the pollutant; these are devices such as flue gas recirculation (FGR), baghouses, and catalytic oxidizers; and
- 3) the unit must have a pre-control potential to emit of greater than the major source thresholds (20,000 lb-NO<sub>x</sub>/yr; 20,000 lb-VOC/yr; 200,000 lb-CO/yr; 140,000 lb-PM<sub>10</sub>/yr or 140,000 lb-SO<sub>x</sub>/yr are the Major Source thresholds).

**S-353-1-10:** 473 HP WAUKESHA MODEL F-2895-GU NATURAL GAS/PROPANE FIRED RICH-BURN IC ENGINE SERVED BY WAUKESHA AIR/FUEL CONTROLLER AND A NON-SELECTIVE 3-WAY CATALYST POWERING A WATER PUMP (WELL 2-01)

1. The permit unit has emission limits for all five criteria pollutants (NO<sub>x</sub>, SO<sub>x</sub>, PM<sub>10</sub>, CO, and VOC).
2. There are no add-on controls for SO<sub>x</sub> and PM<sub>10</sub>; therefore CAM is not applicable for SO<sub>x</sub> and PM<sub>10</sub>.
3. This permit unit may be subject to CAM for NO<sub>x</sub>, CO and VOC since there are NO<sub>x</sub>, CO and VOC limits and has an add-on control in the form of a 3-way non-selective catalytic converters. Based on the pre-controlled annual emissions (shown below), the major source thresholds of 20,000 lb-NO<sub>x</sub>/yr and 20,000 lb-VOC/yr are exceeded. Therefore, the requirements of CAM are triggered.

Annual Post Project Emissions – S-353-1-10					
Pollutant	Emissions Factor (g/bhp-hr)	Rating (bhp)	Annual Hours of Operation (hrs/yr)	Conversion (g/lb)	PE2 Total (lb/yr)
NO <sub>x</sub> *	7.48	473	8760	453.6	68,327
CO**	14.779	473	8760	453.6	135,001
VOC***	2.91	473	8760	453.6	26,582

\* Emission factor based on Natural Gas use.

\*\* Emission factor based on current PTO EF since it is greater than the EF from AP-42.

\*\*\* Emission factor based on LPG/Propane use.

The following conditions were approved during a previous Title V action (Project #S-1041244) and assure compliance with the CAM requirements:

- The engine shall be operated such that the O<sub>2</sub> sensor setting is within 0.6– 1.0 volts DC as necessary to meet the air/fuel ratio setting. [40 Part CFR 64] Y
- The permittee shall monitor and record the following at least once per month: run hour reading, post catalyst temperature readings, visual

inspections, and O2 sensor readings (in millivolts). [District Rule 4702, 6.5.2 and District Rule 2520, 9.4.2] Y

- The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR Part 64] Y
- The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR Part 64] Y
- If the District or EPA determine 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] Y

**S-353-2-10:** 473 HP WAUKESHA MODEL F-2895-GU NATURAL GAS/PROPANE FIRED RICH-BURN IC ENGINE SERVED BY WAUKESHA AIR/FUEL CONTROLLER AND A NON-SELECTIVE 3-WAY CATALYST POWERING A WATER PUMP (WELL 6-01)

1. The permit unit has emission limits for all five criteria pollutants (NO<sub>x</sub>, SO<sub>x</sub>, PM<sub>10</sub>, CO, and VOC).
2. There are no add-on controls for SO<sub>x</sub> and PM<sub>10</sub>; therefore CAM is not applicable for SO<sub>x</sub> and PM<sub>10</sub>.
3. This permit unit may be subject to CAM for NO<sub>x</sub>, CO and VOC since there are NO<sub>x</sub>, CO and VOC limits and has an add-on control in the form of a 3-way non-selective catalytic converters. Based on the pre-controlled annual emissions (shown below), the major source thresholds of 20,000 lb-NO<sub>x</sub>/yr and 20,000 lb-VOC/yr are exceeded. Therefore, the requirements of CAM are triggered.

Annual Post Project Emissions – S-353-2-10					
Pollutant	Emissions Factor (g/bhp-hr)	Rating (bhp)	Annual Hours of Operation (hrs/yr)	Conversion (g/lb)	PE2 Total (lb/yr)
NO <sub>x</sub> *	7.48	473	8760	453.6	68,327
CO**	14.779	473	8760	453.6	135,001
VOC***	2.91	473	8760	453.6	26,582

\* Emission factor based on Natural Gas use.

\*\* Emission factor based on current PTO EF since it is greater than the EF from AP-42.

\*\*\* Emission factor based on LPG/Propane use.

The following conditions were approved during a previous Title V action (Project #S-1041244) and assure compliance with the CAM requirements:



- The engine shall be operated such that the O2 sensor setting is within 0.6 – 1.0 volts DC as necessary to meet the air/fuel ratio setting. [40 Part CFR 64] Y
- The permittee shall monitor and record the following at least once per month: run hour reading, post catalyst temperature readings, visual inspections, and O2 sensor readings (in millivolts). [District Rule 4702, 6.5.2 and District Rule 2520, 9.4.2] Y
- The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR Part 64] Y
- The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR Part 64] Y
- If the District or EPA determine 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] Y

**S-353-3-6:** 615 HP WAUKESHA MODEL F-3521-GL NATURAL GAS FIRED LEAN BURN IC ENGINE POWERING A WATER PUMP (WELL 2-02)

1. The permit unit has emission limits for all five criteria pollutants (NO<sub>x</sub>, SO<sub>x</sub>, PM<sub>10</sub>, CO, and VOC).
2. There are no add-on controls for this permit unit; therefore CAM is not applicable.

**S-353-4-4:** 840 BHP WAUKESHA MODEL F3524 GSI, NATURAL GAS AND LPG-FIRED IC ENGINE SERVED BY 3-WAY CATALYST AND CARBON CANISTER (WELL 603)

1. The permit unit has emission limits for all five criteria pollutants (NO<sub>x</sub>, SO<sub>x</sub>, PM<sub>10</sub>, CO, and VOC).
2. There are no add-on controls for SO<sub>x</sub> and PM<sub>10</sub>; therefore CAM is not applicable for SO<sub>x</sub> and PM<sub>10</sub>.
3. This permit unit may be subject to CAM for NO<sub>x</sub>, CO and VOC since there are NO<sub>x</sub>, CO and VOC limits and has an add-on control in the form of a 3-way non-selective catalytic converters. Based on the pre-controlled annual emissions (shown below), the major source thresholds of 20,000 lb-NO<sub>x</sub>/yr and 20,000 lb-VOC/yr are exceeded. Therefore, the requirements of CAM are triggered.

Annual Post Project Emissions – S-353-4-4					
Pollutant	Emissions Factor (g/bhp-hr)	Rating (bhp)	Annual Hours of Operation (hrs/yr)	Conversion (g/lb)	PE2 Total (lb/yr)
NO <sub>x</sub> *	7.48	473	8760	453.6	68,327
CO**	14.779	473	8760	453.6	135,001
VOC***	2.91	473	8760	453.6	26,582

\* Emission factor based on Natural Gas use.

\*\* Emission factor based on current PTO EF since it is greater than the EF from AP-42.

\*\*\* Emission factor based on LPG/Propane use.

The following conditions were approved during a previous Title V action (Project #S-1031022) and assure compliance with the CAM requirements:

- The engine shall be operated such that the O2 sensor setting is within 0.6 – 1.0 volts DC as necessary to meet the air/fuel ratio setting. [40 Part CFR 64] Y
- The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR Part 64] Y
- The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR Part 64] Y
- If the District or EPA determine 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] Y

The following condition is identical to the condition that was approved during a previous Title V action (Project #S-1041244); therefore, this condition will be listed on permit S-348-5-4 to assure compliance with the CAM requirements:

- The permittee shall monitor and record the following at least once per month: run hour reading, post catalyst temperature readings, visual inspections, and O2 sensor readings (in millivolts). [District Rule 4702, 6.5.2 and District Rule 2520, 9.4.2] Y

**S-353-5-3:** 76 BHP FORD MODEL ESG642 NATURAL GAS/PROPANE-FIRED EMERGENCY IC ENGINE POWERING AN ELECTRICAL GENERATOR (PUMP STATION 6-03)

1. The permit unit has emission limits for all five criteria pollutants (NO<sub>x</sub>, SO<sub>x</sub>, PM<sub>10</sub>, CO, and VOC).
2. There are no add-on controls for SO<sub>x</sub> and PM<sub>10</sub>; therefore CAM is not applicable for SO<sub>x</sub> and PM<sub>10</sub>.

lb-NOx/yr, 200,000 lb-CO/yr and 20,000 lb-VOC/yr are not exceeded. Therefore, the requirements of CAM are not triggered.

Annual Post Project Emissions – S-353-5-3					
Pollutant	Emissions Factor (g/bhp-hr)	Rating (bhp)	Annual Hours of Operation (hrs/yr)	Conversion (g/lb)	PE2 Total (lb/yr)
NO <sub>x</sub> *	7.48	76	100	453.6	125
CO**	14.779	76	100	453.6	248
VOC***	2.91	76	100	453.6	49

\* Emission factor based on Natural Gas use.

\*\* Emission factor based on current PTO EF since it is greater than the EF from AP-42.

\*\*\* Emission factor based on LPG/Propane use.

**Q. 40 CFR Part 61, Subpart M, National Emission Standard for Asbestos**

These regulations apply to demolition or renovation activity, as defined in 40 CFR 61.141. 40 CFR Section 61.150 of this Subpart was amended September 18, 2003, and condition 35 of the facility-wide requirements (S-353-0-2) assures compliance with the requirements.

**R. 40 CFR Part 82, Subparts B and F, Stratospheric Ozone**

These regulations apply to servicing motor vehicles when this service involves the ozone-depleting refrigerant in the motor vehicle air conditioner (MVAC). Sections of this regulation were amended in 2007 and 2008, and conditions 27 and 28 of S-353-0-2 assure compliance with the requirements.

**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**

The applicant is not requesting any new permit shields within this Title V renewal project. In addition, existing obsolete permit shields have been removed from the draft permit for this renewal project.

**X. PERMIT CONDITIONS**

See Attachment A - Draft Renewed Title V Operating Permit.

**XI. ATTACHMENTS**

- A. Draft Renewed Title V Operating Permit
- B. Previous Title V Operating Permit
- C. Detailed Facility List
- D. Stringency Analysis Rule 4601

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# ATTACHMENT A

Draft Renewed Title V Operating Permit

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# San Joaquin Valley Air Pollution Control District

FACILITY: S-353-0-2

EXPIRATION DATE: 10/31/2007

## 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 111 (Kern)] 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 111 (Kern)] Federally Enforceable Through Title V Permit
3. {2287} 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. {2289} The permittee must comply with all conditions of the permit including permit revisions originated by the District. All terms and conditions of a permit that are required pursuant to the Clean Air Act (CAA), including provisions to limit potential to emit, are enforceable by the EPA and Citizens under the CAA. Any permit noncompliance constitutes a violation of the CAA and the District Rules and Regulations, and is grounds for enforcement action, for permit termination, revocation, reopening and reissuance, or modification; or for denial of a permit renewal application. [District Rules 2070, 7.0; 2080; and 2520, 9.8.1 and 9.12.1] Federally Enforceable Through Title V Permit
6. {2290} 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) (Permits Required) and Rule 2031 (12/17/92) (Transfer) shall be filed in a manner and form prescribed by the District and shall give all information necessary to enable the District to make determinations required by Rule 2070 (12/17/92) (Standards for Granting Applications). [District Rule 2040] Federally Enforceable Through Title V Permit
8. {2292} The operator shall maintain records of required monitoring that include: 1) the date, place, and time of sampling or measurement; 2) the date(s) analyses were performed; 3) the company or entity that performed the analysis; 4) the analytical techniques or methods used; 5) the results of such analysis; and 6) the operating conditions at the time of sampling or measurement. [District Rule 2520, 9.4.1] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

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

Facility Name: WEST KERN WATER DISTRICT

Location: WELL FIELD

S-353-0-2 : Aug 18 2010 8:59AM - YOSHIMUJ

9. The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit and, for continuous monitoring instrumentation, all calibration and maintenance records and copies of strip-chart recordings. Original strip-chart recordings shall be kept for one year. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. {2294} 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. {2295} 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. {2296} 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. {2297} 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. {2298} 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. {2299} 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. {2300} 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. {2301} 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. {2302} 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. {2303} 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. {2304} 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. {2305} Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. [District Rule 2520, 9.13.2.4] Federally Enforceable Through Title V Permit

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

22. 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 (2/17/05). 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 (Kern)] 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 Section 5.0 of District Rule 4601 (Amended 12/17/09), unless exempted under Section 4.0 of District Rule 4601. [District Rule 4601, 5.1] Federally Enforceable Through Title V Permit
24. All architectural coating containers used to apply the contents therein to a surface directly from the container by pouring, siphoning, brushing, rolling, padding, ragging or other means, shall be closed when not in use. These architectural coating containers include, but are not limited to, drums, buckets, cans, pails, trays or other application containers. Containers of any VOC-containing materials used for thinning and cleanup shall also be closed when not in use. [District Rule 4601, 5.4] Federally Enforceable Through Title V Permit
25. The permittee shall comply with all the Labeling, Reporting and Test Methods requirements outlined in Rule 4601 (Amended 12/17/09) Sections 6.1, 6.2 and 6.3, unless exempted under Section 4.0 of District Rule 4601. [District Rule 4601, 6.1, 6.2 and 6.3] Federally Enforceable Through Title V Permit
26. {2310} 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. {2311} If the permittee performs maintenance on, or services, repairs, or disposes of appliances, the permittee shall comply with the standards for Recycling and Emissions Reduction pursuant to 40 CFR 82, Subpart F. [40 CFR 82 Subpart F] Federally Enforceable Through Title V Permit
28. {2312} If the permittee performs service on motor vehicles when this service involves the ozone-depleting refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the standards for Servicing of Motor Vehicle Air Conditioners pursuant to all the applicable requirements as specified in 40 CFR 82, Subpart B. [40 CFR 82, Subpart B] Federally Enforceable Through Title V Permit
29. Disturbances of soil related to any construction, demolition, excavation, extraction, or other earthmoving activities shall comply with the requirements for fugitive dust control in District Rule 8021 (8/19/04) unless specifically exempted under Section 4.0 of Rule 8021 or Rule 8011 (8/19/04). [District Rule 8021 and 8011] Federally Enforceable Through Title V Permit
30. Outdoor handling, storage and transport of any bulk material which emits dust shall comply with the requirements of District Rule 8031 (8/19/04), unless specifically exempted under Section 4.0 of Rule 8031 or Rule 8011 (8/19/04). [District Rule 8031 and 8011] Federally Enforceable Through Title V Permit
31. An owner/operator shall prevent or cleanup any carryout or trackout in accordance with the requirements of District Rule 8041 (8/19/04) Section 5.0, unless specifically exempted under Section 4.0 of Rule 8041 or Rule 8011 (8/19/04). [District Rule 8041 and 8011] Federally Enforceable Through Title V Permit
32. Whenever open areas are disturbed or vehicles are used in open areas, the facility shall comply with the requirements of Section 5.0 of District Rule 8051 (8/19/04), unless specifically exempted under Section 4.0 of Rule 8051 or Rule 8011 (8/19/04). [District Rule 8051 and 8011] Federally Enforceable Through Title V Permit
33. Any paved road or unpaved road shall comply with the requirements of District Rule 8061 (8/19/04) unless specifically exempted under Section 4.0 of Rule 8061 or Rule 8011 (8/19/04). [District Rule 8061 and Rule 8011] Federally Enforceable Through Title V Permit

