



MAY 0 3 2010

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

Notice of Preliminary Decision – Title V Permit Renewal Re:

> District Facility # N-3299 **Project # N-1084481**

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 Turlock Irrigation District for its 48 MW combined cycle electric power generation facility at 4500 Crows Landing Road in Modesto, 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

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





MAY 0 3 2010

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

Notice of Preliminary Decision - Title V Permit Renewal Re:

> **District Facility # N-3299** Project # N-1084481

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 Turlock Irrigation District for its 48 MW combined cycle electric power generation facility at 4500 Crows Landing Road in Modesto, 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

34946 Flyover Court Bakersfield, CA 93308-9725 Tel: 661-392-5500 FAX: 661-392-5585

Southern Region





MAY 0 3 2010

George Davies **Turlock Irrigation District** PO Box 949 Turlock, CA 95381

Notice of Preliminary Decision - Title V Permit Renewal Re:

> District Facility # N-3299 **Project # N-1084481**

Dear Mr. Davies:

Enclosed for your review and comment is the District's analysis of the application to renew the Federally Mandated Operating Permit for Turlock Irrigation District for its 48 MW combined cycle electric power generation facility at 4500 Crows Landing Road in Modesto, 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

Seved Sadredin

Executive Director/Air Pollution Control Officer

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 Turlock Irrigation District for its 48 MW combined cycle electric power generation facility at 4500 Crows Landing Road in Modesto, California.

The District's analysis of the legal and factual basis for this proposed action. #N-1084481. is available for public inspection 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 Turlock Irrigation District N-3299

TABLE OF CONTENTS

	•	
l.	PROPOSAL	
II.	FACILITY LOCATION	
III.	EQUIPMENT LISTING	
IV.	GENERAL PERMIT TEMPLATE USAGE	
V.	SCOPE OF EPA AND PUBLIC REVIEW	
VI.	FEDERALLY ENFORCEABLE REQUIREMENTS	
VII.	REQUIREMENTS NOT FEDERALLY ENFORCEABLE	
VIII.	PERMIT REQUIREMENTS	
IX.	PERMIT SHIELD	
Χ.	PERMIT CONDITIONS	
XI.	ATTACHMENTS	22
Α.	DRAFT RENEWED TITLE V OPERATING PERMIT	
B.	PREVIOUS TITLE V OPERATING PERMIT	
C.	STRINGENCY ANALYSIS FOR DISTRICT RULE 4601	
D.	DETAILED FACILITY LIST	

TITLE V PERMIT RENEWAL EVALUATION

Power Generation Facility

Engineer: John Yoshimura

Date: 4/2/10

Facility Number: N-3299

Facility Name: Turlock Irrigation District

Mailing Address: PO Box 949

Turlock, CA 95381

Contact Name: George Davies

Phone: (209) 883-3451

Responsible Official: George Davies

Title: Combustion Turbine Department Manager

Project #: N-1084481

Deemed Complete: 12/24/08

I. PROPOSAL

Turlock Irrigation District previous Title V permit renewal was finalized on October 4, 2007. The Title V permit expired on June 30, 2009. 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 previous Title V actions.

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

Turlock Irrigation District is located at 4500 Crows Landing Road in Modesto, CA.

III. EQUIPMENT LISTING

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

IV. GENERAL PERMIT TEMPLATE USAGE

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

A. Template SJV-UM-0-2 Facility Wide Umbrella

The applicant has requested to utilize template No. SJV-UM-0-2, <u>Facility Wide Umbrella</u>. Based on the information submitted in the Template Qualification Form, the applicant qualifies for the use of this template.

B. Template SJV-GT-1-3 Series 1 Gas Turbines

The applicant has requested to utilize template No. SJV-GT-1-3, <u>Series 1</u> <u>Gas Turbines</u> for the 459 MMBtu/hr combined cycle gas turbine engine for permit number N-3299-3. However, the template is outdated and will not be used.

V. SCOPE OF EPA AND PUBLIC REVIEW

Certain segments of the proposed Renewed Operating Permit are based on model general permit templates that have been previously subject to EPA and public review. The terms and conditions from the model general permit templates are included in the proposed permit and are not subject to further EPA and public review.

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

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

Permit Units	Conditions	Template
N-3299-0-3	1 through 40	SJV-UM-0-2

VI. FEDERALLY ENFORCEABLE REQUIREMENTS

A. Rules Updated

- District Rule 2020, <u>Exemptions</u>
 (amended July 21, 1994 ⇒ amended December 20, 2007)
- District Rule 2201, New and Modified Stationary Source Review Rule (adopted September 19, 1991 ⇒ amended September 21, 2006)
- District Rule 4601, <u>Architectural Coatings</u>
 (amended October 31, 2007 ⇒ amended December 17, 2009)
- District Rule 4702, <u>Internal Combustion Engines Phase 2</u> (adopted August 21, 2003; amended January 18, 2007)
- District Rule 4703, <u>Stationary Gas Turbines</u>
 (amended October 16, 1997 ⇒ amended September 20, 2007)
- 40 CFR Part 61, Subpart M, <u>National Emission Standard for Asbestos</u> (amended November 9, 2007)
- 40 CFR Part 82, Subpart B and Subpart F, <u>Stratospheric Ozone</u> (amended June 8, 2008)

B. Rules Added

- District Rule 4801, <u>Sulfur Compounds</u>
 (adopted May 21, 1992 ⇒ amended December 17,1992)
- 40 CFR Part 60, Subpart IIII, <u>Standards for Performance for Stationary Compression Ignition Internal Combustion Engine</u> (amended July 11, 2006)
- 40 CFR Part 63, Subpart ZZZZ, <u>National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Emissions (RICE)</u> (amended January 18, 2008)

C. Rules Not Updated

 District Rule 1080, <u>Stack Monitoring</u> (adopted June 18, 1992 ⇒ amended December 17,1992)

- District Rule 1081, <u>Source Sampling</u>
 (adopted April 11, 1991 ⇒ amended December 16,1993)
- District Rule 1100, <u>Equipment Breakdown</u>
 (adopted June 18, 1992 ⇒ amended December 17,1992)
- District Rule 1160, <u>Emission Statements</u> (adopted November 18, 1992)
- District Rule 2010, <u>Permits Required</u> (adopted May 21, 1992 ⇒ amended December 17, 1992)
- District Rule 2031, <u>Transfer of Permits</u>
 (adopted May 21, 1992 ⇒ amended December 17, 1992)
- District Rule 2040, <u>Applications</u>
 (adopted May 21, 1992 ⇒ amended December 17, 1992)
- District Rule 2070, <u>Standards for Granting Applications</u> (adopted May 21, 1992 ⇒ amended December 17, 1992)
- District Rule 2080, <u>Conditional Approval</u> (adopted May 21, 1992 ⇒ amended December 17, 1992)
- District Rule 2520, <u>Federally Mandated Operating Permits</u> (adopted June 15, 1995 ⇒ amended June 21, 2001)
- District Rule 4001, New Source Performance Standards (amended September 17, 1997 ⇒ amended April 14, 1999)
- District Rule 4002, <u>National Emission Standards for Hazardous Air Pollutants</u> (amended May 18, 2000 ⇒ amended May 20, 2004)
- District Rule 4101, <u>Visible Emissions</u>
 (amended December 17, 1992 ⇒ amended February 17, 2005)
- District Rule 4201, <u>Particulate Matter Concentration</u> (adopted May 21, 1992 ⇒ amended December 17, 1992)
- District Rule 8011, <u>General Requirements</u>
 (Adopted November 15, 2001 ⇒ amended August 19, 2004)

- District Rule 8021, <u>Construction</u>, <u>Demolition</u>, <u>Excavation</u>, <u>Extraction</u>, and <u>Other Earthmoving Activities</u>
 (adopted November 15, 2001⇒ amended August 19, 2004)
- District Rule 8031, <u>Bulk Materials</u>
 (adopted November 15, 2001 ⇒ amended August 19, 2004)
- District Rule 8041, <u>Carryout and Trackout</u>
 (adopted November 15, 2001 ⇒ amended August 19, 2004)
- District Rule 8051, <u>Open Areas</u>
 (adopted November 15, 2001 ⇒ amended August 19, 2004)
- District Rule 8061, <u>Paved and Unpaved Roads</u>
 (adopted November 15, 2001 ⇒ amended August 19, 2004)
- District Rule 8071, <u>Unpaved Vehicle/Equipment Traffic Areas</u> (adopted November 15, 2001 ⇒ amended September 16, 2004)
- 40 CFR Part 60, Subpart GG, <u>Standards for Performance of Stationary</u> <u>Gas Turbines</u> (amended February 24, 2006)
- 40 CFR Part 72, Permits Regulation
- 40 CFR Part 73, Sulfur Dioxide Allowance System
- 40 CFR Part 75, Continuous Emissions Monitoring
- 40 CFR Part 77, Excess Emissions
- 40 CFR 64, <u>Compliance Assurance Monitoring (CAM)</u>

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 – <u>Airborne Toxic Control Measure (ATCM) for Stationary Compression-Ignition (CI) Engines</u> (amended October 18, 2007)

Conditions 4, 5 and 7 through 10 of permit unit N-3299-1-3 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 39 of permit unit N-3299-0-3 and conditions 21, 26 and 28 of permit unit N-3299-3-3 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 (N-3299-0-3).

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 GG – Standards of Performance for Stationary Gas Turbines

This subpart has not been updated, and conditions 12, 29 through 32, 35, 38, 40, 41 and 63 of permit unit N-3299-3-3 satisfy this rule.

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

This subpart is applicable to manufacturers, owners and operators of stationary compression ignited (CI) internal combustion engines (ICE) as specified in paragraphs (a)(1) through (3) of this section. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.

1) Manufacturers of stationary CI ICE with a displacement of less than 30 liters per cylinder where the model year is:

- a. 2007 or later, for engines that are not fire pumps;
- b. The model year listed in table 3 to this subpart or later model year, for fire pump engines.
- 2) Owners and operators of stationary CI ICE that commence construction after July 11, 2005 where the stationary CI ICE are:
 - a. Manufactured after April 1, 2006 and are not fire pump engines, or
 - b. Manufactured as a certified National Fire Protection Association (NFPA) fire pump engine after July 1, 2006
- 3) Owners and operators of stationary CI ICE that modify or reconstruct their stationary CI ICE after July 11, 2005.

Table 3 to Subpart IIII of Part 60—Certification Requirements for Stationary Fire Pump Engines

Engine power	Starting model year engine manufacturers must certify new stationary fire pump engines according to §60.4202(d)
KW<75 (HP<100)	2011
75≤KW<130 (100≤HP<175)	2010
130≤KW≤560 (175≤HP≤750)	2009
KW>560 (HP>750)	2008

Permit unit N-3299-1-3 is rated at 240 bhp, was manufactured before 2005 and has not been modified, therefore Subpart IIII is not applicable and no further discussion is required.

D. <u>District Rule 4002 - National Emission Standards for Hazardous Air</u> Pollutants

40 CFR 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Emissions (RICE)

Emergency engines are subject to this subpart if they are operated at a major or area source of Hazardous Air Pollutant (HAP) emissions. A major source of HAP emissions is a facility that has the potential to emit any single HAP at a rate of 10 tons/year or greater or any combinations of HAPs at a rate of 25

tons/year or greater. An area source of HAPs is a facility that is not a major source of HAPs. Permit unit N-3299-1-3 is a stationary RICE located at an major source of HAP emissions; therefore, N-3299-1-3 is subject to this Subpart.

40 CFR 63 Subpart ZZZZ requires the following engines to comply with 40 CFR 60 Subpart IIII:

- 1. New emergency engines located at area sources of HAPs
- 2. Emergency engines rated less than or equal to 500 bhp and located at major sources of HAPs

Permit unit N-3299-1-3 is exempt from 40 CFR 60 Subpart IIII, therefore '-1-3 is in compliance with 40 CFR 60 Subpart ZZZZ.

Additionally, 40 CFR 63 Subpart ZZZZ requires engines rated greater 500 bhp and located at major sources of HAPs to meet the notification requirements of §63.6645(h); however, that section only applies if an initial performance test is required. Since an initial performance test is not required for emergency engines and permit unit N-3299-1-3 is rated at 240 bhp, the notification requirement is not applicable.

Permit unit N-3299-1-3 is expected to continue compliance with 40 CFR 63 Subpart ZZZZ.

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.

<u>Section 5.0</u> 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 unit N-3299-0-3 ensures compliance.

F. <u>District Rule 4601 - Architectural Coatings</u>

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 (N-3299-0-3) demonstrate compliance with the requirements of the latest version of this rule.

G. District Rule 4702 - Internal Combustion Engines - Phase 2

The purpose of this rule is to limit the emissions of nitrogen oxides (NO_X) , 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, conditions 7, 8, 9 and 10 of permit unit N-3299-1-3 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

In addition, conditions 4 and 6 of permit unit N-3299-1-3 ensure compliance:

- {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]

H. <u>District Rule 4703 - Stationary Gas Turbines</u>

The purpose of this rule is to limit NO_x emissions from stationary gas turbine systems.

Pursuant to Section 2.0, the provisions of this rule apply to all stationary gas turbine systems, which are subject to District permitting requirements, and with ratings equal to or greater than 0.3 megawatt (MW) and/or a maximum heat input rating of more than 3,000,000 Btu per hour, except as provided in Section 4.0. This permit unit is subject to this rule since its rated capacity is 48 MW.

Section 5.1 requires that NO_x emissions concentrations measured for compliance with Section 5.0 be averaged over a three hour period, using consecutive 15-minute sampling periods in accordance with either the applicable test method in Section 6.4, or, if continuous emission monitors are used, all applicable requirements of 40 CFR Part 60, as detailed in Section 6.2. Any variations from these measurement requirements are subject to APCO and EPA approval prior to implementation. Conditions 12 and 64 of permit unit N-3299-3-3 ensure compliance:

- The NOx emissions concentration during steady state operation shall not exceed 3.0 ppmvd @ 15% O2 over a 3 hour rolling average. Steady-state period refers to any periods that is not a start-up or shutdown period. [District NSR Rule; 40 CFR 60.332(b); 40 CFR 60.334(j)(1)(iii); and District Rule 4703] Y
- "Startup" shall be defined as the period of time, not to exceed two hours, during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. "Shutdown" shall be defined as the period of time, not to exceed one hour, during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District NSR Rule and District Rule 4703]

Section 5.1.2 requires that the owner or operator of any stationary gas turbine system shall not operate such unit under load conditions, except as allowed by Section 5.3, which results in the measured emissions concentration exceeding the applicable emission limits below, according to the Tier 2 Compliance Schedules listed in Section 7.2.

