



APR 0 5 2010

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

Re: Notice of Preliminary Decision – Title V Permit Renewal District Facility # S-2265 Project # S-1083189

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 Berry Petroleum Company for its cogeneration power plant at Heavy Oil Western, SE/4 Section 28, Township 12N, Range 24W, 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: Vanesa Gonzalez, 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

www.valleyair.org www.healthyairliving.com





APR 0 5 2010

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

Re: Notice of Preliminary Decision - Title V Permit Renewal District Facility # S-2265 Project # S-1083189

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 Berry Petroleum Company for its cogeneration power plant at Heavy Oil Western, SE/4 Section 28, Township 12N, Range 24W, 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: Vanesa Gonzalez, Permit Services Engineer

> Seyed Sadredin Executive Oirector/Air Pollution Control Officer

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

www.valleyair.org www.healthyairliving.com





APR 0 5 2010

John Ludwig Berry Petroleum Company 5201 Truxton Ave Bakersfield, CA 93309

Re: Notice of Preliminary Decision - Title V Permit Renewal District Facility # S-2265 Project # S-1083189

Dear Mr. Ludwig:

Enclosed for your review and comment is the District's analysis of the application to renew the Federally Mandated Operating Permit for Berry Petroleum Company for its cogeneration power plant at Heavy Oil Western, SE/4 Section 28, Township 12N, Range 24W, 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: Vanesa Gonzalez, 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 (Mein Office) 1990 E. Gettysburg Avenue Fresno, CA 93726-0244 Tel: (559) 230-6000 FAX: (559) 230-6061 Southern Region 34946 Flyover Court Bakersfield, CA 93308-9725 Tel: 661-392-5500 FAX: 661-392-5585

www.valleyair.org www.healthyairliving.com

Bakersfield Californian

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

NOTICE IS HEREBY GIVEN that the San Joaquin Valley Air Pollution Control District solicits public comment on the proposed renewal of the Federally Mandated Operating Permit to Berry Petroleum Company for its cogeneration power plant at Heavy Oil Western, SE/4 Section 28, Township 12N, Range 24W, California.

The District's analysis of the legal and factual basis for this proposed action, project #S-1083189, is available for public inspection at http://www.valleyair.org/notices/public notices idx.htm and the District office at the address below. 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

Title V Permit Renewal Evaluation Berry Petroleum S-2265

TABLE OF CONTENTS

Ι.	PROPOSAL	2
II.	FACILITY LOCATION	2
III.	EQUIPMENT LISTING	
IV.	GENERAL PERMIT TEMPLATE USAGE	3
V.	SCOPE OF EPA AND PUBLIC REVIEW	3
VI.	FEDERALLY ENFORCEABLE REQUIREMENTS	3
VII.	REQUIREMENTS NOT FEDERALLY ENFORCEABLE	5
VIII.	PERMIT REQUIREMENTS.	
IX.	PERMIT SHIELD	
Х.	PERMIT CONDITIONS	16
XI.	ATTACHMENTS	16
A.	DRAFT RENEWED TITLE V OPERATING PERMIT	

B. PREVIOUS TITLE V OPERATING PERMIT

C. DETAILED FACILITY LIST

TITLE V PERMIT RENEWAL EVALUATION

Engineer: Vanesa Gonzalez Date: December 9, 2009

Facility Number:	S-2265
Facility Name:	Berry Petroleum
Mailing Address:	5201 Truxtun Ave
_	Suite 300
	Bakersfield, CA 93309-0640
Contact Name:	Charlotte Campbell
Phone:	(661) 616-3807
Responsible Official:	Tim Crawford
Title:	Vice President of Production
Project # :	S-1083189
Deemed Complete:	

I. PROPOSAL

Berry Petroleum Company was issued a Title V permit on December 20, 2000. As required by District Rule 2520, the applicant is requesting a permit renewal. The existing Title V permit has been reviewed and modified to reflect all applicable District and federal rules updated, removed, or added since the issuance of the initial Title V permit.

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

II. FACILITY LOCATION

Berry Petroleum Company is located at Heavy Oil Western, SE/4 Section 28, Township 12N, Range 24W.

III. EQUIPMENT LISTING

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

IV. GENERAL PERMIT TEMPLATE USAGE

The applicant is not proposing to use any model general permit templates as a part of this Title V renewal project.