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



34. Any unpaved vehicle/equipment area that anticipates more than 50 vehicle trips per day shall comply with the requirements of Section 5.1.1 of District Rule 8071 (9/16/04). Any unpaved vehicle/equipment area that anticipates more than 150 vehicle trips per day shall comply with the requirements of Section 5.1.2 of District Rule 8071. All sources shall comply with the requirements of Section 5.0 of District Rule 8071 unless specifically exempted under Section 4.0 of Rule 8071 or Rule 8011 (8/19/04). [District Rule 8071 and Rule 8011] Federally Enforceable Through Title V Permit
35. {2319} 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. {2320} 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. {2321} 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. {2322} 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 (Kern) and Rule 111 (Kern). 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, sections 5.1, 5.2, 5.3 and 5.8 (12/17/09); 8021 (8/19/04); 8031 (8/19/04); 8041 (8/19/04); 8051 (8/19/04); 8061 (8/19/04); and 8071 (9/16/04). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
41. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
42. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report begin May 1 of every year. These reports are due within 30 days after the end of the reporting period. [District Rule 2520] Federally Enforceable Through Title V Permit

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

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# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-353-1-10

**EXPIRATION DATE:** 10/31/2007

**SECTION:** 21 **TOWNSHIP:** 30S **RANGE:** 25E

## **EQUIPMENT DESCRIPTION:**

473 HP WAUKESHA MODEL F-2895-GU NATURAL GAS/PROPANE FIRED RICH-BURN IC ENGINE SERVED BY WAUKESHA AIR/FUEL CONTROLLER AND A NON-SELECTIVE 3-WAY CATALYST POWERING A WATER PUMP (WELL 2-01)

## **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. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. 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
4. 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 Rule 4801] Federally Enforceable Through Title V Permit
5. IC engine shall be equipped with Waukesha Custom Controller which readily indicates air/fuel ratio setting within tolerance limits as recommended by the catalyst system supplier. [District NSR Rule] Federally Enforceable Through Title V Permit
6. All exhaust emission shall exit through catalytic converter. [District NSR Rule] Federally Enforceable Through Title V Permit
7. The engine shall be equipped with a positive crankcase ventilation (PCV) system. [District NSR Rule] Federally Enforceable Through Title V Permit
8. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified on the Inspection and Monitoring (I&M) plan submitted to the District. [District Rule 4702, 6.5.5] Federally Enforceable Through Title V Permit
9. This engine shall be equipped with a nonresettable fuel meter and a nonresettable elapsed operating time meter. The fuel meter shall be calibrated periodically per the recommendations of the manufacturer. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
10. The engine shall be operated such that the O2 sensor setting is within 0.6 - 1.0 volts DC as necessary to meet the air/fuel ratio setting. [40 Part CFR 64] Federally Enforceable Through Title V Permit
11. Emissions from this IC engine shall not exceed any of the following limits: 25 ppmvd NOx @ 15% O2 or 0.303 g-NOx/hp-hr, 0.012 g-SOx/hp-hr, 0.175 g-PM10/hp-hr, 2.000 ppmvd CO @ 15% O2 or 14.779 g-CO/hp-hr, or 125 ppmvd VOC @ 15% O2 or 0.528 g-VOC/hp-hr. [District Rules 2201 and District Rule 4702] Federally Enforceable Through Title V Permit
12. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] 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.

13. If the engine is fired on natural gas but not PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM Method D 1072, D 3031, D 4084 or D 3246. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
14. Operator shall determine the sulfur content of each delivery of liquefied petroleum gas (LPG) fired in the IC engine. The sulfur content shall be determined using ASTM Method D 2784. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
15. 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, 9.3.2] Federally Enforceable Through Title V Permit
16. Source testing to measure natural gas-combustion NO<sub>x</sub>, CO, and VOC emissions from this unit shall be measured not less than once every 24 months. [District Rules 4701 and 4702, 6.3.1] 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. 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 Rules 4701 and 4702, 6.3.2] Federally Enforceable Through Title V Permit
19. The following test methods shall be used: NO<sub>x</sub> (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, and VOC (ppmv) - EPA Method 18, 25A or 25B, or ARB Method 100. [District Rules 1081, 4701, and 4702, 6.4] Federally Enforceable Through Title V Permit
20. For 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. VOC emissions shall be reported as methane. VOC, NO<sub>x</sub>, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rules 4701 and 4702, 6.3.2] Federally Enforceable Through Title V Permit
21. The permittee shall monitor and record the stack concentration of NO<sub>x</sub>, CO, and O<sub>2</sub> at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. 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 month. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702, 5.6] Federally Enforceable Through Title V Permit
22. If either the NO<sub>x</sub> or CO concentrations corrected to 15% O<sub>2</sub>, 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 Rules 4701, 5.4 and 4702, 5.6] Federally Enforceable Through Title V Permit
23. 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 Rules 4701 and 4702] 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.

24. The permittee shall monitor and record the following at least once per month: run hour reading, post catalyst temperature readings, visual inspections, and O2 sensor readings (in millivolts). [District Rule 4702, 6.5.2 and District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
25. 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
26. 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
27. If the District or EPA determine 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
28. 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 Rules 4701, 5.4 and 4702] Federally Enforceable Through Title V Permit
29. Operator shall maintain annual records of the fuel supplier invoices for each delivery and the corresponding certified sulfur content. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
30. The operator of this internal combustion (IC) engine shall maintain and retain all records of required monitoring data, support information, including source test results for a minimum of five years, and shall make them available for District inspection upon request. [District Rules 2520, 9.4.2 and 4701, 6.2] Federally Enforceable Through Title V Permit
31. 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 and quantity (cubic feet of gas or gallons of liquid) of fuel used, maintenance or modifications performed, monitoring data, compliance source test results and any other information necessary to demonstrate compliance. [District Rules 4701 and 4702, 6.2.1] Federally Enforceable Through Title V Permit
32. 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, 6.5.8] Federally Enforceable Through Title V Permit
33. 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, 13.2] Federally Enforceable Through Title V Permit
34. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

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

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# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-353-2-10

EXPIRATION DATE: 10/31/2007

SECTION: 21 TOWNSHIP: 30S RANGE: 25E

## EQUIPMENT DESCRIPTION:

473 HP WAUKESHA MODEL F-2895-GU NATURAL GAS/PROPANE FIRED RICH-BURN IC ENGINE SERVED BY WAUKESHA AIR/FUEL CONTROLLER AND A NON-SELECTIVE 3-WAY CATALYST POWERING A WATER PUMP (WELL 6-01)

## 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. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. 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
4. 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 Rule 4801] Federally Enforceable Through Title V Permit
5. IC engine shall be equipped with Waukesha Custom Controller which readily indicates air/fuel ratio setting within tolerance limits as recommended by the catalyst system supplier. [District NSR Rule] Federally Enforceable Through Title V Permit
6. All exhaust emission shall exit through catalytic converter. [District NSR Rule] Federally Enforceable Through Title V Permit
7. The engine shall be equipped with a positive crankcase ventilation (PCV) system. [District NSR Rule] Federally Enforceable Through Title V Permit
8. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified on the Inspection and Monitoring (I&M) plan submitted to the District. [District Rule 4702, 6.5.5] Federally Enforceable Through Title V Permit
9. This engine shall be equipped with a nonresettable fuel meter and a nonresettable elapsed operating time meter. The fuel meter shall be calibrated periodically per the recommendations of the manufacturer. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
10. The engine shall be operated such that the O2 sensor setting is within 0.6 - 1.0 volts DC as necessary to meet the air/fuel ratio setting. [40 Part CFR 64] Federally Enforceable Through Title V Permit
11. Emissions from this IC engine shall not exceed any of the following limits: 25 ppmvd NOx @ 15% O2 or 0.303 g-NOx/hp-hr, 0.012 g-SOx/hp-hr, 0.175 g-PM10/hp-hr, 2,000 ppmvd CO @ 15% O2 or 14.779 g-CO/hp-hr, or 125 ppmvd VOC @ 15% O2 or 0.528 g-VOC/hp-hr. [District Rules 2201 and District Rule 4702] Federally Enforceable Through Title V Permit
12. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] 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.

13. If the engine is fired on natural gas but not PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM Method D 1072, D 3031, D 4084 or D 3246. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
14. Operator shall determine the sulfur content of each delivery of liquefied petroleum gas (LPG) fired in the IC engine. The sulfur content shall be determined using ASTM Method D 2784. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
15. 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, 9.3.2] Federally Enforceable Through Title V Permit
16. Source testing to measure natural gas-combustion NO<sub>x</sub>, CO, and VOC emissions from this unit shall be measured not less than once every 24 months. [District Rules 4701 and 4702, 6.3.1] Federally Enforceable Through Title V Permit
17. 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 Rules 4701 and 4702, 6.3.2] 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: NO<sub>x</sub> (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, and VOC (ppmv) - EPA Method 18, 25A or 25B, or ARB Method 100. [District Rules 1081, 4701, and 4702, 6.4] Federally Enforceable Through Title V Permit
20. For 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. VOC emissions shall be reported as methane. VOC, NO<sub>x</sub>, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rules 4701 and 4702, 6.3.2] Federally Enforceable Through Title V Permit
21. The permittee shall monitor and record the stack concentration of NO<sub>x</sub>, CO, and O<sub>2</sub> at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. 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 month. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702, 5.6] Federally Enforceable Through Title V Permit
22. If either the NO<sub>x</sub> or CO concentrations corrected to 15% O<sub>2</sub>, 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 72 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 Rules 4701, 5.4 and 4702, 5.6] Federally Enforceable Through Title V Permit
23. 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 Rules 4701 and 4702] 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.

24. The permittee shall monitor and record the following at least once per month: run hour reading, post catalyst temperature readings, visual inspections, and O2 sensor readings (in millivolts). [District Rule 4702, 6.5.2 and District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
25. 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
26. 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
27. If the District or EPA determine 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
28. 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 Rules 4701, 5.4 and 4702] Federally Enforceable Through Title V Permit
29. Operator shall maintain annual records of the fuel supplier invoices for each delivery and the corresponding certified sulfur content. [District Rule 4701, 9.4.2] Federally Enforceable Through Title V Permit
30. The operator of this internal combustion (IC) engine shall maintain and retain all records of required monitoring data, support information, including source test results for a minimum of five years, and shall make them available for District inspection upon request. [District Rules 2520, 9.4.2 and 4701, 6.2] Federally Enforceable Through Title V Permit
31. 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 and quantity (cubic feet of gas or gallons of liquid) of fuel used, maintenance or modifications performed, monitoring data, compliance source test results and any other information necessary to demonstrate compliance. [District Rules 4701 and 4702, 6.2.1] Federally Enforceable Through Title V Permit
32. The permittee shall develop an I&M plan for this engine prior to any planned change in operation. The permittee must notify the District in writing 10 days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval within 10 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 installing the permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4701, 6.2.1] Federally Enforceable Through Title V Permit
33. Compliance with permit conditions in the Title V permit shall be deemed compliance with the applicable requirements of District Rule 4701, 6.2.1. No credit shall be granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
34. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

The above conditions are part of the Facility-wide Permit to Operate.

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# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-353-3-6

**EXPIRATION DATE:** 10/31/2007

**SECTION:** SW21 **TOWNSHIP:** 30S **RANGE:** 25E

**EQUIPMENT DESCRIPTION:**

615 HP WAUKESHA MODEL F-3521-GL NATURAL GAS FIRED LEAN BURN IC ENGINE POWERING A WATER PUMP (WELL 2-02)

## PERMIT UNIT REQUIREMENTS

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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. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4201]
3. 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
4. Unit shall be fired on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [Kern County Rule 407 and District Rule 4801] Federally Enforceable Through Title V Permit
5. This engine shall be equipped with a nonresettable fuel meter and a nonresettable elapsed operating time meter. The fuel meter shall be calibrated periodically per the recommendations of the manufacturer. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
6. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified on the Inspection and Monitoring (I&M) plan submitted to the District. [District Rule 4702, 6.5.5] Federally Enforceable Through Title V Permit
7. The exhaust gas O2 concentration shall be maintained between 9.5 and 10.5 % O2. [District Rule 4701] Federally Enforceable Through Title V Permit
8. Emissions from this IC engine shall not exceed any of the following limits: 65 ppmvd NOx @ 15% O2 or 0.777 g-NOx/hp-hr, 0.009 g-SOx/hp-hr, 0.033 g-PM10/hp-hr, 642 ppmvd CO @ 15% O2 or 2.65 g-CO/hp-hr, or 350 ppmvd VOC @ 15% O2 or 1.455 g-VOC/hp-hr. [District Rules 2201 and District Rule 4702] Federally Enforceable Through Title V Permit
9. Nitrogen compound (NOx) emission rate shall not exceed 1.47 grams/BHP-hr and 1.99 lb/hr. [District NSR Rule] Federally Enforceable Through Title V Permit
10. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
11. If the engine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D 1072-80, D 3031-81, D 4084-82 or D 3246-81. [District Rule 2520, 9.3.2] 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.