Rule 4703 Tier 2 NOx Compliance Limits			
Turbino Boting (BNA/)	Compliance Option	NOx Compliance Limit, ppmvd at 15% _{O2}	
Turbine Rating (MW)		Gas Fuel	Liquid Fuel
a) Less than 2.0 Solar Saturn, driving a centrifugal compressor	Standard	50	50
b) No greater than 10 MW, if a DLN System is commercially available for the specific unit, as of April 30, 2003	Standard	25	65
c) No greater than 10 MW, if a DLN System is not commercially available for the specific unit, as of April 30, 2003	Standard	35	65
d) Greater than 10 MW, Combined	Standard	5	25
Cycle.	Enhanced	3	25
e) Greater than 10 MW, Simple cycle,	Standard	5	25
and permit conditions for greater than 877 hrs/yr operation.	Enhanced	3	25
f) Greater than 10 MW, Simple cycle, and permit conditions for no greater than 877 hrs/yr operation.	Standard	25	42
	Enhanced	5	25

This permit unit is subject to turbine rating "d" and is currently in compliance and therefore qualifies for the 5 ppmv limit.

Section 5.2 requires that the owner or operator of any stationary gas turbine system shall not operate such unit under load conditions, except as allowed by Section 5.3, which results in the measured CO emissions concentration exceeding the compliance limits listed below:

Rule 4703 Gas Turbine CO Emission Limit				
Stationary Gas Turbine	CO Emission Limit (ppmv @ 15% O ₂)			
Units not identified below	200			
General Electric Frame 7	25			
General Electric Frame 7 with Quiet Combustors	52			
< 2.0 MW Solar Saturn gas turbine powering a centrifugal compressor	250			

This permit is subject to "Units not identified below" and meets this requirement. However, District practice is to have an applicant demonstrate compliance with the CO emissions on a turbine with three hour averaging

periods. Therefore, compliance with the CO emission limit shall be demonstrated by an average over a three hour period. Conditions 15 and 64 of permit unit N-3299-3-3 ensure compliance:

- The CO emissions concentration during steady state operation shall not exceed 11.8 ppmvd @ 15% O2 over a 3 hour rolling average. Steadystate period refers to any periods that is not a start-up or shutdown period. [District NSR Rule and District Rule 4703] Y
- "Startup" shall be defined as the period of time, not to exceed two hours, during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. "Shutdown" shall be defined as the period of time, not to exceed one hour, during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District NSR Rule and District Rule 4703]

Section 5.3 requires that on and after the date a unit is required, pursuant to Section 7.0, to be in compliance with the emission limits requirements of Section 5.1 or Section 5.2. The applicable emission limits of Sections 5.1 and 5.2 shall not apply during a transitional operation period, as defined in Section 3.0, provided an operator complies with the applicable required specified in Section 5.3.1 and 5.3.2. Compliance is assured by conditions 12, 15 and 64 of permit unit N-3299-3-3:

- The NOx emissions concentration during steady state operation shall not exceed 3.0 ppmvd @ 15% O2 over a 3 hour rolling average. Steady-state period refers to any periods that is not a start-up or shutdown period. [District NSR Rule; 40 CFR 60.332(b); 40 CFR 60.334(j)(1)(iii); and District Rule 4703] Y
- The CO emissions concentration during steady state operation shall not exceed 11.8 ppmvd @ 15% O2 over a 3 hour rolling average. Steadystate period refers to any periods that is not a start-up or shutdown period. [District NSR Rule and District Rule 4703] Y
- "Startup" shall be defined as the period of time, not to exceed two hours, during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. "Shutdown" shall be defined as the period of time, not to exceed one hour, during which a unit is taken from an operational to a non-operational status by allowing it to

cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District NSR Rule and District Rule 4703]

Section 6.1.5 requires the owner or operator of any existing stationary gas turbine system shall be exempt from the requirements of Section 6.1 provided all such turbines under his ownership or control have NO_x and CO emissions limits which are shown on the current Permit to Operate and which do not exceed the applicable Compliance Limits in Section 5.0. The permit unit is currently in compliance with the applicable Compliance Limits in Section 5.0 and therefore is not required to submit an Emission Control Plan.

Section 6.2.1 requires that except for units subject to Section 6.2.3, for turbines with exhaust gas NO_x control devices, the owner or operator shall either install, operate, and maintain continuous emissions monitoring equipment for NO_x and oxygen, as identified in Rule 1080 (Stack Monitoring), or install and maintain APCO-approved alternate monitoring consisting of one or more of the following:

- periodic NO_x emission concentrations,
- turbine exhaust oxygen concentration,
- air-to-fuel ratio.
- flow rate of reducing agents added to turbine exhaust,
- catalyst inlet and exhaust temperature,
- · catalyst inlet and exhaust oxygen concentration,
- other operational characteristics.

Section 6.2.2 requires that except for units subject to Section 6.2.3, for turbines without exhaust-gas NO_x control devices and without continuous emissions monitoring equipment, the owner or operator shall monitor operational characteristics recommended by the turbine manufacturer or emission control system supplier, and approved by the APCO. The turbine associated with this project is equipped with both an exhaust-gas NOx control device and continuous emissions monitoring equipment. Therefore, compliance is assured.

Section 6.2.3 requires that for units 10 MW and greater that operated an average of more than 4,000 hours per year over the last three years before August 18, 1994, the owner or operator shall monitor the exhaust gas NO_x emissions. The NO_x monitoring system shall meet EPA requirements as specified in 40 CFR Part 60 App. B, Spec. 2, 40 CFR Part 60 App. F, and 40 CFR Part 60.7 (c), 60.7 (d), and 60.13, or other systems that are acceptable to the EPA. The owner or operator shall submit to the APCO information

demonstrating that the emission monitoring system has data gathering and retrieval capability. Condition 65 of this permit ensures compliance:

The owner or operator shall monitor the gas turbine exhaust gas NOx emissions using a system that meets EPA requirements as specified in 40 CFR Part 60 App. B, Spec. 2, 40 CFR Part 60 App. F, and 40 CFR Part 60.7 (c), 60.7 (d), and 60.13, or other systems that are acceptable to EPA. [District Rule 4703, 6.2.3] Y

Section 6.2.4 requires that the owner or operator shall maintain all records for a period of five years from the date of data entry and shall make such records available to the APCO upon request. Condition 45 of this permit ensures compliance:

 The owner or operator of a stationary gas turbine system shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4703, 6.2.4]

Section 6.2.5 requires that the owner or operator shall submit to the APCO, before issuance of the Permit to Operate, information correlating the control system operating parameters to the associated measured NO_x output. This information may be used by the APCO to determine compliance when there is no continuous emission monitoring system for NO_x available or when the continuous emission monitoring system is not operating properly. This is a startup requirement for which compliance has already been assured. No additional conditions are required.

Section 6.2.6 requires that the owner or operator shall maintain a stationary gas turbine system operating log that includes, on a daily basis, the actual local time start-up and stop time, length and reason for reduced load periods, total hours of operation, type and quantity of fuel used (liquid/gas). Condition 47 of this permit ensures compliance:

• The owner or operator shall maintain a stationary gas turbine operating log that includes, on a daily basis, the actual local start-up and stop time, total hours of operation, and quantity and heat input of fuel used. [District Rule 4703, 6.2.6]

Section 6.2.7 requires that the owner or operator shall maintain a stationary gas turbine system operating log for units exempt under Section 4.2 that includes, on a daily basis, the actual local start-up time and stop time, total hours of operation, and cumulative hours of operation to date for the calendar year. This unit is not exempt under Section 4.2; therefore, this section is not applicable.

Section 6.2.8 requires that the operator performing start-up or shutdown of a unit shall keep records of the duration of start-up or shutdown. Condition 36 of this permit ensures compliance:

 Permittee shall maintain records of the occurrence and duration of any start-up or shutdown. [District Rule 4703, 6.2.8] Y

Section 6.3.1 requires annual source testing. Condition 41 of this permit ensures compliance:

 Performance testing shall be conducted annually to measure NOx and CO emission concentrations using the following test methods: NOx (ppmv) - EPA Methods 7E or 20; CO (ppmv) - EPA Method 10 or 10B; stack gas oxygen - EPA Method 3, 3A or 20. [District Rule 4703, 6.3.1, 6.4.1, & 6.4.3] Y

Section 6.3.2 requires bierinial source testing for gas turbine systems operating less than 877 hours per year. This permit unit operates more than this and is therefore not applicable to this requirement.

Section 6.3.3 requires that the owner or operator of any unit with an intermittently operated auxiliary burner shall demonstrate compliance with the auxiliary burner both on and off. This unit does not have an auxiliary burner.

Section 6.4 requires that the following test measures shall be used unless otherwise approved by the APCO and EPA.

- Oxides of nitrogen emissions for compliance tests shall be determined by using EPA Method 7E or EPA Method 20.
- Carbon monoxide emissions for compliance tests shall be determined by using EPA Test Methods 10 or 10B.
- Oxygen content of the exhaust gas shall be determined by using EPA Methods 3, 3A, or 20.

Condition 41 of this permit ensures compliance with the test method requirements of this section:

 Performance testing shall be conducted annually to measure NOx and CO emission concentrations using the following test methods: NOx (ppmv) - EPA Methods 7E or 20; CO (ppmv) - EPA Method 10 or 10B; stack gas oxygen - EPA Method 3, 3A or 20. [District Rule 4703, 6.3.1, 6.4.1, & 6.4.3] Y Section 6.4.5 HHV and LHV of gaseous fuels shall be determined by using:

- ASTM D3588-91, Standard Practice for Calculating Heat Value, Compressibility Factor, and Relative Density (Specific Gravity) of Gaseous Fuels, or
- ASTM 1826-88, Standard Test Method for Calorific (Heating) Value of Gases in Natural Gas Range by Continuous Recording Calorimeter, or
- ASTM 1945-81, Standard Method for Analysis of Natural Gas by Gas Chromatography.

Since the permit unit is already in compliance with Tier 2 limits, and HHV or LHV is only required for Tier 1 emission limits, HHV and LHV measurements are not required.

From section 7.2 the Tier 2 Compliance Schedule is as follows: Owners or operators of all applicable stationary gas turbine systems shall submit the emission control plan required by Section 6.1 to the District by April 30, 2003. All owner/operators shall demonstrate and maintain compliance with the applicable provisions of Sections 5.0 and 6.0 in accordance with the following Compliance Schedules:

Rule 4703 Tier 2 Gas Turbine Compliance Schedule			
Turbine Rating (MW)	Compliance Date		
Less than 2.0 Solar Saturn, driving a centrifugal compressor	April 25, 2002		
No greater than 10 MW, if a DLN System is commercially available for the specific unit, as of April 30, 2003	April 30, 2004		
No greater than 10 MW, if a DLN System is not commercially available for the specific unit, as of April 30, 2003	April 30, 2003		
Greater than 10 MW, Combined Cycle.	April 30, 2004		
Greater than 10 MW, Simple cycle, and permit conditions for greater than 877 hrs/yr operation.	April 30, 2005		
Greater than 10 MW, Simple cycle, and permit conditions for no greater than 877 hrs/yr operation.	April 30, 2003		

Section 7.2.4 requires that Operators complying with the Enhanced Option of Table 5-2 shall demonstrate and maintain compliance by the earlier of either

- April 30, 2008, or
- within 90 days following the next Major Overhaul, if that overhaul occurs after April 30, 2004.

Permit unit N-3299-3-3 is already in compliance. The compliance schedule is not required.

I. District Rule 4801 - Sulfur Compounds

Rule 4801 requires that sulfur compound emissions (as SO₂) shall not exceed 0.2% by volume. Using the ideal gas equation, the sulfur compound emissions are calculated as follows:

Volume SO₂ = (n x R x T) ÷ P
n = moles SO₂
T (standard temperature) = 60 °F or 520 °R
R (universal gas constant) =
$$\frac{10.73 \, \text{psi} \cdot \text{ft}^3}{\text{lb} \cdot \text{mol} \cdot \text{°R}}$$

$$\frac{0.000015 \, lb - S}{lb - fuel} \times \frac{7.1 \, lb}{gal} \times \frac{64 \, lb - SO_2}{32 \, lb - S} \times \frac{1 \, MMBtu}{9,051 \, scf} \times \frac{1 \, gal}{0.137 \, MMBtu} \times \frac{lb - mol}{64 \, lb - SO_2} \times \frac{10.73 \, psi - ft^3}{lb - mol - °R} \times \frac{520 \, °R}{14.7 \, psi} \times 1,000,000 = 1.0 \, ppmv$$

Since 1.0 ppmv is \leq 2,000 ppmv, permit unit N-3299-1-3 is expected to continue compliance with Rule 4801. Condition 5 of permit unit N-3299-1-3 ensures compliance with this rule.

 Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801, 17 CCR 93115]

J. 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 (N-3299-0-3) assures compliance with the requirements.

K. 40 CFR Part 64-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 (50,000 lb-NO_x/yr; 50,000 lb-VOC/yr; 200,000 lb-CO/yr; 140,000 lb-PM₁₀/yr or 140,000 lb-SO_x/yr are the Major Source thresholds).

a. N-3299-1-3: 240 HP CUMMINS DIESEL-FIRED EMERGENCY IC ENGINE WITH TURBOCHARGER AND AFTERCOOLER POWERING A FIRE PUMP

Permit unit N-3299-1 is not subject to CAM because this unit does not have any add-on controls.

- b. N-3299-3: GENERAL ELECTRIC MODEL LM6000 459 MMBTU/HR (HHV) COMBINED CYCLE GAS TURBINE ENGINE WITH STEAM INJECTION, OXIDIZATION CATALYST, AMMONIA INJECTION, AND SELECTIVE CATALYTIC REDUCTION SERVING A 48 MW ELECTRICAL GENERATOR
- 1. The permit unit has emission limits for all five criteria pollutants (NOx, SOx, PM10, CO, and VOC.
- 2. There are no add-on controls for SOx and PM10; therefore CAM is not applicable for SOx and PM10.
- 3. Based on 40 CFR 64.2(b)(1)(vi), NOx and CO emission limits are exempt from CAM since the Part 70 permit already specifies a continuous compliance determination method for both NOx and CO. Therefore, CAM is not applicable for NOx and CO. This permit unit may be subject to CAM for VOC since there is a VOC limit and it has add-on controls in the form of an oxidation catalytic system. However, the pre-control VOC potential to emit is less than the major source threshold of 50,000 pounds VOC/year as shown below. Therefore, this unit is not subject to CAM.