V. SCOPE OF EPA AND, PUBLIC REVIEW

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

VI. FEDERALLY ENFORCEABLE REQUIREMENTS

Rules Updated

- District Rule 2020, <u>Exemptions</u> (amended December 19, 2002 ⇒ amended December 20, 2007)
- District Rule 2201, <u>New and Modified Stationary Source Review Rule</u> (amended April 20, 2005 ⇒ amended September 21, 2006)
- District Rule 4601, <u>Architectural Coatings</u> (amended October 31, 2001 ⇒ amended December 17, 2009)
- District Rule 4703, <u>Stationary Gas Turbines</u> (amended April 25, 2002 ⇒ amended September 20, 2007)
- District Rule 8011, <u>General Requirements</u> (adopted November 15, 2001 ⇒ amended August 19, 2004)
- District Rule 8021, <u>Construction, Demolition, Excavation, Extraction, and</u> <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 60.332 through 60.335 (e) NSPS Subpart GG & District Rule 4001 <u>New Source Performance Standards</u>: Standards for Performance of Stationary Gas Turbines
- 40 CFR Part 61 National Emission Standard for Asbestos
- 40 CFR Part 82 <u>Stratospheric Ozone</u>

Rules Removed

There have been no rules removed since the last Title V Renewal was issued.

Rules Added

There have been no rules added since the last Title V Renewal was issued.

Rules Not Updated

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

- District Rule 2080, <u>Conditional Approval</u> (adopted December 17, 1992)
- District Rule 2520, <u>Federally Mandated Operating Permits</u> (amended June 21, 2001)
- District Rule 4101, <u>Visible Emissions</u> (amended February 17, 2005)
- District Rule 4201, <u>Particulate Matter Concentration</u> (amended December 17, 1992)
- 40 CFR Part 64, <u>Compliance Assurance Monitoring Program</u>
- 40 CFR Part 68 Chemical Accident Prevention Provisions

VII. REQUIREMENTS NOT FEDERALLY ENFORCEABLE

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

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

A. Rules Added

No applicable rules have been added.

B. Rules Not Updated

• District Rule 4102, <u>Nuisance</u> (as amended December 17, 1992)

Condition 1 of permit unit –0-3 is 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 will only address rules that have been amended or added since the issuance of the last renewed Title V permit.

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 last renewed 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.
- 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 2520 – Federally Mandated Operating Permit

This rule was recently amended to incorporate several administrative corrections, clarify rule language, and add procedures for implementing compliance schedules. The only amendments to this rule that will have an effect on current permit requirements are the corrections to Section 9 rule references, as described in the following table:

Old Rule Section	Corrected Rule Section
9.3	9.2
9.4	9.3
9.5	9.4
9.6	9.5
9.7	9.6
9.8	9.7
9.9	9.8
9.10	9.9
9.11	9.10
9.12	9.11
9.13	9.12
9.14	9.13
9.15	9.14
9.16	9.15
9.17	9.16
9.18	9.17
9.19	9.18

Rule 2520, Section 6.4.4, "Other Changes Not Requiring Title V Permit Amendment," allowed the permittee to implement changes, including the addition of new emissions units, without triggering the permit modification or amendment requirements until the time of Title V permit renewal, provided the conditions described in Sections 6.4.4.1 through 6.4.4.2 were met.

No changes were implemented under Section 6.4.4, therefore no further action is required.

D. District Rule 4601

District Rule 4601 was amended on December 12, 2009. The following analysis shows that the current non-SIP approved version of District Rule 4601 is more stringent than the SIP approved version of District Rule 4601. Streamlining procedures, as documented in the following steps is utilized to substitute the proposed set of requirements for the otherwise applicable requirements.

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	4.1 The provisions of this rule shall not apply to:	The only change is to require reporting

.

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
	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.	 4.1.1 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. 	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 D.	e of Standards, Table of Standards 1, and Tab	le of Standards 2. These
	 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 or the Table of Standards 2. Limits are expressed as VOC Regulatory, thinned to the manufacturer's maximum thinning recommendation, excluding any colorant added to tint bases.	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.
	 5.2 Most Restrictive VOC Limit: If anywhere on the container of any architectural coating, or any label or sticker affixed to the container, or in any sales, advertising, or technical literature supplied by a manufacturer or anyone acting on their behalf, any representation is made that indicates that the coating meets the definition of or is recommended for use for more than one of the coating categories listed in the Table of Standards, then the most restrictive VOC content limit shall apply. This provision does not apply to the following coating categories: 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 5.2.6 Industrial maintenance coatings 5.2.7 Low-solids coatings 5.2.10 Temperature-indicator safety coatings 5.2.11 Antienna coatings 5.2.13 Flow coatings 5.2.14 Bituminous roof primers 5.2.14 Bituminous roof primers 	 5.2 Most Restrictive VOC Limit: If a coating meets the definition in Section 3.0 for one or more specialty coating categories listed in the Table of Standards 1 or the Table of Standards 2, then that coating is not required to meet the VOC limits for Flat, Nonflat, or Nonflat – HIgh Gloss coatings, but is required to meet the VOC limit for the applicable specialty coating listed in the Table of Standards 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 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 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 specified in Sections 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 	The VOC limit of the non- SIP version is at least as stringent as the SIP version. Therefore, the non-SIP version of the rule is more stringent than the SIP version of the rule.