12. 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, 9.3.2] Federally Enforceable Through Title V Permit
13. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; 407 (Kern). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
14. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: 404 (Kern). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
15. Source testing to measure natural gas-combustion NO<sub>x</sub> and CO emissions from this unit shall be measured not less than once every 24 months. [District Rules 4701 and 4702, 6.3.1] 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 NSR Rule] Federally Enforceable Through Title V Permit
17. The following test methods shall be used: NO<sub>x</sub> (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, and VOC (ppmv) - EPA Method 18, 25A or 25B, or ARB Method 100. [District Rules 1081, 4701, and 4702, 6.4] Federally Enforceable Through Title V Permit
18. For 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. VOC emissions shall be reported as methane. VOC, NO<sub>x</sub>, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rules 4701 and 4702, 6.3.2] Federally Enforceable Through Title V Permit
19. 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 Rules 4701 and 4702, 6.3.2] Federally Enforceable Through Title V Permit
20. Source test results shall be submitted to the District within 60 days of the test. [District Rule 1081] Federally Enforceable Through Title V Permit
21. The permittee shall monitor and record the stack concentration of O<sub>2</sub> at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. 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 month. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702, 5.6] Federally Enforceable Through Title V Permit
22. If the O<sub>2</sub> concentration, as measured by the portable analyzer, exceeds 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 Rules 4701, 5.4 and 4702, 5.6] Federally Enforceable Through Title V Permit

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

23. 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 Rules 4701 and 4702] Federally Enforceable Through Title V Permit
24. The permittee shall monitor and record the following at least once per month: run hour reading, post turbo temperature readings, visual inspections, and exhaust O2 readings. [District Rule 4702, 6.5.2] Federally Enforceable Through Title V Permit
25. The permittee shall maintain records of: (1) the date and time of O2 measurements, (2) the O2 concentration in percent, (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 Rules 4701 and 4702, 5.4] Federally Enforceable Through Title V Permit
26. The operator of an internal combustion (IC) engine shall maintain and retain all records of required monitoring data, support information, including source test results for minimum period of five years, and shall make them available for District inspection upon request. [District Rule 2520, 9.5.2] Federally Enforceable Through Title V Permit
27. 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 and quantity (cubic feet of gas or gallons of liquid) of fuel used, maintenance or modifications performed, monitoring data, compliance source test results and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit
28. 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, 6.5.8] Federally Enforceable Through Title V Permit
29. 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, 13.2] Federally Enforceable Through Title V Permit
30. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

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

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# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-353-4-4

**EXPIRATION DATE:** 10/31/2007

**SECTION:** SW 22 **TOWNSHIP:** 30S **RANGE:** 25E

**EQUIPMENT DESCRIPTION:**

840 BHP WAUKESHA MODEL F3524 GSI, NATURAL GAS AND LPG-FIRED IC ENGINE SERVED BY 3-WAY CATALYST AND CARBON CANISTER (WELL 603)

## 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. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. 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
4. 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 Rule 4801] Federally Enforceable Through Title V Permit
5. IC engine shall be equipped with Waukesha Custom Controller which readily indicates air/fuel ratio setting within tolerance limits as recommended by the catalyst system supplier. [District NSR Rule] Federally Enforceable Through Title V Permit
6. All exhaust emission shall exit through catalytic converter. [District NSR Rule] Federally Enforceable Through Title V Permit
7. The engine shall be operated such that the O2 sensor setting is within 0.6 - 1.0 DC volts as necessary to meet the air/fuel ratio setting. [40 Part CFR 64] Federally Enforceable Through Title V Permit
8. 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
9. NOx exhaust emissions shall be reduced by a minimum of 90% during initial tests and 80% thereafter across the control device, or shall not exceed 0.15 g/bhp-hr or 10.4 ppmv (calculated to 15% oxygen), averaged over at least 15 minutes. [District NSR Rule and Rule 4701] Federally Enforceable Through Title V Permit
10. CO exhaust emissions shall not exceed 0.6 g/bhp-hr or 68.4 ppmv (calculated to 15% oxygen), averaged over at least 15 minutes. [District NSR Rule and Rule 4701] Federally Enforceable Through Title V Permit
11. VOC exhaust emissions shall not exceed 0.15 g/bhp-hr or 30 ppmv (calculated to 15% oxygen), averaged over at least 15 minutes. [District NSR Rule and Rule 4701] Federally Enforceable Through Title V Permit
12. Piping shall have necessary connections to allow for extraction of a grab sample and use of an FID, PID or other District-approved VOC detection device shall be provided for the activated carbon canister exhaust gas. [District Rule 1081] Federally Enforceable Through Title V Permit
13. Crankcase breather vent line emissions shall be controlled by a carbon canister. [District Rule 2201] Federally Enforceable Through Title V Permit

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

14. A fresh spare activated carbon canister shall be kept at the West Kern Water District Warehouse for use when needed. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Crankcase breather vent line exhaust VOC concentration shall not exceed 200 ppmv. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The carbon canister shall be serviced and replaced when the VOC concentration in the crankcase breather line exhaust exceeds 160 ppmv. [District Rule 2201] Federally Enforceable Through Title V Permit
17. The carbon canister removed from the system shall be sealed vapor tight. [District Rule 2201] Federally Enforceable Through Title V Permit
18. If the engine is fired on natural gas but not PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM Method D 1072, D 3031, D 4084 or D 3246. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
19. Operator shall determine the sulfur content of each delivery of liquefied petroleum gas (LPG) fired in the IC engine. The sulfur content shall be determined using ASTM Method D 2784. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
20. 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, 9.3.2] Federally Enforceable Through Title V Permit
21. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified on the Inspection and Monitoring (I&M) plan submitted to the District. [District Rule 4702, 6.5.5] Federally Enforceable Through Title V Permit
22. Source testing to measure natural gas-combustion NO<sub>x</sub>, CO, and VOC emissions from this unit shall be measured not less than once every 24 months. [District Rules 4701 and 4702, 6.3.1] 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 Rules 4701 and 4702, 6.3.2] Federally Enforceable Through Title V Permit
24. For 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. VOC emissions shall be reported as methane. VOC, NO<sub>x</sub>, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rules 4701 and 4702, 6.3.2] Federally Enforceable Through Title V Permit
25. The following test methods shall be used: NO<sub>x</sub> (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, and VOC (ppmv) - EPA Method 18, 25A or 25B, or ARB Method 100. [District Rules 1081, 4701, and 4702, 6.4] Federally Enforceable Through Title V Permit
26. 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
27. 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 Rules 4701 and 4702] 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.

28. The permittee shall monitor and record the stack concentration of NO<sub>x</sub>, CO, and O<sub>2</sub> at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. 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 month. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702, 5.6] Federally Enforceable Through Title V Permit
29. If either the NO<sub>x</sub> or CO concentrations corrected to 15% O<sub>2</sub>, 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 Rules 4701, 5.4 and 4702, 5.6] Federally Enforceable Through Title V Permit
30. 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
31. 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
32. If the District or EPA determine 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
33. The permittee shall record the O<sub>2</sub> sensor reading (in millivolts) on a daily basis. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
34. The permittee shall maintain records of: (1) the date and time of NO<sub>x</sub>, CO, and O<sub>2</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NO<sub>x</sub> and CO concentrations corrected to 15% O<sub>2</sub>, (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 Rules 4701, 5.4 and 4702] Federally Enforceable Through Title V Permit
35. 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 and quantity (cubic feet of gas or gallons of liquid) of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rules 4701 and 4702, 6.2.1] Federally Enforceable Through Title V Permit
36. 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, 6.5.8] Federally Enforceable Through Title V Permit
37. The permittee shall monitor and record the crankcase breather vent line stack concentration of VOCs on a quarterly basis using a portable analyzer. [District Rule 1081] Federally Enforceable Through Title V Permit
38. Operator shall maintain annual records of the fuel supplier invoices for each delivery and the corresponding certified sulfur content. [District Rule 2520, 9.4.2] 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.

39. The operator of this internal combustion (IC) engine shall maintain and retain all records of required monitoring data, support information, including source test results for a minimum of five years, and shall make them available for District inspection upon request. [District Rules 2520, 9.4.2 and 4701, 6.2] Federally Enforceable Through Title V Permit
40. 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, 13.2] Federally Enforceable Through Title V Permit
41. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

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

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# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-353-5-3

EXPIRATION DATE: 10/31/2007

SECTION: SW22 TOWNSHIP: 30S RANGE: 25E

## EQUIPMENT DESCRIPTION:

76 BHP FORD MODEL ESG642 NATURAL GAS/PROPANE-FIRED EMERGENCY IC ENGINE POWERING AN ELECTRICAL GENERATOR (PUMP STATION 6-03)

## PERMIT UNIT REQUIREMENTS

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1. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101, 5.1] Federally Enforceable Through Title V Permit
2. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
4. 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. [District Rule 4702] Federally Enforceable Through Title V Permit
5. NOx emissions shall not exceed 0.0003 lb/hp-hr or 39.7 ppm @ 15% O2. [District NSR Rule] Federally Enforceable Through Title V Permit
6. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
7. 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
8. This engine shall only be fired on PUC quality natural gas, LPG or propane. [District NSR Rule] Federally Enforceable Through Title V Permit
9. 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
10. 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
11. This engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. For testing purposes, the engine shall only be operated the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 - "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems", 1998 edition. Total hours of operation for all maintenance, testing, and required regulatory purposes shall not exceed 100 hours per calendar year. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

12. The permittee shall maintain monthly records of hours of emergency and non-emergency operation. Records shall include the date, the number of hours of operation, and the purpose of the operation (e.g., 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 17 CCR 93115] Federally Enforceable Through Title V Permit
13. The permittee shall maintain monthly records of the type of fuel purchased. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
14. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit

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

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# ATTACHMENT B

Previous Title V Operating Permit

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# San Joaquin Valley Air Pollution Control District

FACILITY: S-353-0-1

EXPIRATION DATE: 10/31/2007

## FACILITY-WIDE REQUIREMENTS

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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 (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 (3/21/02). [District Rule 2010, 3.0 and 4.0; and 2020] Federally Enforceable Through Title V Permit
5. The permittee must comply with all conditions of the permit including permit revisions originated by the District. All terms and conditions of a permit that are required pursuant to the Clean Air Act (CAA), including provisions to limit potential to emit, are enforceable by the EPA and Citizens under the CAA. Any permit noncompliance constitutes a violation of the CAA and the District Rules and Regulations, and is grounds for enforcement action, for permit termination, revocation, reopening and reissuance, or modification; or for denial of a permit renewal application. [District Rules 2070, 7.0; 2080; and 2520, 9.8.1 and 9.12.1] Federally Enforceable Through Title V Permit
6. A Permit to Operate or an Authority to Construct shall not be transferred unless a new application is filed with and approved by the District. [District Rule 2031] Federally Enforceable Through Title V Permit
7. Every application for a permit required under Rule 2010 (12/17/92) shall be filed in a manner and form prescribed by the District. [District Rule 2040] Federally Enforceable Through Title V Permit
8. The operator shall maintain records of required monitoring that include: 1) the date, place, and time of sampling or measurement; 2) the date(s) analyses were performed; 3) the company or entity that performed the analysis; 4) the analytical techniques or methods used; 5) the results of such analysis; and 6) the operating conditions at the time of sampling or measurement. [District Rule 2520, 9.4.1] Federally Enforceable Through Title V Permit
9. The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit and, for continuous monitoring instrumentation, all calibration and maintenance records and copies of strip-chart recordings. Original strip-chart recordings shall be kept for one year. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

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

Facility Name: WEST KERN WATER DISTRICT

Location: WELL FIELD

S-353-0-1: Aug 17 2010 4:01PM - YOSHIMUJ

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

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

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

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

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

36. The permittee shall submit certifications of compliance with the terms and standards contained in Title V permits, including emission limits, standards and work practices, to the District and the EPA annually (or more frequently as specified in an applicable requirement or as specified by the District). The certification shall include the identification of each permit term or condition, the compliance status, whether compliance was continuous or intermittent, the methods used for determining the compliance status, and any other facts required by the District to determine the compliance status of the source. [District Rule 2520, 9.16] Federally Enforceable Through Title V Permit
37. The permittee shall submit an application for Title V permit renewal to the District at least six months, but not greater than 18 months, prior to the permit expiration date. [District Rule 2520, 5.2] Federally Enforceable Through Title V Permit
38. When a term is not defined in a Title V permit condition, the definition in the rule cited as the origin and authority for the condition in a Title V permits shall apply. [District Rule 2520, 9.1.1] Federally Enforceable Through Title V Permit
39. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: Rule 401 (Madera, Fresno, Kern, Kings, San Joaquin, Stanislaus, Tulare and Merced), Rule 110 (Fresno, Stanislaus, San Joaquin), Rule 109 (Merced), Rule 113 (Madera), and Rule 111 (Kern, Tulare, Kings). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
40. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rules 1100, sections 6.1 and 7.0 (12/17/92); 2010, sections 3.0 and 4.0 (12/17/92); 2031 (12/17/92); 2040 (12/17/92); 2070, section 7.0 (12/17/92); 2080 (12/17/92); 4101 (11/15/01); 4601, sections 5.1, 5.2, 5.3, 5.8 and 8.0 (10/31/01); 8021 (11/15/01); 8031 (11/15/01); 8041 (11/15/01); 8051 (11/15/01); 8061 (11/15/01); and 8071 (11/15/01). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
41. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report begin May 1 of every year. 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-353-1-9

EXPIRATION DATE: 10/31/2007

SECTION: 21 TOWNSHIP: 30S RANGE: 25E

## EQUIPMENT DESCRIPTION:

473 HP WAUKESHA MODEL F-2895-GU NATURAL GAS/PROPANE FIRED RICH-BURN IC ENGINE SERVED BY WAUKESHA AIR/FUEL CONTROLLER AND A NON-SELECTIVE 3-WAY CATALYST POWERING A WATER PUMP (WELL 2-01)

## PERMIT UNIT REQUIREMENTS

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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. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. 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
4. 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 Rule 4801] Federally Enforceable Through Title V Permit
5. IC engine shall be equipped with Waukesha Custom Controller which readily indicates air/fuel ratio setting within tolerance limits as recommended by the catalyst system supplier. [District NSR Rule] Federally Enforceable Through Title V Permit
6. All exhaust emission shall exit through catalytic converter. [District NSR Rule] Federally Enforceable Through Title V Permit
7. The engine shall be equipped with a positive crankcase ventilation (PCV) system. [District NSR Rule] Federally Enforceable Through Title V Permit
8. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified on the Inspection and Maintenance (I&M) plan submitted to the District. [District Rule 4702, 6.5.5]
9. This engine shall be equipped with a nonresettable fuel meter and a nonresettable elapsed operating time meter. The fuel meter shall be calibrated periodically per the recommendations of the manufacturer. [District Rule 4702, 5.6.6]
10. The engine shall be operated such that the O2 sensor setting is within 0.6 - 1.0 volts DC as necessary to meet the air/fuel ratio setting. [40 Part CFR 64] Federally Enforceable Through Title V Permit
11. Emissions from this IC engine shall not exceed any of the following limits: 25 ppmvd NOx @ 15% O2 or 0.303 g-NOx/hp-hr, 0.012 g-SOx/hp-hr, 0.175 g-PM10/hp-hr, 2,000 ppmvd CO @ 15% O2 or 14.779 g-CO/hp-hr, or 125 ppmvd VOC @ 15% O2 or 0.528 g-VOC/hp-hr. [District Rules 2201 and District Rule 4702]
12. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
13. If the engine is fired on natural gas but not PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM Method D 1072, D 3031, D 4084 or D 3246. [District Rule 2520, 9.3.2] 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.