The natural gas uncontrolled emission factor is 5.5 lb-VOC/MMscf or 0.006 lb-VOC/MMBtu (AP-42, 1.4-2, July 1998). The maximum rating for this unit is 459 MMBtu/hr.

459 MMBtu/hr x 0.006 lb-VOC/MMBtu x 8,760 hr/yr = 24,125 lb-VOC/yr

L. 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 N-3299-0-3 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

1. Model General Permit Template SJV-UM-0-2

By submitting Model General Permit Template SJV-UM-0-2 qualification form, the applicant has requested that a permit shield be granted for all the applicable requirements identified by the template. Therefore, the permit shields as granted in Model General Permit Template are included as conditions 39 and 40 of the facility-wide requirements (N-3299-0-3).

B. Requirements not Addressed by Model General Permit Templates

The applicant has not requested any permit shield other than as discussed above.

C. Obsolete Permit Shields From Existing Permit Requirements

Permit unit N-3299-1-2 contained a permit shield as condition 9. The permit shield is obsolete and has been removed because the template is outdated.

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. Stringency Analysis for District Rule 4601
- D. Detailed Facility List

ATTACHMENT A

Draft Renewed Title V Operating Permit

San Joaquin Valley Air Pollution Control District

FACILITY: N-3299-0-3

EXPIRATION DATE: 06/30/2009

FACILITY-WIDE REQUIREMENTS

- 1. The owner or operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, 6.1; County Rules 110 (Stanislaus)] 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 (Stanislaus)] 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 REDUIRENTS CONTINUE ON NEXT PAGE

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

Facility Name: TURLOCK IRRIGATION DISTRICT

Location: 4500 CROWS LANDING ROAD, MODESTO, CA 95981

N-3299-0-3 Apr 29 2010 10:02AM -- YOSHIMUJ

- 9. {2293} The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit and, for continuous monitoring instrumentation, all calibration and maintenance records and all original strip-chart recordings. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 10. {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 2570, 9.13.2.4] Federally Enforceable Through Title V Permit

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

Facility Name: TURLOCK IRRIGATION DISTRICT

ocation: 4500 CROWS LANDING ROAD, MODESTO, CA 95381

N-3299-0-3 , Apr 29 2010 10:02AM - YOSHIMUJ

- 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 (Stanislaus)] 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.

Facility Name: TURLOCK IRRIGATION DISTRICT

4500 CROWS LANDING ROAD, MODESTO, CA 95381

Location: N-3299-0-3 : Apr 29 2010 10:02AM -- YOSHIMUJ

- 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 (Stanislaus), Rule 110 (Stanislaus). 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 January 1st of each year, unless alternative dates are approved by the District Compliance Division. These reports are due within 30 days of 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.

N-3299-0-3 : Apr 29 2010 10:02AM - YOSHIMUJ

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-3299-1-3

EXPIRATION DAITE: 06/30/2009

EQUIPMENT DESCRIPTION:

240 HP CUMMINS DIESEL-FIRED EMERGENCY IC ENGINE WITH TURBOCHARGER AND ARTER COOLER POWERING A FIRE PUMP

PERMIT UNIT REQUIREMENTS

- 1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.0] Federally Enforceable Through Title V Permit
- 2. NOx emissions shall not exceed 6.12 grams per horsepower-hour. [District NSR Rule] Federally Enforceable Through Title V Permit
- 3. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702] Federally Enforceable Through Title V Permit
- 4. 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
- 5. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201, 4801 and 17 CCR 93115] Federally Enforceable Through Title V Permit
- 6. 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
- 7. 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
- 8. 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
- 9. 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
- 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.

Facility Name: TURLOCK IRRIGATION DISTRICT

Location: 4500 CROWS LANDING ROAD, MODESTO, CA 9538

N-3299-1-3 . Apr 29 2010 8:57AM - YOSHIMUJ

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-3299-3-3

EXPIRATION DAITE: 06/30/2009

EQUIPMENT DESCRIPTION:

GENERAL ELECTRIC MODEL LM6000 459 MMBTU/HR (HHV) COMBINED CYCLE GAS TURBINE ENGINE WITH STEAM INJECTION, OXIDIZATION CATALYST, AMMONIA INJECTION, AND SELECTIVE CATALYTIC REDUCTION SERVING A 48 MW ELECTRICAL GENERATOR

PERMIT UNIT REQUIREMENTS

- 1. The heat recovery steam generator shall provide space for additional selective catalytic reduction catalyst and additional oxidation catalyst. The additional space shall be sufficient to house the quantity of catalyst material necessary to achieve and maintain compliance with the emission limits of this permit. [District NSR Rule] Federally Enforceable Through Title V Permit
- 2. The gas turbine engine and generator lube oil vents shall be equipped with mist eliminators. Visible emissions from lube oil vents shall not exhibit opacity of 5% or greater except for up to three minutes in any hour. [District NSR Rule] Federally Enforceable Through Title V Permit
- 3. All equipment shall be maintained in proper operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
- 4. The exhaust stack shall be equipped with a continuous emissions monitor (CEM) for CO. The CEM shall meet the requirements of 40 CFR parts 60 and shall be capable of monitoring emissions during startups and shutdowns as well as during normal operating conditions. [District NSR Rule and District Rule 1080] Federally Enforceable Through Title V Permit
- 5. The permittee shall monitor and record the fuel flow rate to the turbine, the CO emission rate, the steam injection rate, the ammonia injection rate, the exhaust temperature both prior to and after the SCR unit, and the exhaust flow rate. A calculated exhaust flow rate may be utilized, provided a District approved calculation method is utilized. [District NSR Rule and District Rule 4703] Federally Enforceable Through Title V Permit
- 6. In accordance with 40 CFR, Part 60, Appendix F, 5.1, cylinder gas audits (CGA) or relative accuracy audits (RAA) of continuous emission monitors shall be conducted quarterly, except during quarters in which a relative accuracy test audit (RATA) is performed. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
- 7. The owner/operator shall perform a relative accuracy test audit (RATA) as specified by 40 CFR Part 60, Appendix F, 5.11, at least once every four calendar quarters. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080] Federally Enforceable Through Title V Permit
- 8. Daily emissions will be compiled for a twenty-four hour period starting and ending at twelve-midnight. Each calendar month in a twelve consecutive month rolling emissions total will commence at the beginning of the first day of the month. The twelve consecutive month rolling emissions total to determine compliance with annual emission limit will be compiled from the twelve most recent calendar months. [District NSR Rule] Federally Enforceable Through Title V Permit

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

Facility Name: TURLOCK IRRIGATION DISTRICT

Location: 4500 CROWS LANDING ROAD, MODESTO, CA 9538

4-3299-3-3 - Apr 13 2010 1:33PM -- YOSHIMUJ

- Startup and shutdown events shall not exceed 1,095 occurrences per calendar year. Startup emissions must be counted toward each applicable emission limit (lb/day and lb/yr). [District NSR Rule] Federally Enforceable Through Title V Permit
- 10. Emissions during startup and shutdown periods must be counted toward the applicable daily emission limitations. [District NSR Rule] Federally Enforceable Through Title V Permit
- 11. The NOx emissions shall not exceed 60.0 lb/hr during start-up periods and shall not exceed 12.3 lb/hr during shutdown periods. [District NSR Rule] Federally Enforceable Through Title V Permit
- 12. The NOx emissions concentration during steady state operation shall not exceed 3.0 ppmvd @ 15% O2 over a 3 hour rolling average. Steady-state period refers to any periods that is not a start-up or shutdown period. [District NSR Rule; 40 CFR 60.332(b); 40 CFR 60.334(j)(1)(iii); and District Rule 4703] Federally Enforceable Through Title V Permit
- 13. The combined total NOx emissions from start-up, shutdown, and steady state operation shall not exceed 142.6 lb/day. [District NSR Rule and District Rule 4703] Federally Enforceable Through Title V Permit
- 14. The CO emissions shall not exceed 40.8 lb/hr during start-up periods and shall not exceed 10.0 lb/hr during shutdown periods. [District NSR Rule] Federally Enforceable Through Title V Permit
- 15. The CO emissions concentration during steady state operation shall not exceed 11.8 ppmvd @ 15% O2 over a 3 hour rolling average. Steady-state period refers to any periods that is not a start-up or shutdown period. [District NSR Rule and District Rule 4703] Federally Enforceable Through Title V Permit
- 16. The combined total CO emissions from start-up, shutdown, and steady state operation shall not exceed 367.1 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
- 17. The VOC emissions concentration shall not exceed 2.0 ppmvd @ 15% O2 over a 3 hour rolling average. [District NSR Rule] Federally Enforceable Through Title V Permit
- 18. The PM10 emissions rate shall not exceed 48.0 lb/day. [District NSR Rule] Federally Enforceable Through Title V **Permit**
- 19. The SOx emission rate shall not exceed 31.4 lb/day. [District NSR Rule] Federally Enforceable Through Title V **Permit**
- 20. Ammonia (NH3) emissions concentration shall not exceed 25 ppmvd @ 15% O2 over a 24 hour rolling average. [District NSR Rule] Federally Enforceable Through Title V Permit
- 21. Compliance with ammonia emission limit shall be demonstrated utilizing one of the following procedures: 1) calculate the daily ammonia emissions using the following equation: (ppmvd @ 15% O2) = $((a - (b \times c/1,000,000)) \times (1,000,000)$ /b)) x d, where a = ammonia injection rate (lb/hr) / (17 lb/lb mol), b = dry exhaust flow rate (lb/hr) / (29 lb/lb mol), c = change in measured NOx concentration ppmvd @ 15% O2 across the catalyst, and d = correction factor. The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip; 2.) utilize another District-approved calculation method using measured surrogate parameters to determine the daily ammonia emissions in ppmvd @ 15% O2. If this option is chosen, the permittee shall submit a detailed calculation protocol for District approval at least 60 days prior to commencement of operation; 3.) Alternatively, the permittee may utilize a continuous in-stack ammonia monitor to verify compliance with the ammonia emissions limit. If this option is chosen, the permittee shall submit a monitoring plan for District approval at least 60 days prior to commencement of operation. [District Rule 4102]
- 22. The cumulative annual emissions shall not exceed either of the following limits: 52,049 lb/year for NOx or 10,454 Ib/year for VOC. [District NSR Rule] Federally Enforceable Through Title V Permit
- 23. Source testing to demonstrate compliance with the NOx (lb/day), CO (lb/day), VOC (ppmvd and lb/day), PM10 (lb/day), and NH3 (ppmvd) emission limits shall be conducted at least once every twelve months. [District NSR Rule] Federally Enforceable Through Title V Permit
- 24. VOC emissions (referenced as methane) shall be determined using EPA method 18 or EPA method 25. [District NSR Rule and District Rule 1081] Federally Enforceable Through Title V Permit

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

Facility Name: TURLOCK IRRIGATION DISTRICT

Location: 4500 CROWS LANDING ROAD, MODESTO, CA 95361

- 25. Source testing to measure concentrations of PM10 shall be conducted using EPA Methods 201 and 202, or EPA Methods 201A and 202, or CARB Method 501 in conjunction with CARB Method 5. Alternative source testing methods will be allowed provided prior written approval is received from both the District and the EPA. [District NSR Rule and District Rule 1081] Federally Enforceable Through Title V Permit
- 26. Ammonia (NH3) emissions shall be determined using BAAQMD Method ST-1B. [District Rule 4102]
- 27. The permittee shall retain records of the cumulative annual NOx and VOC emissions. The record shall be updated daily. [District NSR Rule] Federally Enforceable Through Title V Permit
- 28. The permittee shall maintain hourly records of NOx, CO and ammonia concentrations (ppmv @ 15% O2). [District NSR Rule and District Rules 2520, 9.4.1 and 4102] Federally Enforceable Through Title V Permit
- 29. The owner or operator shall certify, maintain, operate and quality-assure a Continuous Emission Monitoring System (CEMS) which continuously measures and records the exhaust gas NOx and O2 concentrations. NOx CEMS meeting the requirements of 40 CFR 75 may be used to meet the requirements 40 CFR 60.334. However, the missing data substitution methodology provided for in 40 CFR part 75, subpart D, is not required for purposes of identifying excess emissions. Instead, periods of missing CEMS data are to be reported as monitor downtime in the excess emissions and monitoring performance report required in 40 CFR 60.7(c). [District Rule 4703, 6.2.1 and 40 CFR 60.334(b)] Federally Enforceable Through Title V Permit
- 30. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period or shall meet equivalent specifications established by mutual agreement of the District, the ARB and the EPA. [40 CFR 60.334(b)(2) and District Rule 1080, 6.4] Federally Enforceable Through Title V Permit
- 31. The NOx and O2 CEMS shall meet the requirements in Performance Specifications 2 and 3 (for diluent) of 40 CFR part 60, appendix B, except the 7-day calibration drift is based on unit operating days, not calendar days. Appendix F, Procedure 1 is not required. The relative accuracy test audit (RATA) of the NOx and diluent monitors may be performed individually or on a combined basis, i.e., the relative accuracy tests of the CEMS may be performed either: (i) On a ppm basis (for NOx) and a percent O2 basis for oxygen; or (ii) On a ppm at 15 percent O2 basis; or (iii) On a ppm basis (for NOx) and a percent CO2 basis (for a CO2 monitor that uses the procedures in Method 20 to correct the NOx data to 15 percent O2). [40 CFR 60.334(b)(1) and District Rule 1080] Federally Enforceable Through Title V Permit
- 32. As specified in §60.13(e)(2), during each full unit operating hour, each monitor must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour, to validate the hour. For partial unit operating hours, at least one valid data point must be obtained for each quadrant of the hour in which the unit operates. For unit operating hours in which required quality assurance and maintenance activities are performed on the CEMS, a minimum of two valid data points (one in each of two quadrants) are required to validate the hour. [40 CFR 60.334(b)(2) and District Rule 1080] Federally Enforceable Through Title V Permit
- 33. The CEMS shall be linked to a data logger which is compatible with the District's Data acquisition system. Upon notice by the District that the facility's CEM system is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEM data is sent to the District by a District-approved alternative method. [District Rule 1080, 7.1] Federally Enforceable Through Title V Permit
- 34. The owner or operator shall maintain CEMS records that contain the following: the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, adjustments, maintenance, duration of any periods during which a continuous monitoring system or monitoring device is inoperative, and emission measurements. [40 CFR 60.7(b) and District Rule 1080, 7.3] Federally Enforceable Through Title V Permit