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
		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 5.2.3.9 High temperature coatings 5.2.3.10 Temperature-indicator safety 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	
	 5.3 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 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 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 	5.2.3.18 Wood Coatings 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 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 VOC limit of the non- SIP version is at least as stringent as the SIP version. Section 5.3.2 was removed it is no longer applicable in the SIP version. Therefore, the non-SIP version of the rule is more stringent than the SIP version of the rule.

.

.

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
	applied at any time, both during and after the compliance period. This Section 5.3.2 does not apply to any coating that does not display on the container either the statement: "This product is subject to architectural coatings averaging provisions in California" or a substitute symbol specified by the Executive Officer of the California Air Resources Board (ARB). This Section 5.3.2 shall remain in effect until January 1, 2008.		
	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 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 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		This section has been removed. The operation is required to meet the lacquer VOC limit regardless of temperature and humidity. Therefore, non-SIP version of rule is

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
	coating, less water and exempt compounds, prior to the addition of VOC.		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 ismore stringent than theVOC limits of Table ofStandards in the SIP-Approved version.Therefore, non-SIPversion of rule is asstringent as SIP version.
	Table of Standards (See Attachment D for Table)	Table of Standards 1 (Effective through 12/31/10) (See Attachment D 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 D 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 6.1.1 through	6.1 Labeling Requirements: Each manufacturer of any architectural coating subject to this rule shall display the information listed in Sections 6.1.1 through	The non-SIP approved rule contain sections listed in the SIP rule plus additional requirements

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
	6.1.9 on the coating container (or label) in which the coating is sold or distributed.	6.1.14 on the coating container (or label) in which the coating is sold or distributed.	not found in the SIP version. Therefore, non-
	6.1.1 Date Code: The date the coating was manufactured, or a date code	6.1.1 Date Code: The date the coating was manufactured, or a date code	SIP version of rule is as stringent as SIP version.
	representing the date, shall be indicated on the label, lid or bottom of the	representing the date, shall be indicated on the label, lid or bottom of	
	container. If the manufacturer uses a date code for any coating, the	the container. If the manufacturer uses a date code for any coating, the	
	manufacturer shall file an explanation of each code with the Executive Officer of the ARB.	manufacturer shall file an explanation of each code with the Executive Officer of the ARB.	
	6.1.2 Thinning Recommendations: A statement of the manufacturer's	6.1.2 Thinning Recommendations: A statement of the manufacturer's	
	recommendation regarding thinning of the coating shall be indicated on the	recommendation regarding thinning of the coating shall be indicated on	
	label or lid of the container. This requirement does not apply to the	the label or lid of the container. This requirement does not apply to the	
	thinning of architectural coatings with water. If thinning of the coating prior to	thinning of architectural coatings with water. If thinning of the coating prior	
	use is not necessary, the recommendation must specify that the	to use is not necessary, the recommendation must specify that	
	coating is to be applied without thinning. 6.1.3 VOC Content: Each container of any coating subject to this rule shall display	the coating is to be applied without thinning. 6.1.3 VOC Content: Each container of any	
	either the maximum or actual VOC content of the coating, as supplied,	coating subject to this rule shall display one of the following values, in	
	including the maximum thinning as recommended by the manufacturer.	grams of VOC per liter of coating: 6.1.3.1 Maximum VOC Content, as	
	VOC content shall be displayed in grams of VOC per liter of coating. VOC	determined from all potential product formulations; or	
	content displayed shall be calculated using product formulation data, or shall	6.1.3.2 VOC Content, as determined from actual	
	be determined using the test methods in Section 6.3.1. The equations in Sections 3.25 or	formulation data; or 6.1.3.3 VOC Content, as determined using the test	
	3.26, as appropriate, shall be used to calculate VOC content.	methods in Section 6.3.2. If the manufacturer does not	
	6.1.4 Industrial Maintenance Coatings: In addition to the information specified in	recommend thinning, the container must display the VOC Content, as	
	Sections 6.1.1, 6.1.2 and 6.1.3, each manufacturer of any industrial	supplied. If the manufacturer recommends thinning, the container	
	maintenance coating subject to this rule shall display on the label or lid of the	must display the VOC Content, including the maximum amount of	
	container in which the coating is sold or distributed one or more of the following descriptions listed in Section 6.1.4.1	thinning solvent recommended by the manufacturer. If the coating is a multicomponent product, the	
	through 6.1.4.3. 6.1.4.1 "For industrial use only"	container must display the VOC content as mixed or catalyzed. If the	
	6.1.4.2 "For professional use only" 6.1.4.3 "Not for residential use" or	coating contains silanes, siloxanes, or other ingredients that generate	
	"Not intended for residential use"	ethanol or other VOCs during the curing process, the VOC content	
	6.1.5 Clear Brushing Lacquers: Effective January 1, 2003, the labels of all clear brushing lacquers shall prominently	must include the VOCs emitted during curing. 6.1.4 Faux Finishing Coatings: Effective	
	display the statements "For brush application only," and "This product	January 1, 2011, the labels of all clear topcoat Faux Finishing coatings	· · ·
	must not be thinned or sprayed." 6.1.6 Rust Preventative Coatings: Effective	shall prominently display the statement "This product can only be	
	January 1, 2003, the labels of all rust preventative coatings shall prominently	sold or used as part of a Faux Finishing coating system".	
	display the statement "For Metal Substrates Only" 6.1.7 Specialty Primers, Sealers and	6.1.5 Industrial Maintenance Coatings: Each manufacturer of any industrial maintenance coating subject to this	
	Undercoaters: Effective January 1,	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
	 2003, the labels of all specialty primers, sealers and undercoaters shall prominently display one or more of the descriptions listed in Section 6.1.7.1 through 6.1.7.5. 6.1.7.4 For blocking stains. 6.1.7.3 For smoke-damaged substrates. 6.1.7.4 For water-damaged substrates. 6.1.7.4 For water-damaged substrates. 6.1.7.5 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 ron-flat – high gloss coatings shall prominently display the words "All ron-flat – high gloss coatings shall grominently 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 '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 6.1.8.2 For smoke-damaged substrates. 6.1.8.2 For smoke-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 substrates. 6.1.8.5 For blocking stains. 6.1.9 Quick Dry Enamels: The labels of all specialty primers, sealers, and undercoaters shall prominently display the words "Quick Dry" and the dry hard time. (Category deleted effective January 1, 2011, the labels of all specialty primers, sealers, and undercoaters shall prominently display the words "Quick Dry" and the descriptions listed in Sections 6.1.8.1 through 6.1.8.1 For fire-damaged substrates. 6.1.8.2 For blocking stains. 6.1.9 Quick Dry Enamels	