14. Operator shall determine the sulfur content of each delivery of liquefied petroleum gas (LPG) fired in the IC engine. The sulfur content shall be determined using ASTM Method D 2784. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
15. 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, 9.3.2] Federally Enforceable Through Title V Permit
16. Source testing to measure NO<sub>x</sub>, CO, and VOC emissions from this unit shall be conducted upon implementation of this ATC and not less than once every 24 months. [District Rule 4702, 6.3.1] Federally Enforceable Through Title V Permit
17. 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, 6.3.2]
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. Source testing shall be performed for NO<sub>x</sub> (ppmv) according to EPA Method 7E (or ARB Method 100), and stack gas oxygen by EPA Method 3 or 3A (or ARB Method 100). Source testing for CO (ppmv) shall be performed according to EPA Method 10 (or ARB Method 100). [District Rule 4701, 6.4] Federally Enforceable Through Title V Permit
20. For 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. VOC emissions shall be reported as methane. VOC, NO<sub>x</sub>, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702, 6.3.2]
21. The permittee shall monitor and record the stack concentration of NO<sub>x</sub> (as NO<sub>2</sub>), CO, and O<sub>2</sub> at least once every calendar quarter using a portable emission monitor that meets District specifications. [In-stack O<sub>2</sub> monitors may be allowed if approved by the APCO.] Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. 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 five days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4701, 5.4; District Rule 4702, 5.6] Federally Enforceable Through Title V Permit
22. If the NO<sub>x</sub> and/or CO concentrations corrected to 15% O<sub>2</sub>, as measured by the portable analyzer, exceed the permitted 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 the performing the notification and testing required by this condition. [District Rule 4701, 5.4 and District Rule 4702, 5.6] Federally Enforceable Through Title V Permit
23. 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 Rules 4701 and 4702]

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

24. The permittee shall monitor and record the following at least once per month: run hour reading, post catalyst temperature readings, visual inspections, and O2 sensor readings (in millivolts). [District Rule 4702, 6.5.2 and District Rule 2520, 9.4.2]
25. 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
26. 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
27. If the District or EPA determine 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
28. 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 4701, 5.4] Federally Enforceable Through Title V Permit
29. Operator shall maintain annual records of the fuel supplier invoices for each delivery and the corresponding certified sulfur content. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
30. The operator of this internal combustion (IC) engine shall maintain and retain all records of required monitoring data, support information, including source test results for a minimum of five years, and shall make them available for District inspection upon request. [District Rules 2520, 9.4.2 and 4701, 6.2] Federally Enforceable Through Title V Permit
31. 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 and quantity (cubic feet of gas or gallons of liquid) of fuel used, maintenance or modifications performed, monitoring data, compliance source test results and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1]
32. 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, 6.5.8]
33. 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, 13.2] Federally Enforceable Through Title V Permit

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



# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-353-2-9

EXPIRATION DATE: 10/31/2007

SECTION: 21 TOWNSHIP: 30S RANGE: 25E

## EQUIPMENT DESCRIPTION:

473 HP WAUKESHA MODEL F-2895-GU NATURAL GAS/PROPANE FIRED RICH-BURN IC ENGINE SERVED BY WAUKESHA AIR/FUEL CONTROLLER AND A NON-SELECTIVE 3-WAY CATALYST POWERING A WATER PUMP (WELL 6-01)

## PERMIT UNIT REQUIREMENTS

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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. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. 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
4. 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 Rule 4801] Federally Enforceable Through Title V Permit
5. IC engine shall be equipped with Waukesha Custom Controller which readily indicates air/fuel ratio setting within tolerance limits as recommended by the catalyst system supplier. [District NSR Rule] Federally Enforceable Through Title V Permit
6. All exhaust emission shall exit through catalytic converter. [District NSR Rule] Federally Enforceable Through Title V Permit
7. The engine shall be equipped with a positive crankcase ventilation (PCV) system. [District NSR Rule] Federally Enforceable Through Title V Permit
8. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified on the Inspection and Maintenance (I&M) plan submitted to the District. [District Rule 4702, 6.5.5]
9. This engine shall be equipped with a nonresettable fuel meter and a nonresettable elapsed operating time meter. The fuel meter shall be calibrated periodically per the recommendations of the manufacturer. [District Rule 4702, 5.6.6]
10. The engine shall be operated such that the O2 sensor setting is within 0.6 - 1.0 volts DC as necessary to meet the air/fuel ratio setting. [40 Part CFR 64] Federally Enforceable Through Title V Permit
11. Emissions from this IC engine shall not exceed any of the following limits: 25 ppmvd NOx @ 15% O2 or 0.303 g-NOx/hp-hr, 0.012 g-SOx/hp-hr, 0.175 g-PM10/hp-hr, 2,000 ppmvd CO @ 15% O2 or 14.779 g-CO/hp-hr, or 125 ppmvd VOC @ 15% O2 or 0.528 g-VOC/hp-hr. [District Rules 2201 and District Rule 4702]
12. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
13. If the engine is fired on natural gas but not PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM Method D 1072, D 3031, D 4084 or D 3246. [District Rule 2520, 9.3.2] 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.

14. Operator shall determine the sulfur content of each delivery of liquefied petroleum gas (LPG) fired in the IC engine. The sulfur content shall be determined using ASTM Method D 2784. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
15. 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, 9.3.2] Federally Enforceable Through Title V Permit
16. Source testing to measure NO<sub>x</sub>, CO, and VOC emissions from this unit shall be conducted upon implementation of this ATC and not less than once every 24 months. [District Rule 4702, 6.3.1] Federally Enforceable Through Title V Permit
17. 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, 6.3.2]
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. Source testing shall be performed for NO<sub>x</sub> (ppmv) according to EPA Method 7E (or ARB Method 100), and stack gas oxygen by EPA Method 3 or 3A (or ARB Method 100). Source testing for CO (ppmv) shall be performed according to EPA Method 10 (or ARB Method 100). [District Rule 4701, 6.4] Federally Enforceable Through Title V Permit
20. For 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. VOC emissions shall be reported as methane. VOC, NO<sub>x</sub>, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702, 6.3.2]
21. The permittee shall monitor and record the stack concentration of NO<sub>x</sub> (as NO<sub>2</sub>), CO, and O<sub>2</sub> at least once every calendar quarter using a portable emission monitor that meets District specifications. [In-stack O<sub>2</sub> monitors may be allowed if approved by the APCO.] Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. 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 five days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4701, 5.4; District Rule 4702, 5.6] Federally Enforceable Through Title V Permit
22. If the NO<sub>x</sub> and/or CO concentrations corrected to 15% O<sub>2</sub>, as measured by the portable analyzer, exceed the permitted 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 the performing the notification and testing required by this condition. [District Rule 4701, 5.4 and District Rule 4702, 5.6] Federally Enforceable Through Title V Permit
23. 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 Rules 4701 and 4702]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

24. The permittee shall monitor and record the following at least once per month: run hour reading, post catalyst temperature readings, visual inspections, and O2 sensor readings (in millivolts). [District Rule 4702, 6.5.2 and District Rule 2520, 9.4.2]
25. 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
26. 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
27. If the District or EPA determine 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
28. 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 4701, 5.4] Federally Enforceable Through Title V Permit
29. Operator shall maintain annual records of the fuel supplier invoices for each delivery and the corresponding certified sulfur content. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
30. The operator of this internal combustion (IC) engine shall maintain and retain all records of required monitoring data, support information, including source test results for a minimum of five years, and shall make them available for District inspection upon request. [District Rules 2520, 9.4.2 and 4701, 6.2] Federally Enforceable Through Title V Permit
31. 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 and quantity (cubic feet of gas or gallons of liquid) of fuel used, maintenance or modifications performed, monitoring data, compliance source test results and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1]
32. 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, 6.5.8]
33. 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, 13.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-353-3-5

**EXPIRATION DATE:** 10/31/2007

**SECTION:** SW21 **TOWNSHIP:** 30S **RANGE:** 25E

**EQUIPMENT DESCRIPTION:**

615 HP WAUKESHA MODEL F-3521-GL NATURAL GAS FIRED LEAN BURN IC ENGINE POWERING A WATER PUMP (WELL 2-02)

## PERMIT UNIT REQUIREMENTS

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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. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4201]
3. Unit shall be fired on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [Kern County Rule 407 and District Rule 4801] Federally Enforceable Through Title V Permit
4. This engine shall be equipped with a nonresettable fuel meter and a nonresettable elapsed operating time meter. The fuel meter shall be calibrated periodically per the recommendations of the manufacturer. [District Rule 4702, 5.6.6]
5. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified on the Inspection and Maintenance (I&M) plan submitted to the District. [District Rule 4702, 6.5.5]
6. The exhaust gas O2 concentration shall be maintained between 9.5 and 10.5 % O2. [District Rule 4701] Federally Enforceable Through Title V Permit
7. Emissions from this IC engine shall not exceed any of the following limits: 65 ppmvd NOx @ 15% O2 or 0.777 g-NOx/hp-hr, 0.009 g-SOx/hp-hr, 0.033 g-PM10/hp-hr, 642 ppmvd CO @ 15% O2 or 2.65 g-CO/hp-hr, or 350 ppmvd VOC @ 15% O2 or 1.455 g-VOC/hp-hr. [District Rules 2201 and District Rule 4702]
8. Nitrogen compound (NOx) emission rate shall not exceed 1.47 grams/BHP-hr and 1.99 lb/hr. [District NSR Rule] Federally Enforceable Through Title V Permit
9. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. If the engine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D 1072-80, D 3031-81, D 4084-82 or D 3246-81. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. 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, 9.3.2] Federally Enforceable Through Title V Permit
12. Operator shall determine the sulfur content of each delivery of propane fired in the IC engine. The sulfur content shall be determined using ASTM Method D 2784. [District Rule 2520, 9.3.2]

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

13. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Rules 406 (Fresno), 404 (Madera), 407 (Kern, Kings, San Joaquin, Stanislaus, Merced, Tulare). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
14. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Rules 402 (Madera) and 404 (Fresno, Merced, Kern, Kings, San Joaquin, Stanislaus, Tulare). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
15. Source testing to measure natural gas-combustion NO<sub>x</sub>, CO, and VOC emissions from this unit shall be conducted upon implementation of this ATC and not less than once every 24 months. [District Rule 4701, District Rule 4702, 6.3.1 and District Rule 2520, 9.4.2] 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 NSR Rule] Federally Enforceable Through Title V Permit
17. Source testing shall be performed for NO<sub>x</sub> (ppmv) according to EPA Method 7E (or ARB Method 100), and stack gas oxygen by EPA Method 3 or 3A (or ARB Method 100). Source testing for CO (ppmv) shall be performed according to EPA Method 10 (or ARB Method 100). [District Rule 4701, 6.4]
18. For 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. VOC emissions shall be reported as methane. VOC, NO<sub>x</sub>, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702, 6.3.2]
19. 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, 6.3.2]
20. Source test results shall be submitted to the District within 60 days of the test. [District Rule 1081] Federally Enforceable Through Title V Permit
21. The permittee shall monitor and record the stack concentration of O<sub>2</sub> at least once every month using a portable emission monitor that meets District specifications. [In-stack O<sub>2</sub> monitors may be allowed if approved by the APCO.] 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 1 day of restarting the engine unless monitoring has been performed within the last month. [District Rule 4701, 5.4 and District Rule 4702, 5.6] Federally Enforceable Through Title V Permit
22. If the O<sub>2</sub> concentration, as measured by the portable analyzer, is outside the permitted range, the permittee shall return the O<sub>2</sub> to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue outside the permitted range 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 the performing the notification and testing required by this condition. [District Rule 4701, 5.4] Federally Enforceable Through Title V Permit
23. 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 Rules 4701 and 4702]
24. The permittee shall monitor and record the following at least once per month: run hour reading, post turbo temperature readings, visual inspections, and exhaust O<sub>2</sub> readings. [District Rule 4702, 6.5.2]

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

25. The permittee shall maintain records of: (1) the date and time of O2 measurements, (2) the O2 concentration in percent, (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 4701]
26. The operator of an internal combustion (IC) engine shall maintain and retain all records of required monitoring data, support information, including source test results for minimum period of five years, and shall make them available for District inspection upon request. [District Rule 2520, 9.5.2] Federally Enforceable Through Title V Permit
27. 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 and quantity (cubic feet of gas or gallons of liquid) of fuel used, maintenance or modifications performed, monitoring data, compliance source test results and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1]
28. 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, 6.5.8]
29. 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, 13.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-353-4-3

**EXPIRATION DATE:** 10/31/2007

**SECTION:** SW 22 **TOWNSHIP:** 30S **RANGE:** 25E

**EQUIPMENT DESCRIPTION:**

840 BHP WAUKESHA MODEL F3524 GSI, NATURAL GAS AND LPG-FIRED IC ENGINE SERVED BY 3-WAY CATALYST AND CARBON CANISTER (WELL 603)