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

Facility Name: TURLOCK IRRIGATION DISTRICT

ocation: 4500 CROWS LANDING ROAD, MODESTO, CA 95361

N-3299-3-3 : Apr 13 2010 1:33PM -- YOSHIMUJ

- 35. The owner or operator shall submit a written report of CEM operations for each calendar quarter to the APCO. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals. data and magnitude of excess NOx emissions, nature and the cause of excess (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; Applicable time and date of each period during which the CEM was inoperative (monitor downtime), except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [40 CFR 60.334(i), (i)(5) and District Rule 1080, 8.0] Federally Enforceable Through Title V Permit
- 36. Permittee shall maintain records of the occurrence and duration of any start-up or shutdown. [District Rule 4703, 6.2.8] Federally Enforceable Through Title V Permit
- 37. APCO or an authorized representative shall be allowed to inspect, as determined to be necessary, the monitoring devices required by this rule to ensure that such devices are functioning properly. [District Rule 1080, 11.0] Federally Enforceable Through Title V Permit
- 38. This unit shall be fired exclusively on natural gas as defined in 40 CFR 60.331(u) which has a total sulfur content of less than or equal to 1.0 gr/100 scf. [District NSR Rule and 40 CFR 60.333(b)] Federally Enforceable Through Title V Permit
- 39. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.0] Federally Enforceable Through Title V Permit
- 40. If the turbine is not fired on PUC-regulated or FERC-regulated natural gas, the sulfur content of the fuel shall be tested in accordance with 40 CFR 60.344(i). [40 CFR 60.344(i)] Federally Enforceable Through Title V Permit
- 41. Performance testing shall be conducted annually to measure NOx and CO emission concentrations using the following test methods: NOx (ppmv) - EPA Methods 7E or 20; CO (ppmv) - EPA Method 10 or 10B; stack gas oxygen - EPA Method 3, 3A or 20. [District Rule 4703, 6.3.1, 6.4.1, & 6.4.3] Federally Enforceable Through Title V Permit
- 42. The owner or operator shall be required to conform to the sampling facilities and testing procedures described in District Rule 1081, 3.0, & 6.0 (as amended 12/16/93), [District Rule 1081, 3.0 & 6.0] Federally Enforceable Through Title V Permit
- 43. The District must be notified 30 days prior to any performance testing and a test plan shall be submitted for District approval 15 days prior to such testing. [District Rule 1081, 7.1] Federally Enforceable Through Title V Permit
- 44. Performance testing shall be witnessed or authorized by District personnel. Test results must be submitted to the District within 60 days of performance testing. [District Rule 1081, 7.2 & 7.3] Federally Enforceable Through Title V **Permit**
- 45. The owner or operator of a stationary gas turbine system shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years, [District Rule 4703, 6.2.4] Federally Enforceable Through Title V Permit
- 46. Results of the CEM system shall be averaged over a three hour period, using consecutive 15-minute sampling periods in accordance with all applicable requirements of CFR 60.13. [40 CFR 60.13, District Rule 4703, 5.1] Federally Enforceable Through Title V Permit
- 47. The owner or operator shall maintain a stationary gas turbine system operating log that includes, on a daily basis, the actual local time start-up and stop time, length and reason for reduced load periods, total hours of operation, type and quantity of fuel used. [District Rule 4703, 6.2.6] Federally Enforceable Through Title V Permit
- 48. The owners and operators of each affected source and each affected unit at the source shall: (i) Operate the unit in compliance with a complete Acid Rain permit application or a superceding Acid Rain permit issued by the permitting authority; and (ii) have an Acid Rain permit. [40 CFR 72] Federally Enforceable Through Title V Permit
- 49. The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75. [40 CFR 75] Federally Enforceable Through Title V Permit

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

Facility Name: TURLOCK IRRIGATION DISTRICT 4500 CROWS LANDING ROAD, MODESTO, CA 35381 Location:

N-3299-3-3 : Apr 13 2010 1:33PM - YOSHIMUJ

- 50. The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program. [40 CFR 75] Federally Enforceable Through Title V Permit
- 51. The owners and operators of each source and each affected unit at the source shall: (i) hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and (ii) comply with the applicable Acid Rain emissions limitations for sulfur dioxide. [40 CFR 73] Federally Enforceable Through Title V Permit
- 52. Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act. [40 CFR 77] Federally Enforceable Through Title V Permit
- 53. Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program, [40 CFR 72] Federally Enforceable Through Title V Permit
- 54. An allowance shall not be deducted in order to comply with the requirements under 40 CFR part 73, prior to the calendar year for which the allowance was allocated. [40 CFR 73] Federally Enforceable Through Title V Permit
- 55. An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or the written exemption under 40 CFR 72.7 and 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization. [40 CFR 72] Federally Enforceable Through Title V Permit
- 56. An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right. [40] CFR 72] Federally Enforceable Through Title V Permit
- 57. The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides. [40 CFR 72] Federally Enforceable Through Title V Permit
- 58. The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77. [40 CFR 77] Federally Enforceable Through Title V Permit
- 59. The owners and operators of an affected unit that has excess emissions in any calendar year shall: (i) pay without demand the penalty required, and pay up on demand the interest on that penalty; and (ii) comply with the terms of an approved offset plan, as required by 40 CFR part 77. [40 CFR 77] Federally Enforceable Through Title V Permit
- 60. The owners and operators of each affected unit at the source shall keep and make readily available upon request the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or permitting authority: (i) The certificate of representation for the designated representative for the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site beyond such five-year period until such documents are superceded because of the submission of a new certificate of representation changing the designated representative. [40 CFR 72] Federally Enforceable Through Title V Permit
- 61. The owners and operators of each affected unit at the source shall keep and make readily available upon request each of the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or permitting authority; (ii) All emissions monitoring information, in accordance with 40 CFR part 75; (iii) Copies of all reports, compliance certifications and other submissions and all records made or required under the Acid Rain Program; (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission that demonstrates compliance with the requirements of the Acid Rain Program. [40 CFR 72, 40 CFR 75] Federally Enforceable Through Title V **Permit**
- 62. The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR 75 Subpart 1. [40 CFR 75] Federally Enforceable Through Title V Permit

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

Facility Name: TURLOCK IRRIGATION DISTRICT 4500 CROWS LANDING ROAD, MODESTO, CA 95281 Location: 4500 CROWS L N-3299-3-3 Apr 13 2010 1 33PM - YOSHIMUJ

- 63. Permittee shall submit reports of excess emissions for all periods of unit operation, including startup, shutdown, and malfunction in accordance with 40 CFR 60.344(j). [40 CFR 60.334(j)] Federally Enforceable Through Title V Permit
- 64. "Startup" shall be defined as the period of time, not to exceed two hours, during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. "Shutdown" shall be defined as the period of time, not to exceed two hours, during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District NSR Rule and District Rule 4703] Federally Enforceable Through Title V Permit
- 65. The owner or operator shall monitor the gas turbine exhaust gas NOx emissions using a system that meets EPA requirements as specified in 40 CFR Part 60 App. B, Spec. 2, 40 CFR Part 60 App. F, and 40 CFR Part 60.7 (c), 60.7 (d), and 60.13, or other systems that are acceptable to EPA. [District Rule 4703, 6.2.3] Federally Enforceable Through Title V Permit

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

Facility Name: TURLOCK IRRIGATION DISTRICT

Location: 4500 CROWS LANDING ROAD, MODESTO, C N-3299-3-3 - Apr 13 2010 1:33PM - YOSHIMUJ

ATTACHMENT B

Previous Title V Operating Permit

San Joaquin Valley Air Pollution Control District

FACILITY: N-3299-0-2 **EXPIRATION DATE: 06/30/2009**

FACILITY-WIDE REQUIREMENTS

- The owner or operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, 6.1; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit
- 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
- 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
- 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
- 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
- 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
- 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
- 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
- The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit and, for continuous monitoring instrumentation, all calibration and maintenance records and all original strip-chart recordings. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

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

Facility Name: TURLOCK IRRIGATION DISTRICT

Location: 4500 CROWS LANDING ROAD, MODESTO, CA 95381

- 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.

Facility Name: TURLOCK IRRIGATION DISTRICT Location: 4500 CROWS LANDING ROAD, MODESTO, CA 95381 Location:

- 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 10.01 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

- 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. 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 January 1st of each year, unless alternative dates are approved by the District Compliance Division. These reports are due within 30 days of the end of the reporting period. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-3299-1-2

EXPIRATION DATE: 06/30/2009

EQUIPMENT DESCRIPTION:

240 HP CUMMINS DIESEL-FIRED EMERGENCY IC ENGINE WITH TURBOCHARGER AND AFTERCOOLER POWERING A FIRE PUMP

PERMIT UNIT REQUIREMENTS

- 1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.0] Federally Enforceable Through Title V Permit
- 2. NOx emissions shall not exceed 6.12 grams per horsepower-hour. [District NSR Rule] Federally Enforceable Through Title V Permit
- 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]
- 4. This engine shall be operated using only CARB certified diesel fuel. [17 CCR 93115]
- 5. 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
- 6. 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.). 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
- 7. The permittee shall maintain monthly records of the type of fuel purchased, the amount of fuel purchased, date when the fuel was purchased, signature of the permittee who received the fuel, and signature of the fuel supplier indicating that the fuel was delivered. [17 CCR 93115]
- 8. 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
- 9. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: District Rule 4201 and County Rules 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

Facility Name: TURLOCK IRRIGATION DISTRICT
Location: 4500 CROWS LANDING ROAD,MODESTO, CA 95381
N-3299-1-2: Apr 12 2010 2 43PM – YOSHIMUJ

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-3299-3-2

EXPIRATION DATE: 06/30/2009

EQUIPMENT DESCRIPTION:

GENERAL ELECTRIC MODEL LM6000 459 MMBTU/HR (HHV) COMBINED CYCLE GAS TURBINE ENGINE WITH STEAM INJECTION, OXIDIZATION CATALYST, AMMONIA INJECTION, AND SELECTIVE CATALYTIC REDUCTION SERVING A 48 MW ELECTRICAL GENERATOR

PERMIT UNIT REQUIREMENTS

- The heat recovery steam generator shall provide space for additional selective catalytic reduction catalyst and additional oxidation catalyst. The additional space shall be sufficient to house the quantity of catalyst material necessary to achieve and maintain compliance with the emission limits of this permit. [District NSR Rule] Federally Enforceable Through Title V Permit
- The gas turbine engine and generator lube oil vents shall be equipped with mist eliminators. Visible emissions from lube oil vents shall not exhibit opacity of 5% or greater except for up to three minutes in any hour. [District NSR Rule] Federally Enforceable Through Title V Permit
- All equipment shall be maintained in proper operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
- The exhaust stack shall be equipped with a continuous emissions monitor (CEM) for CO. The CEM shall meet the requirements of 40 CFR parts 60 and shall be capable of monitoring emissions during startups and shutdowns as well as during normal operating conditions. [District NSR Rule and District Rule 1080] Federally Enforceable Through Title V Permit
- The permittee shall monitor and record the fuel flow rate to the turbine, the CO emission rate, the steam injection rate, the ammonia injection rate, the exhaust temperature both prior to and after the SCR unit, and the exhaust flow rate. A calculated exhaust flow rate may be utilized, provided a District approved calculation method is utilized. [District NSR Rule and District Rule 4703] Federally Enforceable Through Title V Permit
- In accordance with 40 CFR, Part 60, Appendix F, 5.1, cylinder gas audits (CGA) or relative accuracy audits (RAA) of continuous emission monitors shall be conducted quarterly, except during quarters in which a relative accuracy test audit (RATA) is performed. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
- The owner/operator shall perform a relative accuracy test audit (RATA) as specified by 40 CFR Part 60, Appendix F. 5.11, at least once every four calendar quarters. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080] Federally Enforceable Through Title V Permit
- Daily emissions will be compiled for a twenty-four hour period starting and ending at twelve-midnight. Each calendar month in a twelve consecutive month rolling emissions total will commence at the beginning of the first day of the month. The twelve consecutive month rolling emissions total to determine compliance with annual emission limit will be compiled from the twelve most recent calendar months. [District NSR Rule] 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.