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
		 words "High Gloss." 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 use" 	
	6.2 Penarting Pequirements	US8" 6.2 Percerting Requirements	Lintil Docombor 24, 2040
	 6.2 Reporting Requirements 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 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 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 2004, submit an annual report to the Executive Officer of the ARB the following information for 	 6.2 Reporting Requirements 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 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 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 shall, on or before April 1 of each calendar year, and shall describe the number of gallons 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 Exec	Until December 31, 2010 both versions of the rule have the same reporting requirements. After that date the non-SIP approved rule includes very specific information to be kept and is required for all architectural coatings. Therefore, non-SIP version of rule is as stringent as SIP version

.

•

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
	 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 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 0.10 percent, of perchloroethylene and methylene chloride in the coating. 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 coatings or bituminous roof primers shall, on or before April 1 of each calendar year beginning with the year 2004, submit an annual report to the Executive Officer of ARB. The report shall specify the number of gallons of bituminous roof coatings or bituminous roof primers sold in the State during the preceding calendar year, and shall describe the method used by the manufacturer to calculate State sales. 	 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; 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; 6.2.4.3 the total sales in California during the calendar year to the nearest gallon; 6.2.4.4 the volume percent, to the nearest 0.10 percent, of perchloroethylene and methylene chloride in the coating. 6.2.5 Recycled Coatings: Manufacturers of recycled coatings must submit a letter to the Executive Officer of the ARB certifying their status as a Recycled Paint Manufacturer. The manufacturer shall on or before April 1 of each calendar year beginning with the year 2004, submit an annual report to the Executive Officer of the ARB. The report shall include, for all recycled coatings the total number of gallons distributed in the State during the preceding year, and shall describe the method used by the manufacturer to calculate State distribution. 6.2.6 Bituminous coatings: Each manufacturer 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 the ARB. The report shall specify the number of gallons 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 sold in the State during the preceding calendar year, and shall describe the method used by the manufacturer to calculate state sales. 6.2.7 Effective on and after Janu	

,

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
		Officer of the ARB may be claimed as confidential, and such information shall be handled in accordance with	
		the procedures specified in Title 17, 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 definition;	·
		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	