## PERMIT UNIT REQUIREMENTS

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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 liquified petroleum gas (LPG) with a sulfur content of less than or equal to 0.008% by weight. [Kern County Rule 407 and District Rule 4801] Federally Enforceable Through Title V Permit
4. IC engine shall be equipped with Waukesha Custom Controller which readily indicates air/fuel ratio setting within tolerance limits as recommended by the catalyst system supplier. [District NSR Rule] Federally Enforceable Through Title V Permit
5. All exhaust emission shall exit through catalytic converter. [District NSR Rule] Federally Enforceable Through Title V Permit
6. The engine shall be operated such that the O2 sensor setting is within 0.6 - 1.0 DC volts as necessary to meet the air/fuel ratio setting. [40 Part CFR 64] Federally Enforceable Through Title V Permit
7. NOx exhaust emissions shall be reduced by a minimum of 90% during initial tests and 80% thereafter across the control device, or shall not exceed 0.15 g/bhp-hr or 10.4 ppmv (calculated to 15% oxygen), averaged over at least 15 minutes. [District NSR Rule and Rule 4701] Federally Enforceable Through Title V Permit
8. CO exhaust emissions shall not exceed 0.6 g/bhp-hr or 68.4 ppmv (calculated to 15% oxygen), averaged over at least 15 minutes. [District NSR Rule and Rule 4701] Federally Enforceable Through Title V Permit
9. VOC exhaust emissions shall not exceed 0.15 g/bhp-hr or 30 ppmv (calculated to 15% oxygen), averaged over at least 15 minutes. [District NSR Rule and Rule 4701] Federally Enforceable Through Title V Permit
10. Piping shall have necessary connections to allow for extraction of a grab sample and use of an FID, PID or other District-approved VOC detection device shall be provided for the activated carbon canister exhaust gas. [District Rule 1081]
11. Crankcase breather vent line emissions shall be controlled by a carbon canister. [District Rule 2201]
12. A fresh spare activated carbon canister shall be kept at the West Kern Water District Warehouse for use when needed. [District Rule 2201]
13. Crankcase breather vent line exhaust VOC concentration shall not exceed 200 ppmv. [District Rule 2201]
14. The carbon canister shall be serviced and replaced when the VOC concentration in the crankcase breather line exhaust exceeds 160 ppmv. [District Rule 2201]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

15. The carbon canister removed from the system shall be sealed vapor tight. [District Rule 2201]
16. If the engine is fired on natural gas but not PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM Method D 1072, D 3031, D 4084 or D 3246. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
17. Operator shall determine the sulfur content of each delivery of liquified petroleum gas (LPG) fired in the IC engine. The sulfur content shall be determined using ASTM Method D 2784. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
18. 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, 9.3.2] Federally Enforceable Through Title V Permit
19. Source tests to determine with CO and NOx emissions shall be conducted at least once every 24 months by District-witnessed sample collection by independent testing laboratory. [District Rule 4701, 6.3.1] Federally Enforceable Through Title V Permit
20. 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
21. Source testing shall be performed for NOx (ppmv) according to EPA Method 7E (or ARB Method 100), and stack gas oxygen by EPA Method 3 or 3A (or ARB Method 100). Source testing for CO (ppmv) shall be performed according to EPA Method 10 (or ARB Method 100). [District Rule 4701, 6.4] Federally Enforceable Through Title V Permit
22. The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar quarter using a portable emission monitor that meets District specifications. [In-stack O2 monitors may be allowed if approved by the APCO.] Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. 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 five days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4701, 5.4] Federally Enforceable Through Title V Permit
23. If the NOx and/or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted 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 the performing the notification and testing required by this condition. [District Rule 4701, 5.4] Federally Enforceable Through Title V Permit
24. 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
25. 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
26. If the District or EPA determine 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
27. The permittee shall record the O2 sensor reading (in millivolts) on a daily basis. [District Rule 2520, 9.4.2] 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.



28. The permittee shall maintain records of: (1) the date and time of NO<sub>x</sub>, CO, and O<sub>2</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NO<sub>x</sub> and CO concentrations corrected to 15% O<sub>2</sub>, (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 4701, 5.4] Federally Enforceable Through Title V Permit
29. The permittee shall monitor and record the crankcase breather vent line stack concentration of VOCs on a quarterly basis using a portable analyzer. [District Rule 1081]
30. Operator shall maintain annual records of the fuel supplier invoices for each delivery and the corresponding certified sulfur content. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
31. The operator of this internal combustion (IC) engine shall maintain and retain all records of required monitoring data, support information, including source test results for a minimum of five years, and shall make them available for District inspection upon request. [District Rules 2520, 9.4.2 and 4701, 6.2] Federally Enforceable Through Title V Permit
32. 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, 13.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-353-5-1

**EXPIRATION DATE:** 10/31/2007

**SECTION:** SW22 **TOWNSHIP:** 30S **RANGE:** 25E

**EQUIPMENT DESCRIPTION:**

76 BHP FORD MODEL ESG642 NATURAL GAS/PROPANE-FIRED EMERGENCY IC ENGINE POWERING AN ELECTRICAL GENERATOR (PUMP STATION 6-03)

## PERMIT UNIT REQUIREMENTS

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1. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101, 5.1] Federally Enforceable Through Title V Permit
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
3. 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
4. This engine shall only be fired on PUC quality natural gas, LPG or propane. [District NSR Rule] Federally Enforceable Through Title V Permit
5. 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
6. 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
7. The 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 200 hours per year. [District NSR Rule and District Rule 4701] Federally Enforceable Through Title V Permit
8. NOx emissions shall not exceed 0.0003 lb/hp-hr or 39.7 ppm @ 15% O2. [District NSR Rule] Federally Enforceable Through Title V Permit
9. The permittee shall maintain records of hours of emergency and non-emergency operation. Records shall include the date, the number of hours of operation, and the purpose of the operation (e.g., load testing, weekly testing, rolling blackout, general area power outage, etc.). Such records shall be retained for a period of at least five years and made available for District inspection upon request. [District Rule 1070 and Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

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# ATTACHMENT C

Detailed Facility List

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**Detailed Facility Report**

For Facility=353

Sorted by Facility Name and Permit Number

<b>WEST KERN WATER DISTRICT WELL FIELD</b>	FAC # STATUS: TELEPHONE:	<b>S 353 A (661) 763-3151</b>	TYPE: TOXIC ID:	<b>TitleV 50292</b>	EXPIRE ON: AREA: INSP. DATE:	<b>10/31/2007 6 / 04/11</b>
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PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-353-1-9	473 hp IC Engine	3020-10 D	1	479.00	479.00	A	473 HP WAUKESHA MODEL F-2895-GU NATURAL GAS/PROPANE FIRED RICH-BURN IC ENGINE SERVED BY WAUKESHA AIR/FUEL CONTROLLER AND A NON-SELECTIVE 3-WAY CATALYST POWERING A WATER PUMP (WELL 2-01)
S-353-2-9	473 HP IC Engine	3020-10 D	1	479.00	479.00	A	473 HP WAUKESHA MODEL F-2895-GU NATURAL GAS/PROPANE FIRED RICH-BURN IC ENGINE SERVED BY WAUKESHA AIR/FUEL CONTROLLER AND A NON-SELECTIVE 3-WAY CATALYST POWERING A WATER PUMP (WELL 6-01)
S-353-3-5	615 hp IC Engine	3020-10 D	1	479.00	479.00	A	615 HP WAUKESHA MODEL F-3521-GL NATURAL GAS FIRED LEAN BURN IC ENGINE POWERING A WATER PUMP (WELL 2-02)
S-353-4-3	840 BHP	3020-10 E	1	602.00	602.00	A	840 BHP WAUKESHA MODEL F3524 GSI, NATURAL GAS AND LPG-FIRED IC ENGINE SERVED BY 3-WAY CATALYST AND CARBON CANISTER (WELL 603)
S-353-5-1	76 BHP	3020-10 A	1	80.00	80.00	A	76 BHP FORD MODEL ESG642 NATURAL GAS/PROPANE-FIRED EMERGENCY IC ENGINE POWERING AN ELECTRICAL GENERATOR (PUMP STATION 6-03)

Number of Facilities Reported: 1

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# ATTACHMENT D

Stringency Analysis Rule 4601

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**Stringency Comparison of District Rule 4601 Non-SIP Version (12/17/09) to Current SIP Version (10/31/01)**

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
2.0 Applicability	This rule is applicable to any person who supplies, sells, offers for sale, applies, or solicits the application of any architectural coating, or who manufactures any architectural coating for use within the District.	This rule is applicable to any person who supplies, sells, offers for sale, applies, or solicits the application of any architectural coating, or who manufactures, blends or repackages any architectural coating for use within the District.	No change in the applicability, therefore, non-SIP version of rule is as stringent as SIP version.
4.0 Exemptions	<p>The provisions of this rule shall not apply to:</p> <p>4.1 Any architectural coating that is sold or manufactured for use outside of the District or for shipment to other manufacturers for reformulation or repackaging.</p> <p>4.2 Any architectural coating that is sold in a containers with a volume of one liter (1.057 quarts) or less.</p> <p>4.3 Any aerosol coating product.</p>	<p>4.1 The provisions of this rule shall not apply to:</p> <p>4.1.1 Any architectural coating that is supplied, sold, offered for sale, or manufactured for use outside of the District or for shipment to other manufacturers for reformulation or repackaging.</p> <p>4.1.2 Any aerosol coating product.</p> <p>4.2 With the exception of Section 6.2, the provisions of this rule shall not apply to any architectural coating that is sold in a container with a volume of one liter (1.057 quarts) or less.</p>	The only change is to require reporting requirements as discussed in Section 6.2 of the non-SIP approved version. Therefore, the non-SIP version of the rule is more stringent than the SIP version of the rule.
5.0 Requirements	<b>Note: Section 5.0 requirements refer to Table of Standards, Table of Standards 1, and Table of Standards 2. These tables are included as Attachment X.</b>		
	<p>5.1 VOC Content Limits: Except as provided in Sections 5.2, 5.3, 5.8 and 8.0, no person shall;</p> <p>5.1.1 manufacture, blend, or repackage for sale within the District;</p> <p>5.1.2 supply, sell, or offer for sale within the district;</p> <p>5.1.3 solicit for application or apply within the District any architectural coating with a VOC content in excess of the corresponding limit specified in the Table of Standards, after the specified effective date in the Table of Standards.</p>	<p>5.1 VOC Content Limits: Except as provided in Sections 5.2 and 5.3, no person shall: manufacture, blend, or repackage for use within the District; or supply, sell, or offer for sale within the District; or solicit for application or apply within the District any architectural coating with a VOC content in excess of the corresponding limit specified in the Table of Standards 1 or the Table of Standards 2, after the specified effective date in the Table of Standards 1 or the Table of Standards 2. Limits are expressed as VOC Regulatory, thinned to the manufacturer's maximum thinning recommendation, excluding any colorant added to tint bases.</p>	Sections 5.8 and 8.0 of the SIP version are not included in the non-SIP version. As discussed in corresponding sections the non-SIP version is more stringent. The Table of Standards and Table of Standards 1 have the same VOC limits. Table of Standard 2 is more stringent as discussed below. Therefore, the non-SIP version of the rule is more stringent than the SIP version of the rule.
	<p>5.2 Most Restrictive VOC Limit: If anywhere on the container of any architectural coating, or any label or sticker affixed to the container, or in any sales, advertising, or technical literature supplied by a manufacturer or anyone acting on their behalf, any representation is made that indicates that the coating meets the definition of or is recommended for use for more than one of the coating categories listed in the Table of Standards, then the most restrictive VOC content limit shall apply. This provision does not apply to the following coating categories:</p> <p>5.2.1 Lacquer coatings (including lacquer sanding sealers)</p> <p>5.2.2 Metallic pigmented coatings</p> <p>5.2.3 Shellacs</p> <p>5.2.4 Fire-retardant coatings</p> <p>5.2.5 Pretreatment wash primers</p> <p>5.2.6 Industrial maintenance coatings</p> <p>5.2.7 Low-solids coatings</p>	<p>5.2 Most Restrictive VOC Limit: If a coating meets the definition in Section 3.0 for one or more specialty coating categories listed in the Table of Standards 1 or the Table of Standards 2, then that coating is not required to meet the VOC limits for Flat, Nonflat, or Nonflat – High Gloss coatings, but is required to meet the VOC limit for the applicable specialty coating listed in the Table of Standards 1 or the Table of Standards 2.</p> <p>5.2.1 Effective until December 31, 2010, with the exception of the specialty coating categories specified in Section 5.2.3.1 through 5.2.3.15, if a coating is recommended for use in more than one of the specialty coating categories listed in the Table of Standards 1, the most restrictive (or lowest) VOC content limit shall apply.</p> <p>5.2.2 Effective on and after January 1, 2011, with the exception of the</p>	The VOC limit of the non-SIP version is at least as stringent as the SIP version. Therefore, the non-SIP version of the rule is more stringent than the SIP version of the rule.