Location: 4500 CROWS LANDING ROAD, MODESTO, CA 95381

Facility Name: TURLOCK IRRIGATION DISTRICT

- 9. Startup and shutdown events shall not exceed 1,095 occurrences per calendar year. Startup emissions must be counted toward each applicable emission limit (lb/day and lb/yr). [District NSR Rule] Federally Enforceable Through Title V Permit
- 10. Emissions during startup and shutdown periods must be counted toward the applicable daily emission limitations. [District NSR Rule] Federally Enforceable Through Title V Permit
- 11. The NOx emissions shall not exceed 60.0 lb/hr during start-up periods and shall not exceed 12.3 lb/hr during shutdown periods. [District NSR Rule] Federally Enforceable Through Title V Permit
- 12. The NOx emissions concentration during steady state operation shall not exceed 3.0 ppmvd @ 15% O2 over a 3 hour rolling average. Steady-state period refers to any periods that is not a start-up or shutdown period. [District NSR Rule; 40 CFR 60.332(b); 40 CFR 60.334(j)(1)(iii); and District Rule 4703] Federally Enforceable Through Title V Permit
- 13. The combined total NOx emissions from start-up, shutdown, and steady state operation shall not exceed 142.6 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
- 14. The CO emissions shall not exceed 40.8 lb/hr during start-up periods and shall not exceed 10.0 lb/hr during shutdown periods. [District NSR Rule] Federally Enforceable Through Title V Permit
- 15. The CO emissions concentration during steady state operation shall not exceed 11.8 ppmvd @ 15% O2 over a 3 hour rolling average. Steady-state period refers to any periods that is not a start-up or shutdown period. [District NSR Rule and District Rule 4703] Federally Enforceable Through Title V Permit
- 16. The combined total CO emissions from start-up, shutdown, and steady state operation shall not exceed 367.1 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
- 17. The VOC emissions concentration shall not exceed 2.0 ppmvd @ 15% O2 over a 3 hour rolling average. [District NSR Rule] Federally Enforceable Through Title V Permit
- 18. The PM10 emissions rate shall not exceed 48.0 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
- 19. The SOx emission rate shall not exceed 31.4 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
- 20. Ammonia (NH3) emissions concentration shall not exceed 25 ppmvd @ 15% O2 over a 24 hour rolling average. [District NSR Rule] Federally Enforceable Through Title V Permit
- 21. Compliance with ammonia emission limit shall be demonstrated utilizing one of the following procedures: 1) calculate the daily ammonia emissions using the following equation: (ppmvd @ 15% O2) = ((a (b x c/1,000,000)) x (1,000,000 / b)) x d, where a = ammonia injection rate (lb/hr) / (17 lb/lb mol), b = dry exhaust flow rate (lb/hr) / (29 lb/lb mol), c = change in measured NOx concentration ppmvd @ 15% O2 across the catalyst, and d = correction factor. The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip; 2.) utilize another District-approved calculation method using measured surrogate parameters to determine the daily ammonia emissions in ppmvd @ 15% O2. If this option is chosen, the permittee shall submit a detailed calculation protocol for District approval at least 60 days prior to commencement of operation; 3.) Alternatively, the permittee may utilize a continuous in-stack ammonia monitor to verify compliance with the ammonia emissions limit. If this option is chosen, the permittee shall submit a monitoring plan for District approval at least 60 days prior to commencement of operation. [District Rule 4102]
- 22. The cumulative annual emissions shall not exceed either of the following limits: 52,049 lb/year for NOx or 10,454 lb/year for VOC. [District NSR Rule] Federally Enforceable Through Title V Permit
- 23. Source testing to demonstrate compliance with the NOx (lb/day), CO (lb/day), VOC (ppmvd and lb/day), PM10 (lb/day), and NH3 (ppmvd) emission limits shall be conducted at least once every twelve months. [District NSR Rule] Federally Enforceable Through Title V Permit
- 24. VOC emissions (referenced as methane) shall be determined using EPA method 18 or EPA method 25. [District NSR Rule and District Rule 1081] Federally Enforceable Through Title V Permit

- 25. Source testing to measure concentrations of PM10 shall be conducted using EPA Methods 201 and 202, or EPA Methods 201A and 202, or CARB Method 501 in conjunction with CARB Method 5. Alternative source testing methods will be allowed provided prior written approval is received from both the District and the EPA. [District NSR Rule and District Rule 1081] Federally Enforceable Through Title V Permit
- 26. Ammonia (NH3) emissions shall be determined using BAAQMD Method ST-1B. [District Rule 4102]
- 27. The permittee shall retain records of the cumulative annual NOx and VOC emissions. The record shall be updated daily. [District NSR Rule] Federally Enforceable Through Title V Permit
- 28. The permittee shall maintain hourly records of NOx, CO and ammonia concentrations (ppmv @ 15% O2). [District NSR Rule and District Rules 2520, 9.4.1 and 4102] Federally Enforceable Through Title V Permit
- 29. The owner or operator shall certify, maintain, operate and quality-assure a Continuous Emission Monitoring System (CEMS) which continuously measures and records the exhaust gas NOx and O2 concentrations. NOx CEMS meeting the requirements of 40 CFR 75 may be used to meet the requirements 40 CFR 60.334. However, the missing data substitution methodology provided for in 40 CFR part 75, subpart D, is not required for purposes of identifying excess emissions. Instead, periods of missing CEMS data are to be reported as monitor downtime in the excess emissions and monitoring performance report required in 40 CFR 60.7(c). [District Rule 4703, 6.2.1 and 40 CFR 60.334(b)] Federally Enforceable Through Title V Permit
- 30. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period or shall meet equivalent specifications established by mutual agreement of the District, the ARB and the EPA. [40 CFR 60.334(b)(2) and District Rule 1080, 6.4] Federally Enforceable Through Title V Permit
- 31. The NOx and O2 CEMS shall meet the requirements in Performance Specifications 2 and 3 (for diluent) of 40 CFR part 60, appendix B, except the 7-day calibration drift is based on unit operating days, not calendar days. Appendix F, Procedure 1 is not required. The relative accuracy test audit (RATA) of the NOx and diluent monitors may be performed individually or on a combined basis, i.e., the relative accuracy tests of the CEMS may be performed either: (i) On a ppm basis (for NOx) and a percent O2 basis for oxygen; or (ii) On a ppm at 15 percent O2 basis; or (iii) On a ppm basis (for NOx) and a percent CO2 basis (for a CO2 monitor that uses the procedures in Method 20 to correct the NOx data to 15 percent O2). [40 CFR 60.334(b)(1) and District Rule 1080] Federally Enforceable Through Title V Permit
- 32. As specified in §60.13(e)(2), during each full unit operating hour, each monitor must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour, to validate the hour. For partial unit operating hours, at least one valid data point must be obtained for each quadrant of the hour in which the unit operates. For unit operating hours in which required quality assurance and maintenance activities are performed on the CEMS, a minimum of two valid data points (one in each of two quadrants) are required to validate the hour. [40 CFR 60.334(b)(2) and District Rule 1080] Federally Enforceable Through Title V Permit
- 33. The CEMS shall be linked to a data logger which is compatible with the District's Data acquisition system. Upon notice by the District that the facility's CEM system is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEM data is sent to the District by a District-approved alternative method. [District Rule 1080, 7.1] Federally Enforceable Through Title V Permit
- 34. The owner or operator shall maintain CEMS records that contain the following: the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, adjustments, maintenance, duration of any periods during which a continuous monitoring system or monitoring device is inoperative, and emission measurements. [40 CFR 60.7(b) and District Rule 1080, 7.3] Federally Enforceable Through Title V Permit

N-3299-3-2 : Apr 12 2010 2:43PM -- YOSHIMUJ

- 35. The owner or operator shall submit a written report of CEM operations for each calendar quarter to the APCO. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals. data and magnitude of excess NOx emissions, nature and the cause of excess (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; Applicable time and date of each period during which the CEM was inoperative (monitor downtime), except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [40 CFR 60.334(j), (j)(5) and District Rule 1080, 8.0] Federally Enforceable Through Title V Permit
- 36. Permittee shall maintain records of the occurrence and duration of any start-up or shutdown. [District Rule 4703, 6.2.8] Federally Enforceable Through Title V Permit
- 37. APCO or an authorized representative shall be allowed to inspect, as determined to be necessary, the monitoring devices required by this rule to ensure that such devices are functioning properly. [District Rule 1080, 11.0] Federally Enforceable Through Title V Permit
- 38. This unit shall be fired exclusively on natural gas as defined in 40 CFR 60.331(u) which has a total sulfur content of less than or equal to 1.0 gr/100 scf. [District NSR Rule and 40 CFR 60.333(b)] Federally Enforceable Through Title V **Permit**
- 39. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.0] Federally Enforceable Through Title V Permit
- 40. If the turbine is not fired on PUC-regulated or FERC-regulated natural gas, the sulfur content of the fuel shall be tested in accordance with 40 CFR 60.344(i), [40 CFR 60.344(i)] Federally Enforceable Through Title V Permit
- 41. Performance testing shall be conducted annually to measure NOx and CO emission concentrations using the following test methods: NOx (ppmv) - EPA Methods 7E or 20, or ARB Method 100; CO (ppmv) - EPA Method 10 or 10B, or ARB Method 100; stack gas oxygen - EPA Method 3, 3A or 20, or ARB Method 100. [District Rule 4703, 6.3.1, 6.4.1, & 6.4.3] Federally Enforceable Through Title V Permit
- 42. The owner or operator shall be required to conform to the sampling facilities and testing procedures described in District Rule 1081, 3.0, & 6.0 (as amended 12/16/93). [District Rule 1081, 3.0 & 6.0] Federally Enforceable Through Title V Permit
- 43. The District must be notified 30 days prior to any performance testing and a test plan shall be submitted for District approval 15 days prior to such testing. [District Rule 1081, 7.1] Federally Enforceable Through Title V Permit
- 44. Performance testing shall be witnessed or authorized by District personnel. Test results must be submitted to the District within 60 days of performance testing. [District Rule 1081, 7.2 & 7.3] Federally Enforceable Through Title V Permit
- 45. The owner or operator of a stationary gas turbine system shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4703, 6.2.4] Federally Enforceable Through Title V Permit
- 46. Results of the CEM system shall be averaged over a three hour period, using consecutive 15-minute sampling periods in accordance with all applicable requirements of CFR 60.13. [40 CFR 60.13, District Rule 4703, 5.1] Federally Enforceable Through Title V Permit
- 47. Owner or operator shall maintain a stationary gas turbine system operating log that includes, on a daily basis, the actual local time start-up and stop time, length and reason for reduced load periods, total hours of operation, type and quantity of fuel used. [District Rule 4703, 6.2.6] Federally Enforceable Through Title V Permit
- 48. The owners and operators of each affected source and each affected unit at the source shall: (i) Operate the unit in compliance with a complete Acid Rain permit application or a superceding Acid Rain permit issued by the permitting authority; and (ii) have an Acid Rain permit. [40 CFR 72] Federally Enforceable Through Title V Permit
- 49. The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75. [40 CFR 75] Federally Enforceable Through Title V Permit

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

Facility Name: TURLOCK IRRIGATION DISTRICT Location: 4500 CROWS L N-3299-3-2: Apr 12 2010 2 43PM - YOSHIMUJ 4500 CROWS LANDING ROAD, MODESTO, CA 95381

- 50. The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program. [40 CFR 75] Federally Enforceable Through Title V Permit
- 51. The owners and operators of each source and each affected unit at the source shall: (i) hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and (ii) comply with the applicable Acid Rain emissions limitations for sulfur dioxide. [40 CFR 73] Federally Enforceable Through Title V Permit
- 52. Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act. [40 CFR 77] Federally Enforceable Through Title V Permit
- 53. Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program. [40 CFR 72] Federally Enforceable Through Title V Permit
- 54. An allowance shall not be deducted in order to comply with the requirements under 40 CFR part 73, prior to the calendar year for which the allowance was allocated. [40 CFR 73] Federally Enforceable Through Title V Permit
- 55. An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or the written exemption under 40 CFR 72.7 and 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization. [40 CFR 72] Federally Enforceable Through Title V Permit
- 56. An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right. [40 CFR 72] Federally Enforceable Through Title V Permit
- 57. The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides. [40 CFR 72] Federally Enforceable Through Title V Permit
- 58. The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77. [40 CFR 77] Federally Enforceable Through Title V Permit
- 59. The owners and operators of an affected unit that has excess emissions in any calendar year shall: (i) pay without demand the penalty required, and pay up on demand the interest on that penalty; and (ii) comply with the terms of an approved offset plan, as required by 40 CFR part 77. [40 CFR 77] Federally Enforceable Through Title V Permit
- 60. The owners and operators of each affected unit at the source shall keep and make readily available upon request the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or permitting authority: (i) The certificate of representation for the designated representative for the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site beyond such five-year period until such documents are superceded because of the submission of a new certificate of representation changing the designated representative. [40 CFR 72] Federally Enforceable Through Title V Permit
- 61. The owners and operators of each affected unit at the source shall keep and make readily available upon request each of the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or permitting authority; (ii) All emissions monitoring information, in accordance with 40 CFR part 75; (iii) Copies of all reports, compliance certifications and other submissions and all records made or required under the Acid Rain Program; (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission that demonstrates compliance with the requirements of the Acid Rain Program. [40 CFR 72, 40 CFR 75] Federally Enforceable Through Title V Permit
- 62. The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR 75 Subpart I. [40 CFR 75] Federally Enforceable Through Title V Permit

Location: 4500 CROWS LANDING ROAD, MODESTO, CA 95381

- 63. Permittee shall submit reports of excess emissions for all periods of unit operation, including startup, shutdown, and malfunction in accordance with 40 CFR 60.344(j). [40 CFR 60.334(j)] Federally Enforceable Through Title V Permit
- 64. "Startup" shall be defined as the period of time, not to exceed two hours, during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. "Shutdown" shall be defined as the period of time, not to exceed two hours, during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District NSR Rule and District Rule 4703] Federally Enforceable Through Title V Permit
- 65. The owner or operator shall monitor the gas turbine exhaust gas NOx emissions using a system that meets EPA requirements as specified in 40 CFR Part 60 App. B, Spec. 2, 40 CFR Part 60 App. F, and 40 CFR Part 60.7 (c), 60.7 (d), and 60.13, or other systems that are acceptable to EPA. [District Rule 4703, 6.2.3] Federally Enforceable Through Title V Permit

ATTACHMENT C

Stringency Analysis for District Rule 4601

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	 The provisions of this rule shall not apply to: 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. 4.2 Any architectural coating that is sold in a containers with a volume of one liter (1.057 quarts) or less. 4.3 Any aerosol coating product. 	4.1 The provisions of this rule shall not apply to: 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. 4.1.2 Any aerosol coating product. 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.	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	Note: Section 5.0 requirements refer to Table tables are included as Attachment X.		of Standards 2. These
Requirements	5.1 VOC Content Limits: Except as provided in Sections 5.2, 5.3, 5.8 and 8.0, no person shall; 5.1.1 manufacture, blend, or repackage for sale within the District; 5.1.2 supply, sell, or offer for sale within the district; 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.	 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. Limits are expressed as VOC Regulatory, thinned to the manufacturer's maximum thinning recommendation, excluding any colorant added to tint bases. 5.2 Most Restrictive VOC Limit: If a coating 	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. The VOC limit of the non-
	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: 5.2.1 Lacquer coatings (including lacquer sanding sealers) 5.2.2 Metallic pigmented coatings 5.2.3 Shellacs 5.2.4 Fire-retardant coatings 5.2.5 Pretreatment wash primers 5.2.6 Industrial maintenance coatings 5.2.7 Low-solids coatings	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. 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. 5.2.2 Effective on and after January 1, 2011, with the exception of the	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
	5.2.8 Wood preservatives 5.2.9 High temperature coatings 5.2.10 Temperature-indicator safety coatings 5.2.11 Antenna coatings 5.2.12 Antifouling coatings 5.2.13 Flow coatings 5.2.14 Bituminous roof primers 5.2.15 Specialty primers, sealers and undercoaters	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. 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. 5.2.3.1 Lacquer coatings (including lacquer	
		sanding sealers) 5.2.3.2 Metallic pigmented coatings 5.2.3.3 Shellacs 5.2.3.4 Fire-retardant coatings 5.2.3.5 Pretreatment wash primers	
		5.2.3.6 Industrial maintenance coatings 5.2.3.7 Low-solids coatings 5.2.3.8 Wood preservatives 5.2.3.9 High temperature coatings	
		5.2.3.10 Temperature-indicator safety coatings 5.2.3.11 Antenna coatings 5.2.3.12 Antifouling coatings 5.2.3.13 Flow coatings 5.2.3.14 Bituminous roof primers	
		5.2.3.15 Specialty primers, sealers and undercoaters 5.2.3.16 Aluminum roof coatings 5.2.3.17 Zinc-rich primers 5.2.3.18 Wood Coatings	
	5.3 Sell-Through of Coatings: 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	5.3 Sell-Through of Coatings: 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	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
	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. 5.3.2 A coating included in an approved Averaging Program that does not comply with the specified limit in the	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.	the rule.