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SiP Version of Rule 4601 (12/17/09)	Conclusion
i	6.3.4 Flame Spread Index: The flame	quality assurance checks,	
	spread index of a fire-retardant	recordkeeping). However, if there are	
	coating shall be determined by ASTM	any inconsistencies between the	
	Designation E 84-99, "Standard Test	results of EPA Method 24 test and	
	Method for Surface Burning	any other means for determining	
	Characteristics of Building	VOC content, the EPA Method 24	
	Materials"(see Section 3, Fire-	test results will govern, except when	
	Retardant Coating).	an alternative method is approved as specified in Section 6.3.3. The	
	6.3.5 Fire Resistance Rating: The fire	District Air Pollution Control Officer	
	resistance rating of a fire-resistive coating shall be determined by ASTM	(APCO) may require the	
	Designation E 119-98, "Standard	manufacturer to conduct an EPA	
	Test Methods for Fire Tests of	Method 24 analysis.	
	Building Construction Materials"(see	6.3.3 Alternative Test Methods: Other test	
	Section 3, Fire-Resistive Coating).	methods demonstrated to provide	
	6.3.6 Gloss Determination: The gloss of a	results that are acceptable for	
	coating shall be determined by ASTM	purposes of determining compliance	
	Designation D 523-89 (1999),	with Section 6.3.2 1, after review and	
	"Standard Test Method for Specular	approved in writing by the staffs of	
	Gloss"(see Section 3, Flat Coating,	the District, ARB and EPA, may also	
	Nonflat Coating, Nonflat-High Gloss	be used.	
	Coating and Quick-Dry Enamel).	6.3.4 Methacrylate Traffic Marking	
	6.3.7 Metal Content of Coatings: The	Coatings: Analysis of methacrylate	
	metallic content of a coating shall be	multicomponent coatings used as	
	determined by SCAQMD Method	traffic marking coatings shall be	,
	318-95, Determination of Weight	conducted according to a	
	Percent Elemental Metal in Coatings	modification of EPA Method 24 (40	
	by X-Ray Diffraction, SCAQMD	CFR 59, subpart D, Appendix A).	
	Laboratory Methods of Analysis for	This method has not been approved	
	Enforcement Samples (see Section	for methacrylate multicomponent	
	3, Metallic Pigmented Coating).	coatings used for other purposes	
	6.3.8 Acid Content of Coatings: The acid	than as traffic marking coatings or for other classes of multicomponent	
	content of a coating shall be determined by ASTM Designation D	coatings.	
	1613-96, "Standard Test Method for	6.3.5 Flame Spread Index: The flame	
	Acidity in Volatile Solvents and	spread index of a fire-retardant	
	Chemical Intermediates Used in	coating shall be determined by ASTM	
	Paint, Varnish, Lacquer and related	E84-07, "Standard Test Method for	
	products"(see Section 3, Pre-	Surface Burning Characteristics of	
	Treatment Wash Primer).	Building Materials" (see Section 3.0,	
	6.3.9 Drying Times: The set-to-touch, dry-	Fire-Retardant Coating).	
	hard, dry-to-touch and dry-to-recoat	6.3.6 Fire Resistance Rating: The fire	
	times of a coating shall be	resistance rating of a fire-resistive	
	determined by ASTM Designation D	coating shall be determined by ASTM	
	1640-95, "Standard Test Methods for	E119-07, "Standard Test Methods for	
	Drying, Curing, or Film Formation of	Fire Tests of Building Construction	
	Organic Coatings at Room	Materials" (see Section 3.0, Fire-	· · ·
	Temperature" (see Section 3, Quick-	Resistive Coating).	
	Dry Enamel and Quick-Dry Primer,	6.3.7 Gloss Determination: The gloss of a	•
	Sealer and Undercoater) The tack-	coating shall be determined by ASTM	
	free time of a quickdry enamel	D523-89 (1999), "Standard Test	
	coating shall be determined by the	Method for Specular Gloss" (see	
	Mechanical Test Method of ASTM	Section 3.0, Flat Coating, Nonflat	
	Designation D 1640-95.	Coating, Nonflat-High Gloss Coating and Quick-Dry Enamel).	•
	6.3.10 Surface Chalkiness: The chalkiness of a surface shall be	6.3.8 Metal Content of Coatings: The	
	determined using ASTM Designation	metallic content of a coating shall be	
	D4214-98, "Standard Test Methods	determined by SCAQMD Method	
	for Evaluating the Degree of Chalking	318-95, Determination of Weight	
	of Exterior Paint Films*(see Section	Percent Elemental Metal in Coatings	
	3, Specialty Primer, Sealer and	by X-Ray Diffraction SCAQMD	
	Undercoater).	Laboratory Methods of Analysis for	
	6.3.11 Exempt Compounds—Siloxanes:	Enforcement Samples (see Section	
	Exempt compounds that are cyclic,	3.0, Metallic Pigmented Coating,	
	branched, or linear completely	Aluminum Roof Coating and Faux	
	methylated siloxanes, shall be	Finish.	

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
	analyzed as exempt compounds for compliance with Section 6 by BAAQMD Method 43, "Determination of Volatile Methylsiloxanes in Solvent-Based Coatings, Inks, and Related Materials," <i>BAAQMD Manual</i> <i>of Procedures</i> , Volume III, adopted 11/6/96 (see Section 3, Volatile Organic Compound, and Section	6.3.9 Acid Content of Coatings: The acid content of a coating shall be determined by ASTM D1613-06, "Standard Test Method for Acidity in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer and related products" (see Section 3.0, Pre-Treatment Wash Primer).	
	 6.3.1). 6.3.12 Exempt Compounds— Parachlorobenzotrifluoride (PCBTF): The exempt compound parachlorobenzotrifluoride, shall be analyzed as an exempt compound for compliance with Section 6 by BAAQMD Method 41, "Determination of Volatile Organic Compounds in Solvent Based Coatings and Related Materials Containing 	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	
	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	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	
	 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). 	 2011.) 2011.0 2011.0	
	 6.3.15 Alternative 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 	 6) Freedans, Volanie III, adopted 11/6/96 (see Section 3.0, Volatile Organic Compound, and Section 6.3.2). 6.3.13 Exempt Compounds— Parachlorobenzotrifluoride (PCBTF): The exempt compound parachlorobenzotrifluoride, shall be analyzed as an exempt compound for compliance with Section 6 by BAAQMD Method 41, "Determination of Volatile Organic Compounds in 	
	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).	 Solvent Based Coatings and Related Materials Containing Parachlorobenzotriflouride," BAAQMD Manual of Procedures, Volume III, adopted 12/20/95 (see Section 3.0, Volatile Organic Compound, and Section 6.3.2). 6.3.14 Exempt Compounds: The content of compounds under U.S. EPA Method 24 shall be analyzed by SCAQMD Method 303-91 (Revised 	