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
	<p>5.2.8 Wood preservatives</p> <p>5.2.9 High temperature coatings</p> <p>5.2.10 Temperature-indicator safety coatings</p> <p>5.2.11 Antenna coatings</p> <p>5.2.12 Antifouling coatings</p> <p>5.2.13 Flow coatings</p> <p>5.2.14 Bituminous roof primers</p> <p>5.2.15 Specialty primers, sealers and undercoaters</p>	<p>specialty coating categories specified in Sections 5.2.3.2, 5.2.3.3, 5.2.3.5 through 5.2.3.9, and 5.2.3.14 through 5.2.3.18, if a coating is recommended for use in more than one of the specialty coating categories listed in the Table of Standards 2, the most restrictive (or lowest) VOC content limit shall apply.</p> <p>5.2.3 This requirement applies to: usage recommendations that appear anywhere on the coating container, anywhere on any label or sticker affixed to the container, or in any sales, advertising, or technical literature supplied by a manufacturer or anyone acting on their behalf.</p> <p>5.2.3.1 Lacquer coatings (including lacquer sanding sealers)</p> <p>5.2.3.2 Metallic pigmented coatings</p> <p>5.2.3.3 Shellacs</p> <p>5.2.3.4 Fire-retardant coatings</p> <p>5.2.3.5 Pretreatment wash primers</p> <p>5.2.3.6 Industrial maintenance coatings</p> <p>5.2.3.7 Low-solids coatings</p> <p>5.2.3.8 Wood preservatives</p> <p>5.2.3.9 High temperature coatings</p> <p>5.2.3.10 Temperature-indicator safety coatings</p> <p>5.2.3.11 Antenna coatings</p> <p>5.2.3.12 Antifouling coatings</p> <p>5.2.3.13 Flow coatings</p> <p>5.2.3.14 Bituminous roof primers</p> <p>5.2.3.15 Specialty primers, sealers and undercoaters</p> <p>5.2.3.16 Aluminum roof coatings</p> <p>5.2.3.17 Zinc-rich primers</p> <p>5.2.3.18 Wood Coatings</p>	
	<p>5.3 Sell-Through of Coatings:</p> <p>5.3.1 A coating manufactured prior to the January 1, 2003 or January 1, 2004 effective date specified for that coating in the Table of Standards may be sold, supplied, or offered for sale for up to three years after the specified effective date. In addition, a coating manufactured before the effective date specified for that coating in the Table of Standards may be applied at any time, both before and after the specified effective date, so long as the coating complied with the standards in effect at the time the coating was manufactured. This Section 5.3 does not apply to any coating that does not display the date or date-code required by Section 6.1.1.</p> <p>5.3.2 A coating included in an approved Averaging Program that does not comply with the specified limit in the</p>	<p>5.3 Sell-Through of Coatings:</p> <p>A coating manufactured prior to the effective date specified for that coating in the Table of Standards 1 or the Table of Standards 2, and that complied with the standards in effect at the time the coating was manufactured, may be sold, supplied, or offered for sale for up to three years after the specified effective date. In addition, a coating manufactured before the effective date specified for that coating in the Table of Standards 1 or the Table of Standards 2 may be applied at any time, both before and after the specified effective date, so long as the coating complied with the standards in effect at the time the coating was manufactured. This Section 5.3 does not apply to any coating that does not display the date or date-code required by Section 6.1.1.</p>	<p>The VOC limit of the non-SIP version is at least as stringent as the SIP version. Section 5.3.2 was removed it is no longer applicable in the SIP version. Therefore, the non-SIP version of the rule is more stringent than the SIP version of the rule.</p>

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
	<p>Table of Standards may be sold, supplied, or offered for sale for up to three years after the end of the compliance period specified in the approved Averaging Program. In addition, such a coating may be applied at any time, both during and after the compliance period. This Section 5.3.2 does not apply to any coating that does not display on the container either the statement: "This product is subject to architectural coatings averaging provisions in California" or a substitute symbol specified by the Executive Officer of the California Air Resources Board (ARB). This Section 5.3.2 shall remain in effect until January 1, 2008.</p>		
	<p>5.4 Painting Practices: All architectural coating containers used to apply the contents therein to a surface directly from the container by pouring, siphoning, brushing, rolling, padding, ragging or other means, shall be closed when not in use. These architectural coating containers include, but are not limited to, drums, buckets, cans, pails, trays or other application containers. Containers of any VOC containing materials used for thinning and cleanup shall also be closed when not in use.</p>	<p>5.4 Painting Practices: All architectural coating containers used to apply the contents therein to a surface directly from the container by pouring, siphoning, brushing, rolling, padding, ragging or other means, shall be closed when not in use. These architectural coating containers include, but are not limited to, drums, buckets, cans, pails, trays or other application containers. Containers of any VOC-containing materials used for thinning and cleanup shall also be closed when not in use.</p>	<p>No change in the requirements, therefore, non-SIP version of rule is as stringent as SIP version.</p>
	<p>5.5 Thinning: No person who applies or solicits the application of any architectural coating shall apply a coating that is thinned to exceed the applicable VOC limit specified in the Table of Standards.</p>	<p>5.5 Thinning: No person who applies or solicits the application of any architectural coating shall apply a coating that is thinned to exceed the applicable VOC limit specified in the Table of Standards 1 or the Table of Standards 2.</p>	<p>The VOC limit of the non-SIP version is at least as stringent as the SIP version. Therefore, the non-SIP version of the rule is more stringent than the SIP version of the rule.</p>
	<p>5.6 Rust Preventative Coatings: Effective January 1, 2004, no person shall apply or solicit the application of any rust preventative coating for industrial use, unless such a rust preventative coating complies with the industrial maintenance coating VOC limit specified in the Table of Standards.</p>	<p>5.6 Rust Preventative Coatings: Effective through December 31, 2010, no person shall apply or solicit the application of any rust preventative coating for industrial use, unless such a rust preventative coating complies with the industrial maintenance coating VOC limit specified in the Table of Standards 1.</p>	<p>The VOC limit of the non-SIP version is at least as stringent as the SIP version. Therefore, the non-SIP version of the rule is more stringent than the SIP version of the rule.</p>
	<p>5.7 Coatings Not Listed in the Table of Standards: For any coating that does not meet any of the definitions for the specialty coatings categories listed in the Table of Standards, the VOC content limit shall be determined by classifying the coating as a flat coating or a nonflat coating, based on its gloss, as defined in Sections 3.21, 3.36 and 3.37 and the corresponding flat or nonflat VOC limit shall apply.</p>	<p>5.7 Coatings Not Listed in the Table of Standards 1 or the Table of Standards 2: For any coating that does not meet any of the definitions for the specialty coatings categories listed in the Table of Standards 1 or the Table of Standards 2, the VOC content limit shall be determined by classifying the coating as a Flat, Nonflat, or Nonflat – High Gloss coating, based on its gloss, and the corresponding Flat, Nonflat, or Nonflat – High Gloss VOC limit in the Table of Standards 1 or the Table of Standards 2 shall apply.</p>	<p>The VOC limit of the non-SIP version is at least as stringent as the SIP version. Therefore, the non-SIP version of the rule is more stringent than the SIP version of the rule.</p>
	<p>5.8 Lacquers: Notwithstanding the provisions of Section 3.1, a person or facility may add up to 10 percent by volume of VOC to a lacquer to avoid blushing of the finish during days with relative humidity greater</p>	<p>---</p>	<p>This section has been removed. The operation is required to meet the lacquer VOC limit regardless of</p>



Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
	than 70 percent and temperature below 65°F, at the time of application, provided that the coating contains acetone and no more than 550 grams of VOC per liter of coating, less water and exempt compounds, prior to the addition of VOC.		temperature and humidity. Therefore, non-SIP version of rule is as stringent as SIP version
	5.9 Averaging Compliance Option: On or after January 1, 2003, in lieu of compliance with the specified limits in The Table of Standards for floor coatings; industrial maintenance coatings; primers, sealers, and undercoaters; quick-dry primers, sealers, and undercoaters; quick-dry enamels; roof coatings; bituminous roof coatings; rust preventative coatings; stains; waterproofing sealers, as well as flats and non-flats (excluding recycled coatings), manufacturers may average designated coatings such that their actual cumulative emissions from the averaged coatings are less than or equal to the cumulative emissions that would have been allowed under those limits over a compliance period not to exceed one year. Such manufacturers must also comply with the averaging provisions contained in Section 8.0, as well as maintain and make available for inspection records for at least three years after the end of the compliance period. This Section 5.9 and Section 8.0 shall cease to be effective on January 1, 2005, after which averaging will no longer be allowed.	---	This section is removed from the non-SIP version, it is no longer applicable. Therefore, non-SIP version of rule is as stringent as SIP version.
	---	5.8 Prior to January 1, 2011, any coating that meets a definition in Section 3.0 for a coating category listed in the Table of Standards 2 and complies with the applicable VOC limit in the Table of Standards 2 and with Sections 5.2 and 6.1 (including those provision of Section 6.1 otherwise effective on January 1, 2011) shall be considered in compliance with this rule.	Table of Standards 2 is more stringent than the VOC limits of Table of Standards in the SIP-Approved version. Therefore, non-SIP version of rule is as stringent as SIP version.
Table of Standards (See Attachment X for Table)		Table of Standards 1 (Effective through 12/31/10) (See Attachment X for Table)	The non-SIP rule requirements are the same as the Table of Standards in the SIP approved rule, except Table of Standards 1 expires at which time Table of Standards 2 is in effect. As discussed below these standards are more stringent. Therefore, non-SIP version of rule is as stringent as SIP version.
		Table of Standards 2 (Effective on and after 1/1/11) (See Attachment X for Table)	The requirements of Table of Standards 2 are more stringent than the Table of Standards in the SIP rule. Therefore, non-SIP version of rule is as stringent as SIP version.
6.0 Administrative Requirements	6.1 Labeling Requirements: Each manufacturer of any architectural coating subject to this rule shall display the information listed in Sections	6.1 Labeling Requirements: Each manufacturer of any architectural coating subject to this rule shall display the	The non-SIP approved rule contain sections listed in the SIP rule plus

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
	<p>6.1.1 through 6.1.9 on the coating container (or label) in which the coating is sold or distributed.</p> <p>6.1.1 Date Code: The date the coating was manufactured, or a date code representing the date, shall be indicated on the label, lid or bottom of the container. If the manufacturer uses a date code for any coating, the manufacturer shall file an explanation of each code with the Executive Officer of the ARB.</p> <p>6.1.2 Thinning Recommendations: A statement of the manufacturer's recommendation regarding thinning of the coating shall be indicated on the label or lid of the container. This requirement does not apply to the thinning of architectural coatings with water. If thinning of the coating prior to use is not necessary, the recommendation must specify that the coating is to be applied without thinning.</p> <p>6.1.3 VOC Content: Each container of any coating subject to this rule shall display either the maximum or actual VOC content of the coating, as supplied, including the maximum thinning as recommended by the manufacturer. VOC content shall be displayed in grams of VOC per liter of coating. VOC content displayed shall be calculated using product formulation data, or shall be determined using the test methods in Section</p> <p>6.3.1. The equations in Sections 3.25 or 3.26, as appropriate, shall be used to calculate VOC content.</p> <p>6.1.4 Industrial Maintenance Coatings: In addition to the information specified in Sections 6.1.1, 6.1.2 and 6.1.3, each manufacturer of any industrial maintenance coating subject to this rule shall display on the label or lid of the container in which the coating is sold or distributed one or more of the following descriptions listed in Section 6.1.4.1 through 6.1.4.3.</p> <p>6.1.4.1 "For industrial use only"</p> <p>6.1.4.2 "For professional use only"</p> <p>6.1.4.3 "Not for residential use" or "Not intended for residential use"</p> <p>6.1.5 Clear Brushing Lacquers: Effective January 1, 2003, the labels of all clear brushing lacquers shall prominently display the statements "For brush application only," and "This product must not be thinned or sprayed."</p> <p>6.1.6 Rust Preventative Coatings: Effective January 1, 2003, the labels of all rust preventative coatings shall prominently display the statement "For Metal Substrates Only"</p> <p>6.1.7 Specialty Primers, Sealers and Undercoaters: Effective January 1, 2003, the labels of all specialty primers, sealers and undercoaters shall prominently</p>	<p>information listed in Sections 6.1.1 through 6.1.14 on the coating container (or label) in which the coating is sold or distributed.</p> <p>6.1.1 Date Code: The date the coating was manufactured, or a date code representing the date, shall be indicated on the label, lid or bottom of the container. If the manufacturer uses a date code for any coating, the manufacturer shall file an explanation of each code with the Executive Officer of the ARB.</p> <p>6.1.2 Thinning Recommendations: A statement of the manufacturer's recommendation regarding thinning of the coating shall be indicated on the label or lid of the container. This requirement does not apply to the thinning of architectural coatings with water. If thinning of the coating prior to use is not necessary, the recommendation must specify that the coating is to be applied without thinning.</p> <p>6.1.3 VOC Content: Each container of any coating subject to this rule shall display one of the following values, in grams of VOC per liter of coating:</p> <p>6.1.3.1 Maximum VOC Content, as determined from all potential product formulations; or</p> <p>6.1.3.2 VOC Content, as determined from actual formulation data; or</p> <p>6.1.3.3 VOC Content, as determined using the test methods in Section 6.3.2.</p> <p>If the manufacturer does not recommend thinning, the container must display the VOC Content, as supplied. If the manufacturer recommends thinning, the container must display the VOC Content, including the maximum amount of thinning solvent recommended by the manufacturer. If the coating is a multicomponent product, the container must display the VOC content as mixed or catalyzed. If the coating contains silanes, siloxanes, or other ingredients that generate ethanol or other VOCs during the curing process, the VOC content must include the VOCs emitted during curing.</p> <p>6.1.4 Faux Finishing Coatings: Effective January 1, 2011, the labels of all clear topcoat Faux Finishing coatings shall prominently display the statement "This product can only be sold or used as part of a Faux Finishing coating system".</p> <p>6.1.5 Industrial Maintenance Coatings: Each manufacturer of any industrial maintenance coating subject to this rule shall display on the label or lid of</p>	<p><b>additional requirements not found in the SIP version. Therefore, non-SIP version of rule is as stringent as SIP version.</b></p>

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	<p>display one or more of the descriptions listed in Section</p> <p>6.1.7.1 through 6.1.7.5.</p> <p>6.1.7.1 For blocking stains.</p> <p>6.1.7.2 For fire-damaged substrates.</p> <p>6.1.7.3 For smoke-damaged substrates.</p> <p>6.1.7.4 For water-damaged substrates.</p> <p>6.1.7.5 For excessively chalky substrates.</p> <p>6.1.8 Quick Dry Enamels: Effective January 1, 2003, the labels of all quick dry enamels shall prominently display the words "Quick Dry" and the dry hard time.</p> <p>6.1.9 Non-flat – High Gloss Coatings: Effective January 1, 2003, the labels of all non-flat – high gloss coatings shall prominently display the words "High Gloss".</p>	<p>the container in which the coating is sold or distributed one or more of the following descriptions listed in Section 6.1.5.1 through 6.1.5.3.</p> <p>6.1.5.1 "For industrial use only"</p> <p>6.1.5.2 "For professional use only"</p> <p>6.1.5.3 "Not for residential use" or "Not intended for residential use"</p> <p>6.1.6 Clear Brushing Lacquers: The labels of all clear brushing lacquers shall prominently display the statements "For brush application only," and "This product must not be thinned or sprayed." (Category deleted effective January 1, 2011.)</p> <p>6.1.7 Rust Preventative Coatings: The labels of all rust preventative coatings shall prominently display the statement "For Metal Substrates Only".</p> <p>6.1.8 Specialty Primers, Sealers and Undercoaters: Effective until December 31, 2010, the labels of all specialty primers, sealers and undercoaters shall prominently display one or more of the descriptions listed in Section 6.1.8.1 through 6.1.8.5. Effective on and after January 1, 2011, the labels of all specialty primers, sealers, and undercoaters shall prominently display one or more of the descriptions listed in Sections 6.1.8.1 through 6.1.8.3. On and after January 1, 2011, Sections 6.1.8.4 and 6.1.8.5 will be no longer effective.</p> <p>6.1.8.1 For fire-damaged substrates.</p> <p>6.1.8.2 For smoke-damaged substrates.</p> <p>6.1.8.3 For water-damaged substrates.</p> <p>6.1.8.4 For excessively chalky substrates.</p> <p>6.1.8.5 For blocking stains.</p> <p>6.1.9 Quick Dry Enamels: The labels of all quick dry enamels shall prominently display the words "Quick Dry" and the dry hard time. (Category deleted effective January 1, 2011.)</p> <p>6.1.10 Reactive Penetrating Sealers: Effective January 1, 2011, the labels of all Reactive Penetrating Sealers shall prominently display the statement "Reactive Penetrating Sealer."</p> <p>6.1.11 Stone Consolidants: Effective January 1, 2011, the labels of all Stone Consolidants shall prominently display the statement "Stone Consolidant - For Professional Use Only."</p> <p>6.1.12 Nonflat– High Gloss Coatings: The labels of all Nonflat – high gloss coatings shall prominently display the words "High Gloss."</p>	