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
	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 Califomia Air Resources Board (ARB). This Section 5.3.2 shall remain in effect until January 1, 2008.		
	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.	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.	No change in the requirements, therefore, non-SIP version of rule is as stringent as SIP version.
	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.	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.	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.
	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.	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.	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.
	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.	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.	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.
	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		This section has been removed. The operation is required to meet the lacquer VOC limit regardless of

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

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
	display one or more of the descriptions listed in Section 6.1.7.1 through 6.1.7.5. 6.1.7.1 For blocking stains. 6.1.7.2 For fire-damaged substrates. 6.1.7.3 For smoke-damaged substrates. 6.1.7.4 For excessively chalky substrates. 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. 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".	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. 6.1.5.1 "For industrial use only" 6.1.5.2 "For professional use only" 6.1.5.3 "Not for residential use" or "Not intended for residential use" 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.) 6.1.7 Rust Preventative Coatings: The labels of all rust preventative coatings shall prominently display the statement "For Metal Substrates Only". 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. 6.1.8.1 For smoke-damaged substrates. 6.1.8.2 For smoke-damaged substrates. 6.1.8.3 For water-damaged substrates. 6.1.8.4 For excessively chalky substrates. 6.1.8.5 For blocking stains. 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, the labels of all Stone Consolidants: Effective January 1, 2011, the labels of all Stone Consolidants shall prominently display the statement "Reactive Penetrating Sealers: Effective January 1, 2011, the labels of all Stone Consolidants: Effective January 1, 2011, the labels of all Stone Consolidants: Effective January 1, 2011, the labels of all Stone Consolidants: Effective January 1, 2011, the labels of all Stone Consolidants: Fire Stone Consolidant - For Profe	

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
		6.1.13 Wood Coatings: Effective January 1, 2011, the labels of all Wood Coatings shall prominently display the statement "For Wood Substrates Only." 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. 6.1.14.1 "For industrial use only" 6.1.14.2 "For professional use only" 6.1.14.3 "Not for residential use" or "Not intended for residential	
	6.2 Reporting Requirements	use" 6.2 Reporting Requirements	Until December 31, 2010
	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. 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. 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. 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: 6.2.4.1 the product brand name and a copy of the product label with legible usage instructions;	The reporting requirements specified in Sections 6.2.1 through 6.2.6 shall apply until December 31, 2010. 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. 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. 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. 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	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.

I • • • • • • • • • • • • • • • • • • •	sion of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
6.2.4.2 ti the the 6.2.4.3 ti duri nea 6.2.4.4 ti nea per chic 6.2.5 Recycled co the Executi certifying ti Manufactur or before A beginning v annual repo the ARB. T recycled co gallons dist preceding y method use calculate S 6.2.6 Bituminous manufactur or bitumino before Apri beginning v annual repo ARB. Ther of gallons o bituminous during the p shall descri	he product category listed in Table of Standards to which coating belongs; he total sales in California ing the calendar year to the arest gallon; he volume percent, of chloroethylene and methylene oride in the coating. Coatings: Manufacturers of catings must submit a letter to the Officer of the ARB meir status as a Recycled Paint rer. The manufacturer shall, on world to the Executive Officer of the report shall include, for all catings, the total number of tributed in the State during the year, and shall describe the ed by the manufacturer to tate distribution. In a coatings: Each rer of bituminous roof coatings with the year 2004, submit an out to the Executive Officer of each calendar year with the year 2004, submit and out to the Executive Officer of each calendar year with the year 2004, submit and out to the Executive Officer of each calendar year with the year 2004, submit and out to the Executive Officer of each calendar year, and in the State preceding calendar year, and in the State preceding calendar year, and in the method used by the rer to calculate State sales.	annual report to the Executive Officer of the ARB the following information for products sold in the State during the preceding year: 6.2.4.1 the product brand name and a copy of the product label with legible usage instructions; 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; 6.2.4.3 the total sales in California during the calendar year to the nearest gallon; 6.2.4.4 the volume percent, to the nearest gallon; 6.2.5 Recycled Coatings: Manufacturers of 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. 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 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 roatings sold in the State during the Preceding calendar yea	

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
	,	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: 6.2.7.1 the name and mailing	
		address of the manufacturer; 6.2.7.2 the name, address and	
		telephone number of a contact person; 6.2.7.3 the name of the coating product as it appears on the	
		label and the applicable coating category; 6.2.7.4 whether the product is	
		marketed for interior or exterior use or both; 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);	
		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; 6.2.7.7 the names and CAS numbers of the VOC	
		constituents in the product; 6.2.7.8 the names and CAS numbers of any compounds in the product specifically exempted from the VOC	
		6.2.7.9 whether the product is marketed as solvent-borne, waterborne or 100% solids:	
		6.2.7.10 description of resin or binder in the product; 6.2.7.11 whether the coating is a	
		single-component or multi- component product; 6.2.7.12 the density of the product in pounds per gallon;	
		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	
		6.2.7.14 the percent by volume of: solids, water, and any compounds in the product	
	<u></u>	specifically exempted from the VOC definition.	

Requirement	SIP Version of Rule 4601	Non-SIP Version of Rule 4601	Conclusion
Category	(10/31/01)	(12/17/09)	
	6.3 Test Methods 6.3.1 VOC Content of Coatings: To	6.3 Test Methods The test methods listed below shall be	The non-SIP version includes all the requirements of the SIP
	determine the physical properties of a	used to demonstrate compliance with	version. Therefore, the
	coating in order to perform the	this rule. Alternate equivalent test	non-SIP version of the
	calculations in Section 3.26 and 3.27,	methods may be used provided the test	rule is more stringent
	the reference method for VOC content	methods have been approved by the	than the SIP version of
	is U.S. EPA Method 24, except as	APCO and EPA.	the rule.
	provided in Sections 6.3.2 and 6.3.15. An alternative method to determine the	6.3.1 Calculation of VOC Content: For the	
	VOC content of coatings is SCAQMD	purpose of determining compliance	
	Method 304-91 (Revised February	with the VOC content limits in the	
	1996), incorporated by reference in	Table of Standards 1 or the Table of	
	Section 6.3.14. The exempt	Standards 2, the VOC content of a	
	compounds content shall be	coating shall be determined as defined in Section 3.77, 3.78, or 3.79	
	determined by SCAQMD Method 303- 91 (Revised August 1996),	as appropriate. The VOC content of a	
	incorporated by reference in Section	tint base shall be determined without	
	6.3.12. To determine the VOC content	colorant that is added after the tint	
	of a coating, the manufacturer may	base is manufactured. If the	
	use U.S. EPA Method 24, or an alternative method as provided in	manufacturer does not recommend thinning, the VOC Content must be	•
,	Section 6.3.2, formulation data, or any	calculated for the product as	
	other reasonable means for predicting	supplied. If the manufacturer	
	that the coating has been formulated	recommends thinning, the VOC	
	as intended (e.g., quality assurance	Content must be calculated including the maximum amount of thinning	
	checks, recordkeeping). However, if there are any inconsistencies between	solvent recommended by the	·
	the results of a Method 24 test and	manufacturer. If the coating is a multi-	
	any other means for determining VOC	component product, the VOC content	
	content, the Method 24 test results will	must be calculated as mixed or	
	govern, except when an alternative method is approved as specified in	catalyzed. If the coating contains silanes, siloxanes, or other	
	Section 6.3.2. The District Air Pollution	ingredients that generate ethanol or	
	Control Officer (APCO) may require	other VOC during the curing process,	
	the manufacturer to conduct a Method	the VOC content must include the	
	24 analysis. 6.3.2 Alternative Test Methods: Other test	VOCs emitted during curing. 6.3.2 VOC Content of Coatings: To	
	methods demonstrated to provide	determine the physical properties of a	
	results that are acceptable for	coating in order to perform the	
	purposes of determining compliance	calculations in Section 3.77 and 3.79, the reference method for VOC	
	with Section 6.3.1, after review and approved in writing by the staffs of the	content is EPA Method 24, except as	
	District, the ARB and the U.S. EPA,	provided in Sections 6.3.3 and 6.3.16.	
	may also be used. 6.3.3 Methacrylate	An alternative method to determine	
	Traffic Marking Coatings: Analysis of methacrylate multicomponent coatings	the VOC content of coatings is SCAQMD Method 304-91 (Revised	
	used as traffic marking coatings shall	February 1996). The exempt	
	be conducted according to a	compounds content shall be	
	modification of U.S. EPA Method 24	determined by SCAQMD Method	
	(40 CFR 59, subpart D, Appendix A), incorporated by reference in Section	303-91 (Revised 1993), BAAQMD Method 43 (Revised 1996), or	
	6.3.15. This method has not been	BAAQMD Method 41 (Revised 1995),	
	approved for methacrylate	as applicable. To determine the VOC	
	multicomponent coatings used for	content of a coating, the	
	other purposes than as traffic marking coatings or for other classes of	manufacturer may use EPA Method 24. or an alternative method as	
	multicomponent coatings.	provided in Section 6.3.3, formulation	
	6.3.4 Flame Spread Index: The flame	data, or any other reasonable means	
	spread index of a fire-retardant coating	for predicting that the coating has	
	shall be determined by ASTM	been formulated as intended (e.g., quality assurance checks,	
	Designation E 84-99, "Standard Test Method for Surface Burning	recordkeeping). However, if there are	
	Characteristics of Building	any inconsistencies between the	
	Materials"(see Section 3, Fire-	results of EPA Method 24 test and	
	Retardant Coating).	any other means for determining	
	6.3.5 Fire Resistance Rating: The fire	VOC content, the EPA Method 24	