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
		1993), "Determination of Exempt Compounds," SCAQMD Laboratory Methods of Analysis for Enforcement Samples (see Section 3.0, Volatile Organic Compound, and Section 6.3.2).	<u></u>
		 6.3.15 VOC Content of Coatings: The VOC content of a coating shall be determined by EPA Method 24 as it exists in appendix A of 40 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 6.3.2). 	
		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 	

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
i		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	
		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	
1		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	
ļ		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".	

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
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 primers, sealers, and undercoaters; quick-dry enamels; 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 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 8.14 are not listed. 		No change in the requirements, therefore, non-SIP version of rule is as stringent as SIP version.

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.

Conditions 26, 27, and 28 of the facility-wide requirements S-2265-0-3 will ensure compliance with these requirements.

E. District Rule 4703 – Stationary Gas Turbines

This rule applies 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) or a maximum heat input rating of more than 3,000,000 Btu per hour.

The rule was amended on September 20, 2007 to include Tier 3 compliance limit requirements. This amendment to the rule does not effect the permit requirements of unit S-2265-1.

In addition to the Tier 3 compliance limits requirements the term thermal stabilization period was removed from the Rule.

Conditions 16, 17, and 19 of the requirements for unit S-2265-1-13, were revised to reflect current Rule 4703 definitions.

F. District Rule 8011 – <u>General Requirements</u>

The purpose of Regulation VIII (Fugitive PM_{10} Prohibitions) is to reduce ambient concentrations of fine particulate matter (PM_{10}) by requiring actions to prevent, reduce or mitigate anthropogenic fugitive dust emissions. The Rules contained in this Regulation have been developed pursuant to United States Environmental Protection Agency guidance for Serious PM_{10} Nonattainment Areas. These rules are applicable to specified anthropogenic fugitive dust sources. Fugitive dust contains PM_{10} and particles larger than PM_{10} . Controlling fugitive dust missions when visible emissions are detected will not prevent all PM_{10} emissions, but will substantially reduce PM_{10} emissions.

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

Conditions 33 through 37 of the facility-wide requirements S-2265-0-3 will ensure compliance with these requirements.

G. District Rule 8021 – <u>Construction, Demolition, Excavation, Extraction,</u> <u>and Other Earthmoving Activities</u>

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

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

Section 5.0 requires that no person shall perform any construction, demolition, excavation, extraction, or other earthmoving activities unless the

appropriate requirements in sections 5.1 and 5.2 are sufficiently implemented to limit VDE to 20% opacity. In addition to the requirements of this rule, a person shall comply with all other applicable requirements of Regulation VIII.

Condition 32 of the facility-wide requirements S-2265-0-3 will ensure compliance with these requirements.

H. District Rule 8031 – Bulk Materials

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

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

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

Condition 33 of the facility-wide requirements S-2265-0-3 will ensure compliance with these requirements.

I. District Rule 8041 – <u>Carryout and Trackout</u>

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

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

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

Condition 34 of the facility-wide requirements S-2265-0-3 will ensure compliance with these requirements.

J. District Rule 8051 – Open Areas

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

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

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

Condition 35 of the facility-wide requirements S-2265-0-3 will ensure compliance with these requirements.

K. District Rule 8061 – Paved and Unpaved Roads

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

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

Condition 36 of the facility-wide requirements S-2265-0-3 will ensure compliance with these requirements.

L. District Rule 8071 – Unpaved Vehicle/Equipment Traffic Area

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

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

Condition 37 of the facility-wide requirements S-2265-0-3 will ensure compliance with these requirements.

M. 40 CFR Part 60, Subpart GG, Standard of Performance for Stationary Gas Turbines

This requirement limits emissions of nitrogen oxides. Emissions shall not exceed a NO_x emission rate of 75 ppmv or 150 ppmv, depending on the unit size (at 15% O₂ with the ISO correction factor). The following analysis shows that the proposed requirement of District Rule 4703 is more stringent than 40 CFR requirements pertaining to NO_x emissions. Streamlining procedures, as documented in the following steps is utilized to substitute the proposed set of requirements for the otherwise applicable requirements.