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
		<p>6.1.13 Wood Coatings: Effective January 1, 2011, the labels of all Wood Coatings shall prominently display the statement "For Wood Substrates Only."</p> <p>6.1.14 Zinc Rich Primers: Effective January 1, 2011, the labels of all Zinc Rich Primers shall prominently display one or more of the following descriptions listed in Section 6.1.14.1 through 6.1.14.3.</p> <p>6.1.14.1 "For industrial use only"</p> <p>6.1.14.2 "For professional use only"</p> <p>6.1.14.3 "Not for residential use" or "Not intended for residential use"</p>	
	<p>6.2 Reporting Requirements</p> <p>6.2.1 Clear Brushing Lacquers: Each manufacturer of clear brushing lacquers shall, on or before April 1 of each calendar year beginning in the year 2004, submit an annual report to the Executive Officer of the ARB. The report shall specify the number of gallons of clear brushing lacquers sold in the State during the preceding calendar year, and shall describe the method used by the manufacturer to calculate State sales.</p> <p>6.2.2 Rust Preventative Coatings: Each manufacturer of rust preventative coatings shall, on or before April 1 of each calendar year beginning in the year 2004, submit an annual report to the Executive Officer of the ARB. The report shall specify the number of gallons of rust preventative coatings sold in the State during the preceding calendar year, and shall describe the method used by the manufacturer to calculate State sales.</p> <p>6.2.3 Specialty Primers, Sealers and Undercoaters: Each manufacturer of specialty primers, sealers and undercoaters shall, on or before April 1 of each calendar year beginning in the year 2004, submit an annual report to the Executive Officer of the ARB. The report shall specify the number of gallons of specialty primers, sealers and undercoaters sold in the State during the preceding calendar year, and shall describe the method used by the manufacturer to calculate State sales.</p> <p>6.2.4 Toxic Exempt Compounds: For each architectural coating that contains perchloroethylene or methylene chloride, the manufacturer shall, on or before April 1 of each calendar year beginning in the year 2004, submit an annual report to the Executive Officer of the ARB the following information for products sold in the State during the preceding year:</p> <p>6.2.4.1 the product brand name and a copy of the product label with legible usage instructions;</p>	<p>6.2 Reporting Requirements</p> <p>The reporting requirements specified in Sections 6.2.1 through 6.2.6 shall apply until December 31, 2010.</p> <p>6.2.1 Clear Brushing Lacquers: Each manufacturer of clear brushing lacquers shall, on or before April 1 of each calendar year beginning in the year 2004, submit an annual report to the Executive Officer of the ARB. The report shall specify the number of gallons of clear brushing lacquers sold in the State during the preceding calendar year, and shall describe the method used by the manufacturer to calculate State sales.</p> <p>6.2.2 Rust Preventative Coatings: Each manufacturer of rust preventative coatings shall, on or before April 1 of each calendar year beginning in the year 2004, submit an annual report to the Executive Officer of the ARB. The report shall specify the number of gallons of rust preventative coatings sold in the State during the preceding calendar year, and shall describe the method used by the manufacturer to calculate State sales.</p> <p>6.2.3 Specialty Primers, Sealers and Undercoaters: Each manufacturer of specialty primers, sealers and undercoaters shall, on or before April 1 of each calendar year beginning in the year 2004, submit an annual report to the Executive Officer of the ARB. The report shall specify the number of gallons of specialty primers, sealers and undercoaters sold in the State during the preceding calendar year, and shall describe the method used by the manufacturer to calculate State sales.</p> <p>6.2.4 Toxic Exempt Compounds: For each architectural coating that contains perchloroethylene or methylene chloride, the manufacturer shall, on or before April 1 of each calendar year beginning in the year 2004, submit an</p>	<p><b>Until December 31, 2010 both versions of the rule have the same reporting requirements. After that date the non-SIP approved rule includes very specific information to be kept and is required for all architectural coatings. Therefore, non-SIP version of rule is as stringent as SIP version.</b></p>

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
	<p>6.2.4.2 the product category listed in the Table of Standards to which the coating belongs;</p> <p>6.2.4.3 the total sales in California during the calendar year to the nearest gallon;</p> <p>6.2.4.4 the volume percent, to the nearest 0.10 percent, of perchloroethylene and methylene chloride in the coating.</p> <p>6.2.5 Recycled Coatings: Manufacturers of recycled coatings must submit a letter to the Executive Officer of the ARB certifying their status as a Recycled Paint Manufacturer. The manufacturer shall, on or before April 1 of each calendar year beginning with the year 2004, submit an annual report to the Executive Officer of the ARB. The report shall include, for all recycled coatings, the total number of gallons distributed in the State during the preceding year, and shall describe the method used by the manufacturer to calculate State distribution.</p> <p>6.2.6 Bituminous Coatings: Each manufacturer of bituminous roof coatings or bituminous roof primers shall, on or before April 1 of each calendar year beginning with the year 2004, submit an annual report to the Executive Officer of ARB. The report shall specify the number of gallons of bituminous roof coatings or bituminous roof primers sold in the State during the preceding calendar year, and shall describe the method used by the manufacturer to calculate State sales.</p>	<p>annual report to the Executive Officer of the ARB the following information for products sold in the State during the preceding year:</p> <p>6.2.4.1 the product brand name and a copy of the product label with legible usage instructions;</p> <p>6.2.4.2 the product category listed in the Table of Standards 1 or the Table of Standards 2 to which the coating belongs;</p> <p>6.2.4.3 the total sales in California during the calendar year to the nearest gallon;</p> <p>6.2.4.4 the volume percent, to the nearest 0.10 percent, of perchloroethylene and methylene chloride in the coating.</p> <p>6.2.5 Recycled Coatings: Manufacturers of recycled coatings must submit a letter to the Executive Officer of the ARB certifying their status as a Recycled Paint Manufacturer. The manufacturer shall, on or before April 1 of each calendar year beginning with the year 2004, submit an annual report to the Executive Officer of the ARB. The report shall include, for all recycled coatings, the total number of gallons distributed in the State during the preceding year, and shall describe the method used by the manufacturer to calculate State distribution.</p> <p>6.2.6 Bituminous Coatings: Each manufacturer of bituminous roof coatings or bituminous roof primers shall, on or before April 1 of each calendar year beginning with the year 2004, submit an annual report to the Executive Officer of ARB. The report shall specify the number of gallons of bituminous roof coatings or bituminous roof primers sold in the State during the preceding calendar year, and shall describe the method used by the manufacturer to calculate state sales.</p> <p>6.2.7 Effective on and after January 1, 2011, Sales Data: All sales data listed in Sections 6.2.7.1 to 6.2.7.14 shall be maintained on-site by the responsible official for a minimum of three years. A responsible official from each manufacturer shall upon request of the Executive Officer of the ARB, or his or her delegate, provide data concerning the distribution and sales of architectural coatings. Sales data submitted by the responsible official to the Executive Officer of the ARB may be claimed as confidential, and such information shall be handled in accordance with the procedures specified in Title 17,</p>	

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		<p>California Code of Regulations Sections 91000-91022. The responsible official shall within 180 days provide information, including, but not limited to the data listed in Sections 6.2.7.1 through 6.2.7.14:</p> <p>6.2.7.1 the name and mailing address of the manufacturer;</p> <p>6.2.7.2 the name, address and telephone number of a contact person;</p> <p>6.2.7.3 the name of the coating product as it appears on the label and the applicable coating category;</p> <p>6.2.7.4 whether the product is marketed for interior or exterior use or both;</p> <p>6.2.7.5 the number of gallons sold in California in containers greater than one liter (1.057 quart) and equal to or less than one liter (1.057 quart);</p> <p>6.2.7.6 the VOC Actual content and VOC Regulatory content in grams per liter. If thinning is recommended, list the VOC Actual content and VOC Regulatory content after maximum recommended thinning. If containers less than one liter have a different VOC content than containers greater than one liter, list separately. If the coating is a multi-component product, provide the VOC content as mixed or catalyzed;</p> <p>6.2.7.7 the names and CAS numbers of the VOC constituents in the product;</p> <p>6.2.7.8 the names and CAS numbers of any compounds in the product specifically exempted from the VOC definition;</p> <p>6.2.7.9 whether the product is marketed as solvent-borne, waterborne, or 100% solids;</p> <p>6.2.7.10 description of resin or binder in the product;</p> <p>6.2.7.11 whether the coating is a single-component or multi-component product;</p> <p>6.2.7.12 the density of the product in pounds per gallon;</p> <p>6.2.7.13 the percent by weight of: solids, all volatile materials, water, and any compounds in the product specifically exempted from the VOC definition; and</p> <p>6.2.7.14 the percent by volume of: solids, water, and any compounds in the product specifically exempted from the VOC definition.</p>	

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	<p>6.3 Test Methods</p> <p>6.3.1 VOC Content of Coatings: To determine the physical properties of a coating in order to perform the calculations in Section 3.26 and 3.27, the reference method for VOC content is U.S. EPA Method 24, except as provided in Sections 6.3.2 and 6.3.15. An alternative method to determine the VOC content of coatings is SCAQMD Method 304-91 (Revised February 1996), incorporated by reference in Section 6.3.14. The exempt compounds content shall be determined by SCAQMD Method 303-91 (Revised August 1996), incorporated by reference in Section 6.3.12. To determine the VOC content of a coating, the manufacturer may use U.S. EPA Method 24, or an alternative method as provided in Section 6.3.2, formulation data, or any other reasonable means for predicting that the coating has been formulated as intended (e.g., quality assurance checks, recordkeeping). However, if there are any inconsistencies between the results of a Method 24 test and any other means for determining VOC content, the Method 24 test results will govern, except when an alternative method is approved as specified in Section 6.3.2. The District Air Pollution Control Officer (APCO) may require the manufacturer to conduct a Method 24 analysis.</p> <p>6.3.2 Alternative Test Methods: Other test methods demonstrated to provide results that are acceptable for purposes of determining compliance with Section 6.3.1, after review and approved in writing by the staffs of the District, the ARB and the U.S. EPA, may also be used. 6.3.3 Methacrylate Traffic Marking Coatings: Analysis of methacrylate multicomponent coatings used as traffic marking coatings shall be conducted according to a modification of U.S. EPA Method 24 (40 CFR 59, subpart D, Appendix A), incorporated by reference in Section 6.3.15. This method has not been approved for methacrylate multicomponent coatings used for other purposes than as traffic marking coatings or for other classes of multicomponent coatings.</p> <p>6.3.4 Flame Spread Index: The flame spread index of a fire-retardant coating shall be determined by ASTM Designation E 84-99, "Standard Test Method for Surface Burning Characteristics of Building Materials"(see Section 3, Fire-Retardant Coating).</p> <p>6.3.5 Fire Resistance Rating: The fire</p>	<p>6.3 Test Methods</p> <p>The test methods listed below shall be used to demonstrate compliance with this rule. Alternate equivalent test methods may be used provided the test methods have been approved by the APCO and EPA.</p> <p>6.3.1 Calculation of VOC Content: For the purpose of determining compliance with the VOC content limits in the Table of Standards 1 or the Table of Standards 2, the VOC content of a coating shall be determined as defined in Section 3.77, 3.78, or 3.79 as appropriate. The VOC content of a tint base shall be determined without colorant that is added after the tint base is manufactured. If the manufacturer does not recommend thinning, the VOC Content must be calculated for the product as supplied. If the manufacturer recommends thinning, the VOC Content must be calculated including the maximum amount of thinning solvent recommended by the manufacturer. If the coating is a multi-component product, the VOC content must be calculated as mixed or catalyzed. If the coating contains silanes, siloxanes, or other ingredients that generate ethanol or other VOC during the curing process, the VOC content must include the VOCs emitted during curing.</p> <p>6.3.2 VOC Content of Coatings: To determine the physical properties of a coating in order to perform the calculations in Section 3.77 and 3.79, the reference method for VOC content is EPA Method 24, except as provided in Sections 6.3.3 and 6.3.16. An alternative method to determine the VOC content of coatings is SCAQMD Method 304-91 (Revised February 1996). The exempt compounds content shall be determined by SCAQMD Method 303-91 (Revised 1993), BAAQMD Method 43 (Revised 1996), or BAAQMD Method 41 (Revised 1995), as applicable. To determine the VOC content of a coating, the manufacturer may use EPA Method 24, or an alternative method as provided in Section 6.3.3, formulation data, or any other reasonable means for predicting that the coating has been formulated as intended (e.g., quality assurance checks, recordkeeping). However, if there are any inconsistencies between the results of EPA Method 24 test and any other means for determining VOC content, the EPA Method 24</p>	<p>The non-SIP version includes all the requirements of the SIP version. Therefore, the non-SIP version of the rule is more stringent than the SIP version of the rule.</p>