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). 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, Fiat Coating, Nonfat Coating), Nonfat Coating, Nonfat	Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
Designation E 119-98, "Standard Test Methods for Fire Tests of Building Construction Materials' (see Section 3, Fire-Resistive Coating). 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, Filat Coating, Nonflat-Holland, Nonflat Coating, Nonflat-Holland, Nonflat-Hol				
Methods for Fire Tests of Building Construction Materials (see Section 3, Fire-Resistive Coating). 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-Dy Enamel). 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, SCAQMD Laboratory Methods of Analysis for Enforcement Samples (see Section 3, Pre- Treatment Vash Primer). 6.3 9 Dying Times: The set-to-touch, dy- 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 Flim 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. 6.3.10 Surface Chalkiness: The chalkiness of a surface shalkiness: The chalkines of a surface shalkiness: The chalkines of a surface shalkiness: The chalkines of a surface shalkines of the shalkines of a surface shalkines of the shalkines of a surface shalkines of the shalkine determined by ASTM Designation D4214-98, 'Standard Test Method		coating shall be determined by ASTM	an alternative method is approved as	
Construction Materials' (see Section 3, Fire-Resistive Coating), 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, Fiat Coating, Nonflat Coating, Nonflat-High Gloss Coating and Quick-Dry Enamel). 6.3.7 Metal Content of Coatings: The metallic content of a coating shall be determined by SCAOMD Method 318-95. Determination of Weight Percent Elemental Metal in Coatings by X-Ray Diffraction, SCAOMD Leboratory Methods of Analysis for Enforcement Samples (see Section 3, Metallic Pigmented Coating). 6.3.8 Acid Content of Coatings: The acid content of a coating shall be determined by ASTM Designation D 1613-96, "Standard Test Methods for Acidify in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer and related products (see Section 3, Pre-Treatment Wash Primer). 6.3.9 Dryng 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 7), Unick-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. 6.3.10 Surface Chalkiness: The chalkiness of a surface shall be determined by ASTM Designation D 1640-95. 8. "Standard Test Methods for Evaluating ASTM Designation D 1640-95. 8. "Standard Test Methods for Evaluating the Degree of Chalking of Exterior Paint Films' (see Section 3.0, Filre-Resistance rating of a fire-resistive coating shall be determined by ASTM Designation D 1640-95. 9. "Standard Test Methods for Evaluating the Degree of Chalking of Exterior Paint Films' (see Section 3.0, File Coating, Nonflat Coating, Nonflat Coating shall be determined by ASTM Designation D 1640-95. 9. "Standard Test Methods for Evaluating the Degree of Chalking of Exterior Paint Films' (see Section 3.0, File Co		<u> </u>		
Fire-Resistive Coating). 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 Standard Test Method for Specular Coating and Quick-Dy Enamel) 6.3.7 Metal Content of Coatings: The metallic content of a coating shall be determined by SCACAMD Method 318-95, Determination of Weight Percent Elemental Metal in Coatings by X-Ray Diffraction, SCAQMD Laboratory Methods of Analysis for Enforcement Samples (see Section 3, Metallic Pigmented Coating). 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, Quick-Dy-Roment). 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. 6.3.10 Surface Chalkiness: The chalkiness of a surface shall be determined by ASTM Designation D 1640-95. 6.3.10 Surface Chalkiness: The chalkiness of a surface shall be determined by ASTM Designation D 1640-95. 6.3.10 Surface Chalkiness: The chalkiness of a surface shall be determined by ASTM Designation D 1640-95. 6.3.10 Surface Chalkiness: The chalkiness of a surface shall be determined by ASTM Designation D 2714-98. 6.3.8 Metal Content of Coating, Nonflat Coati				
6.3.6 Gloss Determination. The gloss of a coating shall be determined by ASTM Designation D 523-39 (1999) "Standard Test Method for Specular Gloss' (see Section 3, Flat Coating, Nonfat Coati				
coating shall be determined by ASTM Designation D 523-89 (1999). 'Standard Test Method for Specular Gloss'(see Section 3, Tat Coating, Nonflat Coating, Standard Test Method of Coatings: The metallic content of a coating shall be determined by SCAQMID Method 318-95, Determination of Weight Percent Elemental Metal in Coatings by X-Ray Diffraction, SCAQMID Laboratory Methods of Analysis for Enforcement Samples (see Section 3, Metallic Pigmented Coating). 6.3.4 A Methocylate Triaffic Marking Coatings: Analysis of methacrylate multicomponent coatings used as traffic marking coatings 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, Pretrament Wash Primer). 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 for Specular Gloss' (see Section 3, 10 Surface Chalkiness: The chalkiness of a surface shall be determined using ASTM Designation D 1840-95. *Standard Test Methods for Evaluating ASTM Designation D 1840-95. *Standard Test Methods for Evaluating ASTM Designation D 1840-95. *Standard Test Methods for Evaluating the Degree of Chalking of Exterior Paint Firms' (see Section 3, Specialty Degree of Chalking of Exterior Paint Firms' (see Section 3, Specialty Degree of Chalking of Exterior Paint Firms' (see Section 3, Specialty Degree of Chalking of Exterior Paint Firms' (see Section 3, Specialty Degree of Chalking of Exterior Paint Firms' (see Section 3, Specialt				
Designation D 523-89 (1999). "Standard Test Method for Specular Gloss (see Section 3, Flat Coating, Nonflat Coating, Standard Test Method of Coatings The metallic content of a coating shall be determined by SCAQMD bethod 318-95, Determination of Weight Percent Elemental Metal in Coatings by X-Ray Diffraction, SCAQMD Laboratory Methods of Analysis for Enforcement Samples (see Section 3), Metallic Pigmented Coating). 6.38 Acid Content of Coatings: The acid content of a coating shall be determined by ASTM Designation D 1613-96, "Standard Test Method for Acidty in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer and related products (see Section 3, Pre-Treatment Wash Primer). 6.39 Drying Times: The set-to-touch, dryhard, 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 Finamel and Quick-Dry Finamel pain Guick-Dry Finamel pain Finam Spread Index: The fire resistance rating of a fire-resistive coating shall be determined by ASTM Designation D 1640-95. 5.36 Fire Resistance Rating: The fire resistore of Chalking of Exterior Paint Finam Spread Index: The fire resistore coating shall be determined by SCAQMM Method 318-95. Determination of Weight		. 7		
Standard Test Method for Specular Gloss'(see Section 3, Flore Intermetal Method for Specular Gloss'(see Section 3, Standard Test Methods for Drying, Curing, or Firm Formation of Organic Coatings ARTM Designation D 1640-95. Standard Test Methods for Drying, Curing, or Firm Formation of Organic Coatings and Undercoater) The tack-free time of a quickbry Primer, Sealer and Undercoater) The tack-free time of a quickbry Drying, Carling, or Firm Formation of Organic Coatings, and Drying 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). Standard Test Methods for Drying, Curing, or Firm Formation of Organic Coatings, ARTM Designation D 1640-95. Standard Test Methods for Drying, Curing, or Firm Formation of Organic Coating, and Dundercoater) The tack-free time of a quickbry paramel coating shall be determined by ASTM Designation D 1640-95. Standard Test Methods for Drying, Curing, or Firm Formation of Organic Coatings at Room Temperature (see Section 3, Ouick-Dry Enamel and Quick-Dry Firmer, Sealer and Undercoater) The tack-free time of a quickbry paramel coating shall be determined by the Mechanical Test Method for ASTM Designation D 1640-95. Standard Test Methods for Evaluating the Degree of Chalking of Exterior Paint Firms' (see Section 3, Specialty Degree of Chalking of Exterior Paint Firms' (see Section 3, Specialty Degree of Chalking of Exterior Paint Firms' (see Section 3, Specialty Degree of Chalking of Exterior Paint Firms' (see Section 3, Specialty Degree of Chalking of Exterior Paint Firms' (see Section 3, Specialty Degree of Chalking of Exterior Paint Firms' (see Section 3, Specialty Degree of Chalking of Exterior Paint Firms' (see Section 3, Specialty Degree of Chalking of Exterior Paint Firms' (see Section 3, Specialty Degree of Chalking of Exterior Paint Firms' (see Section 3, Specialty Degree of Chalking of Exterior Paint Firms' (see Section 3, Specialty Degree of Chalking o		~		
Gloss'(see Section 3, Flat Coating, Nonflat Coating, Nonf				
Nonflat Coating, Nonflat-High Gloss Coating and Quick-Dy Enamel). 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, SCAQMD Laboratory Methods of Analysis for Enforcement Samples (see Section 3, Metallic Pigmented Coating). 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 Acidy in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer and related products" (see Section 3, Pre-Treatment Wash Primer). 6.3.9 Dying 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-Dy Finamel and Quick-Dry Primer, Sealer and Undercoater) The tack-free time of a quickdry enamel coating shall be determined by ASTM Designation D 1640-95. 6.3.10 Surface Chalkiness: The chalkiness of a surface Shall be determined using ASTM Designation D 4214-98, "Standard Test Method for Fire Tests of Building Construction Materials" (see Section 3.0, Fire-Restoatnac Test Method of ASTM Designation D 1640-95. 6.3.10 Surface Chalkiness: The chalkiness of a surface Shall be determined using ASTM Designation D 4214-98, "Standard Test Method for Fire Tests of Building Construction Materials" (see Section 3.0, Fire-Rests of Building Construction Mate				
Coating and Quick-Dry Enamel). 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, SCAQMD Laboratory Methods of Analysis for Enforcement Samples (see Section 3.) Metallic Pigmented Coating). 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). 6.3.9 Drying Times: The set-to-touch, dryhard, 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 Primer, Sealer and Quick-Dry Enamel and Q				
be used. 6.3.4 Methacrylate Traffic Marking coatings shall be determined by SCAQMD Method 318- 95, Determination of Weight Percent Elemental Metal in Coatings by X-Ray Diffraction, ScAQMD Laboratory Methods of Analysis for Enforcement Samples (see Section 3, Metallic Pigmented Coating) 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). 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 Prinamel and Quick-Dry Primer, Sealer and Quick-Dry Primer, Sealer 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. 6.3.10 Surface Chalkiness: The chalkiness of a surface shall be determined using ASTM Designation D 2614-98, "Standard Test Methods for Evaluating the Degree of Chalking of Exterior Paint Films' (see Section 3, Specialty The Standard Test Method of Texeluating the Degree of Chalking of Exterior Paint Films' (see Section 3, Specialty Bushard D Appendix A). This method has not been approved for methacrylate multicomponent coatings shall be conducted according to a multicomponent coatings used for other purposes than as traffic marking coatings of rother classes of multicomponent coatings. Films Pseed Index: The flam coating sused for other purposes than as traffic marking coatings of rother classes of multicomponent coatings. Films Pseed Index: The flam coating sused for other purposes than as traffic marking coatings of for other classes of multicomponent coatings. Films Pseed Index: The flam coating sused for other purposes than				
determined by SCACMD Method 318- 95. Determination of Weight Percent Elemental Metal in Coatings by X-Ray Diffraction, SCAQMD Laboratory Methods of Analysis for Enforcement Samples (see Section 3, Metallic Pigmented Coating). 6.3.8 Acid Content of a coating shall be determined by ASTM Designation D 1613-96, "Standard Test Method for Acidity in Volatile Solvients and Chemical Intermediates Used in Paint, Varnish, Lacquer and related products (see Section 3, Pre- Treatment Wash Primer). 6.3.9 Drying Times: The set-to-fouch, 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 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. 6.3.10 Surface Chalkiness: The chalkiness of a surface shall be determined using ASTM Designation D 1640-95. "Standard Test Methods for Evaluating the Degree of Chalking of Exterior Paint Films' (see Section 3, Specialty Diffaction, Scalage of methacrylate multicomponent coatings shall be conducted according to a modification of EPA Method 2 (40 CPR 59, subpart D, Appendix A). This method has not been approved for methacrylate multicomponent coatings shall be conducted according to a modification of EPA Method 2 (40 CPR 59, subpart D, Appendix A). This method has not been approved for methacrylate multicomponent coatings shall be conducted according to a modification of EPA Method 2 (40 CPR 59, subpart D, Appendix A). This method has not been approved for methacrylate multicomponent coatings shall be conducted according to a modification of EPA Method for Appendix A). This method has not been approved for methacrylate multicomponent coatings shall be conducted according to an decident marking coatings or for other classes of multicomponent coatings can five and publication of EPA Method of EPA Method				
Security of the security of th		metallic content of a coating shall be	6.3.4 Methacrylate Traffic Marking	
Elemental Metal in Coatings by X-Ray Diffraction, SCAQMD Laboratory Methods of Analysis for Enforcement Samples (see Section 3, Metallic Pigmented Coating). 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). 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. 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 6.3.8 Metal Content of Coatings: The metallic content of Coatings. The		determined by SCAQMD Method 318-	Coatings: Analysis of methacrylate	
Diffraction, SCAQMD Laboratory Methods of Analysis for Enforcement Samples (see Section 3, Metallic Pigmented Coating). 6.3.8 cid 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). 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. 6.3.10 Surface Chalkiness: The chalkiness of a surface shall be determined using ASTM Designation D4211-98, "Standard Test Methods for Evaluating the Degree of Chalking of Exterior Paint Films (see Section 3, Specialty) 6.3.8 Metal Content of Coatings: The metallic content of a coating shall be determined by ASTM Designation O4211-98, "Standard Test Methods for Evaluating the Degree of Chalking of Exterior Paint Films (see Section 3, Specialty) 6.3.8 Metal Content of Coatings: The metallic content of a coating shall be determined by SCAQMD Method 318-95, Determination of Weight		95, Determination of Weight Percent	multicomponent coatings used as	
Methods of Analysis for Enforcement Samples (see Section 3, Metallic Pigmented Coating). 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). 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 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, "Standard Test Methods for Fire Tests of Building Construction Materials" (see Section 3, 0, Fire-Resistive Coating). 6.3.7 Gloss Determination: The gloss of a coating shall be determined by ASTM DESIGNATION D4214-98, "Standard Test Methods for Erie Tests of Building Construction Materials" (see Section 3.0, Fire-Resistive Coating). 6.3.8 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 used for other purposes than as traffic marking coatings used for other purposes than as traffic marking coatings used for other purposes than as traffic marking coatings used for other purposes than as traffic marking coatings used for other purposes than as traffic marking coatings of or other classes of multicomponent coatings sad for other purposes than as traffic marking coatings of or other classes of multicomponent coatings sad for other purposes than as traffic marking coatings of or other classes of multicomponent coatings as traffic marking coatings of or other classes of multicomponent coatings as traffic marking coatings of or other classes of multicomponent coatings as traffic mark				
Samples (see Section 3, Metallic Pigmented Coating). 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). 6.3.9 Drying Times: The set-to-touch, dryhard, 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 Primer, Sealer and Quick-Dry P				
Pigmented 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). 6.3.9 Drying Times: The set-to-louch, dryhard, 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 Primer, Sealer and Undercoater) The tack-free time of a quickdry enamel coating shall be determined by the Mechanical Test Methods for Sister Method for Sis	.]			
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). 6.3.9 Drying Times: The set-to-touch, dryhard, 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. 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) Method for Specular Gloss" (see Section 3.0, Fire-Resistive Coating). 6.3.8 Metal Content of Coatings: The metallic content of Coatings: The metallic content of a coating shall be determined by ASTM Designation D4214-98, "Standard Test Methods for Evaluating the Degree of Chalking of Exterior Paint Films" (see Section 3, Specialty) Method for Specular Gloss" (see Section 3.0, Fire-Resistive Coating). 6.3.8 Method for Specular Gloss' (see Section 3.0, Fire-Resistive Coating). 6.3.9 Fire Resistance Rating: The fire resistance rating of a fire-resistive coating shall be determined by ASTM E19-07, "Standard Test Methods for Fire Tests of Building Materials" (see Section 3.0, Fire-Resistance rating of a fire-resistive coating shall be determined by ASTM E19-07, "Standard Test Methods for Fire Tests of Building Materials" (see Section 3.0, Fire-Resistance rating of a fire-resistive coating shall be determined by ASTM E19-07, "Standard Test Methods for Fire Tests of Building Materials" (see Section 3.0, Fire-Resistance rating of a fire-resistive coating shall be				
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, Varrish, Lacquer and related products" (see Section 3, Pre-Treatment Wash Primer). 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. 9.5. 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) coatings used for other purposes than as traffic marking coatings or for other classes of multicomponent coatings. 6.3.5 Flame Spread Index: The flame spread index of a fire-restardant coating shall be determined by ASTM E84-07, "Standard Test Method for Surface Burning Characteristics of Burling Materials" (see Section 3.0, Fire-Retardant Coating). 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). 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 Materials" (see Section 3.0, Fire-Resistance rating of a fire-resistive coating shall be determined by ASTM E119-07, "Standard Test Methods for Fire-Resistive Coating). 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-Resistive Coati		<u> </u>		
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) 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 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. 6.3.10 Surface Chalkiness: The chalkiness of a surface Shall be determined using ASTM Designation D 4214-98, "Standard Test Methods for Evaluating the Degree of Chalking of Exterior Paint Films" (see Section 3.0, Fire- Resistive Coating). as traffic marking coatings of ro ther classes of multicomponent coatings. 6.3.5 Flame Spread Index: The flame s				
classes of multicomponent coatings. Acidity in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer and related products" (see Section 3, Pre-Treatment Wash Primer). 6.3.9 Drying Times: The set-to-touch, dryhard, 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 Primer, Sealer and Undercoater) The tack-free time of a quickdry enamel coating shall be determined by the Mechanical Test Method of a Surface Burning Characteristics of Building Materials" (see Section 3.0, Fire-Retardant Coating). 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-Resistre Coating). 6.3.7 Gloss Determination: The gloss of a coating shall be determined by ASTM D523-89 (1999), "Standard Test Methods for Fire Resistance Rating: The fire resistance rating of a fire-resistive coating, Shall be determined by ASTM E119-07, "Standard Test Methods for Fire Resistance Rating: The fire resistance rating of a fire-resistive coating. 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 Resistance Rating: The fire resistance rating of a fire-resistive coating. 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 Resistance Rating: The fire resistance rating of a fire-resistive coating. 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 Resistance Rating: The fire resistance rating of a fire-resistive coating, Shall be determined by SCACMD Method for Specular Gloss" (see Section 3.0				
Acidity in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer and related products" (see Section 3, Pre-Treatment Wash Primer). 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 ASTM Designation D 1640-95. 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) 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). 6.3.6 Fire Resistance Rating: The fire resistance rating 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). 6.3.6 Fire Resistance Rating: The fire resistance rating of a fire-resistive coating shall be determined by ASTM E19-07, "Standard Test Methods for Fire Tests of Building Materials" (see Section 3.0, Fire-Retardant Coating). 6.3.6 Fire Resistance Rating: The fire resistance rating of a fire-resistive coating shall be determined by ASTM E19-07, "Standard Test Methods for Fire Tests of Building Construction Materials" (see Section 3.0, Fire-Retardant Coating). 6.3.6 Fire Resistance Pating. 6.3.7 Gloss Determination: The gloss of a coating shall be determined by ASTM Designation D 1640-95. 6.3.8 Metal Content of Coatings: The metallic content of a coating shall be determined by SCAQMD Method 50 Fire-Retardant Coating shall be determined by SCAQ				
Chemical Intermediates Used in Paint, Varnish, Lacquer and related products" (see Section 3, Pre-Treatment Wash Primer). 6.3.9 Drying Times: The set-to-touch, dryhard, 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 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. 6.3.10 Surface Chalkiness: The chalkiness of a surface shall be determined using ASTM Designation D 4214-98, "Standard Test Methods for Evaluating the Degree of Chalking of Exterior Paint Films" (see Section 3, Specialty) Spread index of a fire-retardant coating shall be determined by ASTM E844-07, "Standard Test Method for Surface Burning Characteristics of Building Materials" (see Section 3.0, Fire-Retardant Coating). 6.3.6 Fire Resistance Rating: The fire resistance rating of a fire-resistive coating. Surface Pathon for Specular Pathon for Fire Tests of Building Construction Materials" (see Section 3.0, 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-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-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-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-Resistance rating of a fire-resistive coating shall be determined by ASTM E119-07, "Standard Test Methods for Fire Resistance rating of a fire-re		· ·		
products"(see Section 3, Pre- Treatment Wash Primer). 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. 6.3.10 Surface Chalkiness: The chalkiness of a surface shall be determined using ASTM Designation D4214-98, "Standard Test Method for Surface Burning Characteristics of Building Materials" (see Section 3.0, 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). 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, 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- 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- 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- Resistance Rating: The fire resistance rating of a fire-resistive coating shall be determined by ASTM D523-89 (1999), "Standard Test Method for Specular Gloss" Method for Specular Gloss' (see Section 3.0, Fire- Resistance rating of a fire-resistive coating shall be determined by Coating). 6.3.7 Gloss D				
Treatment Wash Primer). 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 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. 6.3.10 Surface Chalkiness: The chalkiness of a surface shall be determined using ASTM Designation D4214-98, "Standard Test Methods for Exterior Paint Films" (see Section 3, Specialty) Surface Burning Characteristics of Building Materials: (see Section 3.0, 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). 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). 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-Resistance rating of a fire-resistive coating shall be determined by ASTM E119-07, "Standard Test Methods for Evaluating and Quick-Dry Enamel). 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 Evaluating (see Section 3.0, Fire-Resistance rating of a fire-resistive coating, shall be determined by ASTM Display (see Section 3.0, Fire-Resistance rating of a fire-resistive coating, shall be determined by ASTM Display (see Section 3.0, Fire-Resistive Coating). 6.3.7 Gloss Determination: The gloss of a coating shall be determined by ASTM Display (see Secti		Varnish, Lacquer and related	coating shall be determined by ASTM	
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 Primer, Sealer 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. 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) Building Materials" (see Section 3.0, Fire-Resistance rating of a fire-resistive coating). 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-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-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-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-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). 6.3.7 Gloss Determination: The gloss of a coating shall be determined by ASTM D523-89 (1999), "Standard Test Methods for Fire Tests of Building Construction Materials" (see Section 3.0, Fire-Resistive Coating). 6.3.7 Gloss Determination: The gloss of a coating shall be determined by ASTM D523-89 (1999)		products"(see Section 3, Pre-	E84-07, "Standard Test Method for	
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. 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) Fire-Retardant Coating). 6.3.6 Fire Resistance Rating: The fire resistance rating of a fire-resistive coating 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-Resistance rating of a fire-resistance ra		Treatment Wash Primer).		
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. 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 6.3.6 Fire Resistance Rating: The fire resistance rating of a fire-resistive coating 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-Resistance rating of a fire-resistive coating, shall be determined by ASTM E119-07, "Standard Test Methods for Section 3.0, Fire-Resistance rating of a fire-resistive coating, shall be determined by ASTM E119-07, "Standard Test Methods for Section 3.0, Fire-Resistance rating of a fire-resistive coating, shall be determined by ASTM E119-07, "Standard Test Methods for Section 3.0, Fire-Resistive Coating, See Section 3.0, Fire-Resistive Coating, Materials" (see Section 3.0, Fire-Resistance rating of a fire-resistive coating shall be determined by ASTM E119-07, "Standard Test Methods for Section 3.0, Fire-Resistive Coating, Section 3.0, Fire-Resistive Coating, Section 3.0, Fire-Resistive Coating, Materials" (see Section 3.0, Fire-Resistive Coating, Section 3.0, Fire-Resistive Coatin				
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. 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 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). 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). 6.3.8 Metal Content of Coatings: The metallic content of a coating shall be determined by SCAQMD Method 318-95, Determination of Weight				
"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. 6.3.10 Surface Chalkiness: The chalkiness of a surface shall be determined using ASTM Designation D4214-98, "Standard Test Methods for Fire Tests of Building Construction Materials" (see Section 3.0, Fire- Resistive Coating). 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). 6.3.8 Metal Content of Coatings: The metallic content of a coating shall be determined by SCAQMD Method 318-95, Determination of Weight				
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. 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 Standard Test Methods for Fire Tests of Building Construction Materials" (see Section 3.0, Fire-Resistive Coating). 6.3.7 Gloss Determination: The gloss of a coating shall be determined by ASTM D523-89 (1999), "Standard Test Methods for Specular Gloss" (see Section 3.0, Flat Coating, Nonflat Coating, Nonflat-High Gloss Coating and Quick-Dry Enamel). 6.3.8 Metal Content of Coatings: The metallic content of a coating shall be determined by SCAQMD Method 318-95, Determination of Weight				
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. 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 Fire Tests of Building Construction Materials" (see Section 3.0, Fire-Resistive Coating). 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 Coating, Nonflat Coating, Nonflat Coating, Nonflat Coating, Nonflat Coating and Quick-Dry Enamel). 6.3.8 Metal Content of Coatings: The metallic content of a coating shall be determined by SCAQMD Method 318-95, Determination of Weight				
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. 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 3.0, Fire-Resistive Coating). 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, Fire-Resistive Coating). 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, Fire-Resistive Coating). 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, Fire-Resistive Coating). 6.3.8 Metarials" (see Section 3.0, Fire-Resistive Coating). 6.3.9 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, No				
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. 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 Resistive Coating). 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). 6.3.8 Metal Content of Coatings: The metallic content of a coating shall be determined by SCAQMD Method 318-95, Determination of Weight		• • • • •		
Undercoater) The tack-free time of a quickdry enamel coating shall be determined by the Mechanical Test Method of ASTM Designation D 1640-95. 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) 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). 6.3.8 Metal Content of Coatings: The metallic content of a coating shall be determined by SCAQMD Method 318-95, Determination of Weight			_ •	
quickdry enamel coating shall be determined by the Mechanical Test Method of ASTM Designation D 1640- 95. 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 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). 6.3.8 Metal Content of Coatings: The metallic content of a coating shall be determined by SCAQMD Method 318-95, Determination of Weight			<u>~</u> ,	
Method of ASTM Designation D 1640- 95. 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 Method for Specular Gloss" (see Section 3.0, Flat Coating, Nonflat Coating, Nonflat-High Gloss Coating and Quick-Dry Enamel). 6.3.8 Metal Content of Coatings: The metallic content of a coating shall be determined by SCAQMD Method 318-95, Determination of Weight			coating shall be determined by ASTM	
95. 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 Section 3.0, Flat Coating, Nonflat Co		determined by the Mechanical Test	D523-89 (1999), "Standard Test	
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 See Section 3, Specialty See Section 3, Specialty See Section 3, Specialty See Section 3, Specialty Coating, Nonflat-High Gloss Coating and Quick-Dry Enamel). 6.3.8 Metal Content of Coatings: The metallic content of a coating shall be determined by SCAQMD Method 318-95, Determination of Weight		<u> </u>		
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 and Quick-Dry Enamel). 6.3.8 Metal Content of Coatings: The metallic content of a coating shall be determined by SCAQMD Method 318-95, Determination of Weight				
ASTM Designation D4214-98, "Standard Test Methods for Evaluating the Degree of Chalking of Exterior Paint Films" (see Section 3, Specialty 6.3.8 Metal Content of Coatings: The metallic content of a coating shall be determined by SCAQMD Method 318-95, Determination of Weight		_		
"Standard Test Methods for Evaluating the Degree of Chalking of Exterior determined by SCAQMD Method Paint Films" (see Section 3, Specialty 318-95, Determination of Weight		-		
the Degree of Chalking of Exterior determined by SCAQMD Method Paint Films"(see Section 3, Specialty 318-95, Determination of Weight				
Paint Films"(see Section 3, Specialty 318-95, Determination of Weight				
		Primer, Sealer and Undercoater).	Percent Elemental Metal in Coatings	
6.3.11 Exempt Compounds—Siloxanes: by X-Ray Diffraction, SCAQMD				
Exempt compounds that are cyclic, Laboratory Methods of Analysis for		Exempt compounds that are cyclic,	Laboratory Methods of Analysis for	
branched, or linear completely Enforcement Samples (see Section				
methylated siloxanes, shall be 3.0, Metallic Pigmented Coating,				
analyzed as exempt compounds for Aluminum Roof Coating and Faux		· ' '	_	
compliance with Section 6 by Finish.				
BAAQMD Method 43, "Determination 6.3.9 Acid Content of Coatings: The acid				
of Volatile Methylsiloxanes in Solvent- Record Coatings, lake and Related determined by ASTM D1613.06				
Based Coatings, Inks, and Related determined by ASTM D1613-06, Materials," BAAQMD Manual of "Standard Test Method for Acidity in				
Procedures, Volume III, adopted Volatile Solvents and Chemical				
11/6/96 (see Section 3, Volatile Intermediates Used in Paint, Varnish,		•		
Organic Compound, and Section Lacquer and related products" (see				
6.3.1). Section 3.0, Pre-Treatment Wash				
6.3.12 Exempt Compounds— Primer).			,	