The following table has side-by-side comparison of applicable requirements:

Type of Requirement	District Rule 4703	Subpart GG, § 60.332, 60.333 and 60.334	Proposed Requirement
Emissions Limit	Section 5.1.2 - for > 10 MW, 5 ppmv @ 15% O ₂ . (Tier II Standard Option)	60.332(a)(1) – 75 ppmv @ 15% O ₂ . (Lowest possible concentration) 60.333(a) No owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any stationary gas turbine any gases which contain sulfur dioxide in excess of 0.015% by volume at 15% oxygen and on a dry basis.	5 ppmv @ 15% O ₂ .
Work place standards	N/A	60.333(b) No owner or operator subject to the provisions of this subpart shall burn in any stationary gas turbine any fuel, which contains sulfur in excess of 0.8% by weigh (8000 ppmw).	This unit shall be fired exclusively on natural gas which has a total sulfur content of less than or equal to 1.0 gr/100 scf
Monitoring	(6.2.1) 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	60.334(a) The owner or operator of any stationary gas turbine subject to the provisions of this subpart and using water injection to control NO _x emissions shall install or operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of water to fuel being fired in the turbine. 60.334(b) Install, certify, maintain, operate, and quality-assure a continuous emissions monitoring system for NOx and O ₂ . 60.334(h)(3) The sulfur content of each fuel source shall be: (i) documented in a valid purchase contract, a supplier certification, a tariff sheet or transportation contract or (ii) demonstrated by representative fuel sampling data which shows that sulfur content of gas does not exceed 0.25 gr/100 scf. At a minimum, the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of Appendix D of 40 CFR part 75 is required	The owner or operator shall install, certify, maintain, operate, and quality- assure a system which continuously measures and records the exhaust gas NO _x and O ₂ concentrations. The sulfur content of each fuel source shall be: (i) documented in a valid purchase contract, a supplier certification, a tariff sheet or transportation contract or (ii) monitored weekly using ASTM Methods D4084, D5504, D6228, or Gas Processors Association Standard 2377. If sulfur content is less than 1.0 gr/100 scf for 8 consecutive weeks, then the Monitoring frequency shall be every six (6) months. If any six (6) month monitoring show exceedance, weekly monitoring shall resume and exceedance shall be reported to APCO

 intervals, data and magnitude of excess NOx emissions, nature and 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 traditate the hour for either NOx or diluent (or both). Testing Annual Testing for nitrogen oxides (NOx) concentrations using EPA Method 20 or 7E and porty or 7E and PPA method 3, 3A, or 20. 	Type of Requirement	District Rule 4703	Subpart GG, § 60.332, 60.333 and 60.334	Proposed Requirement
oxides (NOx) concentrations method 20 or 7E and EPA method 3, 3A for (NOx) concentrations using EPA using EPA Method 20 or 7E and O2. Method 20 or 7E and oxygen (O2) oxygen (O2) using Method 3, 3A, Using Method 3, 3A, Using Method 3, 3A,	Reporting	intervals, data and magnitude of excess NOx emissions, nature and 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, except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no	submit reports of excess emissions and monitor downtime as required under §60.7(c), periods of excess emissions that shall be reported are defined as follows: 60.334(J)(1)(iii) - An hour of excess emissions shall be any operating hour in which 4-hour rolling average NOx concentration exceeds applicable emissions limit and a period of monitor downtime shall be any unit operating hour in which sufficient data are not obtained to validate the hour for either NOx or diluent (or both). 60.334(J)(5): all reports required under §60.7(c) shall be post marked by 30 th day	quarter and shall include the following: Time intervals, data and magnitude of excess NOx emissions, nature and 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. Excess emissions shall be defined as any operating hour in which 4-hour rolling average NOx concentration exceeds applicable emissions limit and a period of monitor downtime shall be any unit operating hour in which sufficient data are not obtained to validate the hour for either NOx or
or 20.	Testing	oxides (NOx) concentrations using EPA Method 20 or 7E and	method 20 or 7E and EPA method 3, 3A for	Method 20 or 7E and oxygen (O2)

The District Rule 4703 requirement to limit NOx concentration to 5 ppmv @ 15% O2 is clearly more stringent than the Subpart GG emissions limit of 75 ppmv as discussed below.

Condition 16 of the requirements for unit S-2265-1-13 will ensure compliance with this rule requirement.