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
	<p>resistance rating of a fire-resistive coating shall be determined by ASTM Designation E 119-98, "Standard Test Methods for Fire Tests of Building Construction Materials"(see Section 3, Fire-Resistive Coating).</p> <p>6.3.6 Gloss Determination: The gloss of a coating shall be determined by ASTM Designation D 523-89 (1999), "Standard Test Method for Specular Gloss"(see Section 3, Flat Coating, Nonflat Coating, Nonflat-High Gloss Coating and Quick-Dry Enamel).</p> <p>6.3.7 Metal Content of Coatings: The metallic content of a coating shall be determined by SCAQMD Method 318-95, Determination of Weight Percent Elemental Metal in Coatings by X-Ray Diffraction, <i>SCAQMD Laboratory Methods of Analysis for Enforcement Samples</i> (see Section 3, Metallic Pigmented Coating).</p> <p>6.3.8 Acid Content of Coatings: The acid content of a coating shall be determined by ASTM Designation D 1613-96, "Standard Test Method for Acidity in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer and related products"(see Section 3, Pre-Treatment Wash Primer).</p> <p>6.3.9 Drying Times: The set-to-touch, dry-hard, dry-to-touch and dry-to-recoat times of a coating shall be determined by ASTM Designation D 1640-95, "Standard Test Methods for Drying, Curing, or Film Formation of Organic Coatings at Room Temperature" (see Section 3, Quick-Dry Enamel and Quick-Dry Primer, Sealer and Undercoater) The tack-free time of a quickdry enamel coating shall be determined by the Mechanical Test Method of ASTM Designation D 1640-95.</p> <p>6.3.10 Surface Chalkiness: The chalkiness of a surface shall be determined using ASTM Designation D4214-98, "Standard Test Methods for Evaluating the Degree of Chalking of Exterior Paint Films"(see Section 3, Specialty Primer, Sealer and Undercoater).</p> <p>6.3.11 Exempt Compounds—Siloxanes: Exempt compounds that are cyclic, branched, or linear completely methylated siloxanes, shall be analyzed as exempt compounds for compliance with Section 6 by BAAQMD Method 43, "Determination of Volatile Methylsiloxanes in Solvent-Based Coatings, Inks, and Related Materials," <i>BAAQMD Manual of Procedures</i>, Volume III, adopted 11/6/96 (see Section 3, Volatile Organic Compound, and Section 6.3.1).</p> <p>6.3.12 Exempt Compounds—</p>	<p>test results will govern, except when an alternative method is approved as specified in Section 6.3.3. The District Air Pollution Control Officer (APCO) may require the manufacturer to conduct an EPA Method 24 analysis.</p> <p>6.3.3 Alternative Test Methods: Other test methods demonstrated to provide results that are acceptable for purposes of determining compliance with Section 6.3.2 4, after review and approved in writing by the staffs of the District, ARB and EPA, may also be used.</p> <p>6.3.4 Methacrylate Traffic Marking Coatings: Analysis of methacrylate multicomponent coatings used as traffic marking coatings shall be conducted according to a modification of EPA Method 24 (40 CFR 59, subpart D, Appendix A). This method has not been approved for methacrylate multicomponent coatings used for other purposes than as traffic marking coatings or for other classes of multicomponent coatings.</p> <p>6.3.5 Flame Spread Index: The flame spread index of a fire-retardant coating shall be determined by ASTM E84-07, "Standard Test Method for Surface Burning Characteristics of Building Materials" (see Section 3.0, Fire-Retardant Coating).</p> <p>6.3.6 Fire Resistance Rating: The fire resistance rating of a fire-resistive coating shall be determined by ASTM E119-07, "Standard Test Methods for Fire Tests of Building Construction Materials" (see Section 3.0, Fire-Resistive Coating).</p> <p>6.3.7 Gloss Determination: The gloss of a coating shall be determined by ASTM D523-89 (1999), "Standard Test Method for Specular Gloss" (see Section 3.0, Flat Coating, Nonflat Coating, Nonflat-High Gloss Coating and Quick-Dry Enamel).</p> <p>6.3.8 Metal Content of Coatings: The metallic content of a coating shall be determined by SCAQMD Method 318-95, Determination of Weight Percent Elemental Metal in Coatings by X-Ray Diffraction, <i>SCAQMD Laboratory Methods of Analysis for Enforcement Samples</i> (see Section 3.0, Metallic Pigmented Coating, Aluminum Roof Coating and Faux Finish).</p> <p>6.3.9 Acid Content of Coatings: The acid content of a coating shall be determined by ASTM D1613-06, "Standard Test Method for Acidity in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer and related products" (see Section 3.0, Pre-Treatment Wash Primer).</p>	



Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
	<p>Parachlorobenzotrifluoride (PCBTF): The exempt compound parachlorobenzotrifluoride, shall be analyzed as an exempt compound for compliance with Section 6 by BAAQMD Method 41, "Determination of Volatile Organic Compounds in Solvent Based Coatings and Related Materials Containing Parachlorobenzotrifluoride," <i>BAAQMD Manual of Procedures</i>, Volume III, adopted 12/20/95 (see Section 3, Volatile Organic Compound, and Section 6.3.1).</p> <p>6.3.13 Exempt Compounds: The content of compounds under U.S. EPA Method 24 shall be analyzed by SCAQMD Method 303-91 (Revised 1996), "Determination of Exempt Compounds," <i>SCAQMD Laboratory Methods of Analysis for Enforcement Samples</i> (see Section 3, Volatile Organic Compound, and Section 6.3.1).</p> <p>6.3.14 VOC Content of Coatings: The VOC content of a coating shall be determined by U.S. EPA Method 24 as it exists in appendix A of 40 <i>Code of Federal Regulations</i> (CFR) part 60, "Determination of Volatile Matter Content, Water Content, Density, Volume Solids and Weight Solids of Surface Coatings"(see Section 6.3.1).</p> <p>6.3.15 Alternative VOC Content of Coatings: The VOC content of coatings may be analyzed either by U.S. EPA Method 24 or SCAQMD Method 304-91 (Revised 1996), "Determination of Volatile Organic Compounds (VOC) in Various Materials," <i>SCAQMD Laboratory Methods of Analysis for Enforcement Samples</i> (see Section 6.3.1).</p> <p>6.3.16 Methacrylate Traffic Marking Coatings: The VOC content of methacrylate multicomponent coatings used as traffic marking coatings shall be analyzed by the procedures in 40 CFR part 59, subpart D, appendix A, "Determination of Volatile Matter Content of Methacrylate Multicomponent Coatings Used as Traffic Marking Coatings" (September 11, 1998) (see Section 6.3.3).</p>	<p>6.3.10 Drying Times: The set-to-touch, dry-hard, dry-to-touch and dry-to-recoat times of a coating shall be determined by ASTM D1640-95, "Standard Test Methods for Drying, Curing, or Film Formation of Organic Coatings at Room Temperature" (see Section 3.0, Quick-Dry Enamel and Quick-Dry Primer, Sealer and Undercoater) The tack-free time of a quick-dry enamel coating shall be determined by the Mechanical Test Method of ASTM D1640-95. (Category deleted effective January 1, 2011.)</p> <p>6.3.11 Surface Chalkiness: The chalkiness of a surface shall be determined using ASTM D4214-98, "Standard Test Methods for Evaluating the Degree of Chalking of Exterior Paint Films"(see Section 3, Specialty Primer, Sealer and Undercoater). (Category deleted effective January 1, 2011.)</p> <p>6.3.12 Exempt Compounds—Siloxanes: Exempt compounds that are cyclic, branched, or linear completely methylated siloxanes, shall be analyzed as exempt compounds for compliance with Section 6 by BAAQMD Method 43, "Determination of Volatile Methylsiloxanes in Solvent-Based Coatings, Inks, and Related Materials," <i>BAAQMD Manual of Procedures</i>, Volume III, adopted 11/6/96 (see Section 3.0, Volatile Organic Compound, and Section 6.3.2).</p> <p>6.3.13 Exempt Compounds—Parachlorobenzotrifluoride (PCBTF): The exempt compound parachlorobenzotrifluoride, shall be analyzed as an exempt compound for compliance with Section 6 by BAAQMD Method 41, "Determination of Volatile Organic Compounds in Solvent Based Coatings and Related Materials Containing Parachlorobenzotrifluoride," <i>BAAQMD Manual of Procedures</i>, Volume III, adopted 12/20/95 (see Section 3.0, Volatile Organic Compound, and Section 6.3.2).</p> <p>6.3.14 Exempt Compounds: The content of compounds under U.S. EPA Method 24 shall be analyzed by SCAQMD Method 303-91 (Revised 1993), "Determination of Exempt Compounds," <i>SCAQMD Laboratory Methods of Analysis for Enforcement Samples</i> (see Section 3.0, Volatile Organic Compound, and Section 6.3.2).</p> <p>6.3.15 VOC Content of Coatings: The VOC content of a coating shall be determined by EPA Method 24 as it exists in appendix A of 40 <i>Code of</i></p>	

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
		<p><i>Federal Regulations</i> (CFR) part 60, "Determination of Volatile Matter Content, Water Content, Density, Volume Solids and Weight Solids of Surface Coatings" (see Section 6.3.2).</p> <p>6.3.16 Alternative VOC Content of Coatings: The VOC content of coatings may be analyzed either by U.S. EPA Method 24 or SCAQMD Method 304-91 (Revised 1996), "Determination of Volatile Organic Compounds (VOC) in Various Materials," <i>SCAQMD Laboratory Methods of Analysis for Enforcement Samples</i>.</p> <p>6.3.17 Methacrylate Traffic Marking Coatings: The VOC content of methacrylate multicomponent coatings used as traffic marking coatings shall be analyzed by the procedures in 40 CFR part 59, subpart D, appendix A, "Determination of Volatile Matter Content of Methacrylate Multicomponent Coatings Used as Traffic Marking Coatings" (September 11, 1998).</p> <p>6.3.18 Hydrostatic Pressure for Basement Specialty Coatings: The hydrostatic pressure resistance for basement specialty coatings shall be analyzed using ASTM D7088-04, "Standard Practice for Resistance to Hydrostatic Pressure for Coatings Used in Below Grade Applications Applied to Masonry".</p> <p>6.3.19 Tub and Tile Refinish Coating Adhesion: The adhesion of tub and tile coating shall be determined by ASTM D4585-99, "Standard Practice for Testing Water Resistance of Coatings Using Controlled Condensation" and ASTM D3359-02, "Standard Test Methods for Measuring Adhesion by Tape Test".</p> <p>6.3.20 Tub and Tile Refinish Coating Hardness: The hardness of tub and tile refinish coating shall be determined by ASTM D3363-05, "Standard Test Method for Film Hardness by Pencil Test".</p> <p>6.3.21 Tub and Tile Refinish Coating Abrasion Resistance: Abrasion resistance of tub and tile refinish coating shall be analyzed by ASTM D4060-07, "Standard Test Methods for Abrasion Resistance of Organic Coatings by the Taber Abraser".</p> <p>6.3.22 Tub and Tile Refinish Coating Water Resistance: Water resistance of tub and tile refinish coatings shall be determined by ASTM D4585-99, "Standard Practice for Testing Water Resistance of Coatings Using Controlled Condensation" and ASTM D714-02e1, "Standard Test Method</p>	

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
		<p>for Evaluating Degree of Blistering of Paints".</p> <p>6.3.23 Waterproofing Membrane: Waterproofing membrane shall be tested by ASTM C836-06, "Standard Specification for High Solids Content, Cold Liquid-Applied Elastomeric Waterproofing Membrane for Use with Separate Wearing Course".</p> <p>6.3.24 Mold and Mildew Growth for Basement Specialty Coatings: Mold and mildew growth resistance for basement specialty coatings shall be determined by ASTM D3273-00, "Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber" and ASTM D3274-95, "Standard Test Method for Evaluating Degree of Surface Disfigurement of Paint Films by Microbial (Fungal or Algal) Growth or Soil and Dirt Accumulation".</p> <p>6.3.25 Reactive Penetrating Sealer Water Repellency: Reactive penetrating sealer water repellency shall be analyzed by ASTM C67-07, "Standard Test Methods for Sampling and Testing Brick and Structural Clay Tile"; or ASTM C97-02, "Standard Test Methods for Absorption and Bulk Specific Gravity of Dimension Stone"; or ASTM C140-06, "Standard Test Methods for Sampling and Testing Concrete Masonry Units and Related Units".</p> <p>6.3.26 Reactive Penetrating Sealer Water Vapor Transmission: Reactive penetrating sealer water vapor transmission shall be analyzed ASTM E96/E96M-05, "Standard Test Method for Water Vapor Transmission of Materials".</p> <p>6.3.27 Reactive Penetrating Sealer - Chloride Screening Applications: Reactive penetrating sealers shall be analyzed by National Cooperative Highway Research Report 244 (1981), "Concrete Sealers for the Protection of Bridge Structures".</p> <p>6.3.28 Stone Consolidants: Stone consolidants shall be tested using ASTM E2167-01, "Standard Guide for Selection and Use of Stone Consolidants".</p>	
7.0 Compliance Schedule	Persons subject to this rule shall be in compliance with this rule by October 31, 2001.	Persons subject to this rule shall be in compliance with this rule by the dates specified within the rule.	No change in the requirements, therefore, non-SIP version of rule is as stringent as SIP version.
8.0 Averaging Compliance Option	8.1 On or after January 1, 2003, in lieu of compliance with the specified limits in the Table of Standards for floor coatings; industrial maintenance coatings; primers, sealers, and undercoaters; quick-dry primers, sealers, and undercoaters; quick-dry enamels; roof coatings; rust		No change in the requirements, therefore, non-SIP version of rule is as stringent as SIP version.

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
	<p>preventative coatings; stains; waterproofing sealers, as well as flats and non-flats (excluding recycled coatings), manufacturers may average designated coatings such that their actual cumulative emissions from the averaged coatings are less than or equal to the cumulative emissions that would have been allowed under those limits over a compliance period not to exceed one year. Such manufacturers must also comply with the averaging provisions contained in this Section, as well as maintain and make available for inspection records for at least three years after the end of the compliance period. This Section shall cease to be effective on January 1, 2005, after which averaging will no longer be allowed.</p> <p>Per Section 8.1, averaging is no longer applicable. Therefore, Section 8.2 through 8.14 are not listed.</p>		

District Rule 4601 was amended (12/17/2009). As analyzed, each amended section of the non-SIP version of the rule is at least as stringent as, or more stringent than the corresponding section of the SIP version of the rule. Therefore, it is concluded that overall the non-SIP version of the rule is more stringent than the SIP version of the rule.