Requirement	SIP Version of Rule 4601	Non-SIP Version of Rule 4601	Conclusion
Category	(10/31/01)	(12/17/09)	
	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 Parachlorobenzotriflouride," BAAQMD Manual of Procedures, Volume III, adopted 12/20/95 (see Section 3, Volatile Organic Compound, and Section 6.3.1). 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," SCAQMD Laboratory Methods of Analysis for Enforcement Samples (see Section 3, Volatile Organic Compound, and Section 6.3.1). 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 Code of Federal Regulations (CFR) part 60, "Determination of Volatile Matter Content, Water Content, Density, Volume Solids and Weight Solids of Surface Coatings" (See Section 6.3.1). 6.3.15 Alternative VOC Content of Coatings: The VOC content of Coatings: The 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," SCAQMD Laboratory Methods of Analysis for Enforcement Samples (see Section 6.3.1). 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).	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.) 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.) 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," BAAQMD Manual of Procedures, Volume III, adopted 11/6/96 (see Section 3.0, Volatile Organic Compound, and Section 6.3.2). 6.3.13 Exempt Compounds—Parachlorobenzotrifluoride, shall be analyzed as an exempt compound for compliance with Section 6 by BAAQMD Method 41, "Determination of Volatile Organic Compound, and Section 6.3.2). 6.3.13 Exempt Compounds in Solvent Based Coatings and Related Materials Containing 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 Compounds in Solvent Based Coatings and Related Ma	

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
		Federal Regulations (CFR) part 60, "Determination of Volatile Matter Content, Water Content, Density, Volume Solids and Weight Solids of Surface Coatings" (see Section 6.3.2). 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," SCAQMD Laboratory Methods of Analysis for Enforcement Samples.	
		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). 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". 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". 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". 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". 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	

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
Category	(10/31/01)	for Evaluating Degree of Blistering of Paints". 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". 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". 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". 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". 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". 6.3.28 Stone Consolidants: Stone	
		consolidants shall be tested using ASTM E2167-01, "Standard Guide for Selection and Use of Stone Consolidants".	
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	
a	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. Per Section 8.1, averaging is no longer applicable. Therefore, Section 8.2 through 3.14 are not listed.			

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.

ATTACHMENT D

Detailed Facility List

SJVUAPCD NORTHERN

4/22/10 9:37 am

Detailed Facility Report
For Facility=3299
Sorted by Facility Name and Permit Number

TURLOCK IRRIGATION DISTRICT	FAC #	N 3299	TYPE:	TitleV	EXPIRE ON:	06/30/2009
4500 CROWS LANDING ROAD	STATUS:	Α	TOXIC ID:	51617	AREA:	15 /
MODESTO, CA 95381	TELEPHONE:	(209) 883-8232			INSP. DATE:	04/11

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
N-3299-1-2	240 bhp IC engine	3020-10 C	1	240.00	240.00	Α	240 HP CUMMINS DIESEL-FIRED EMERGENCY IC ENGINE WITH TURBOCHARGER AND AFTERCOOLER POWERING A FIRE PUMP
N-3299-2-2	49,000 kW	3020-08A G	1	10,215.00	10,215.00	D	ONE (1) GENERAL ELECTRIC LM-5000 417 MMBTU/HR (HHV) GAS TURBINE ENGINE WITH STEAM INJECTION, OXIDIZATION CATALYST, AMMONIA INJECTION, AND SELECTIVE CATALYTIC REDUCTION SERVING A 49 MW ELECTRICAL GENERATOR
N-3299-3-2	48,000 kW	3020-08B G	1	10,215.00	10,215.00	A	GENERAL ELECTRIC MODEL LM6000 459 MMBTU/HR (HHV) COMBINED CYCLE GAS TURBINE ENGINE WITH STEAM INJECTION, OXIDIZATION CATALYST, AMMONIA INJECTION, AND SELECTIVE CATALYTIC REDUCTION SERVING A 48 MW ELECTRICAL GENERATOR

Number of Facilities Reported: 1