Compliance with SO_x Emission Concentration Limit - 60.333(a):

Compliance is expected as shown by the following calculations at 1 grain of total sulfur per 100 standard cubic feet of gas, assuming all sulfur is converted to SO_2 .

$$\%S(lb/lbNG) = \left(\frac{1 \text{ gr}}{100 \text{ scf}}\right) \left(\frac{1 \text{ lb}}{7000 \text{ gr}}\right) \left(\frac{24.5 \text{ L}}{\text{mol NG}}\right) \left(\frac{1 \text{ mol}}{16 \text{ g}}\right) \left(\frac{454 \text{ g}}{1 \text{ lb}}\right) \left(\frac{0.035 \text{ scf}}{1 \text{ L}}\right) (100)$$

= 0.00348% sulfur by weight

 $| b SO_2/scf gas = (0.0000348)(1 | b/23.8 scf gas)(64 | b SO_2/32 | b S)$ $= 2.92 E-6 | b SO_2/scf gas$

Ib $SO_2/V_{exhaust}$ = (Ib SO_2/scf gas) ÷ (F factor) (Btu content of natural gas)

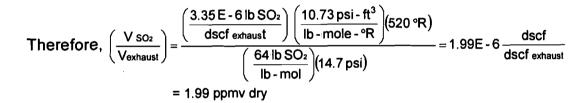
$$\left(\frac{lb \text{ SO}_2}{\text{Vexhaust}}\right) = \frac{\left(2.92 \text{ E} - 6 \frac{lb \text{ SO}_2}{\text{scf gas}}\right) \left(\frac{10^6 \text{ Btu}}{\text{MMBtu}}\right)}{\left(8710 \frac{\text{dscf}}{\text{MMBtu}}\right) \left(1000 \frac{\text{Btu}}{\text{scf}}\right)} = 3.35 \text{ E} - 7 \frac{lb \text{ SO}_2}{\text{dscf exhaust}}$$

 $V_{SO2}/V_{exhaust} = nRT/P$

where,

n = moles SO₂ = (3.35 E-7 lb SO₂/dscf exhaust)/(64 lb SO₂/ lb-mol)
R = universal gas constant = 10.73 psi-ft³/lb-mol- R
T = standard temperature = 60
$$F$$
 = 520 R

P = standard pressure = 14.7 psi



Diluting it to 15% O₂

ppmv @ 15% O2 = ppmv dry X
$$\left(\frac{20.9 - 15}{20.9}\right)$$
 = 0.56 ppmv

0.56 ppmv << 150 ppmv.

Compliance with 150 ppmv SO_x at 15% excess O₂ and dry standard conditions and 2,000 ppmv is assured because the unit has a fuel sulfur content of 1.0 gr/100 scf.

Conditions 15, 21, and 33 of the requirements for unit S-2265-1-13 will ensure compliance with this rule requirement.

Compliance with Sulfur Fuel Content Limit - 60.333(b):

Natural gas with fuel sulfur content of 1.0 gr/100 scf or less assures compliance with the 0.8% sulfur by weight limit of New Source Performance Standard, Subpart GG - 40 CFR Subpart 60.333(b). This standard can be converted to an expression of weight percent of sulfur in the natural gas (ng):

$$%S(lb/lbNG) = \left(\frac{1 \text{ gr}}{100 \text{ scf}}\right) \left(\frac{1 \text{ lb}}{7000 \text{ gr}}\right) \left(\frac{24.5 \text{ L}}{\text{mol NG}}\right) \left(\frac{1 \text{ mol}}{16 \text{ g}}\right) \left(\frac{454 \text{ g}}{1 \text{ lb}}\right) \left(\frac{0.035 \text{ scf}}{1 \text{ L}}\right) (100)$$
$$= 0.00348\% \text{ sulfur by weight}$$

Thus natural gas with fuel sulfur content of 1.0 gr/100 scf or less assures compliance with the 0.8% sulfur by weight limit of New Source Performance Standard, Subpart GG - 40 CFR Subpart 60.333(b).Conditions

Conditions 15, and 21 of the requirements for unit S-2265-1-13 will ensure compliance with this rule requirement.

N. 40 CFR 60 Subpart KKKK - Standards of Performance for Stationary Combustion Turbines

The EPA promulgated this new NSPS that would apply to new stationary combustion turbines greater than or equal to 1 MW that commence construction, modification or reconstruction after February 18, 2005. The gas turbine permit unit S-2265-1-13 was initially constructed before February 18, 2005 and not been modified or reconstructed since. Therefore requirements of this NSPS are not applicable.

O. 40 CFR Part 64 - CAM

Although 40 CFR Part 64 was not amended since the issuance of the initial Title V Permit, it is considered here since it was not evaluated in the initial Title V evaluation. 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;
- 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.
- a. <u>S-2265-1-13 38.7 MW G.T.E. NATURAL GAS-FIRED</u> COGENERATION SYSTEM - MIDWAY SUNSET FIELD

This permit unit has emissions limits for SO_X , PM_{10} , CO, and VOC but it does not have add-on controls for these criteria pollutants. Therefore, this permit unit is not subject to CAM for SO_X , PM_{10} , CO, and VOC.

This permit may be subject to CAM for NO_X , as there is a NO_X limit, and it has an add-on control in the form of SCR with water injection.

The controlled daily emission limit for this unit is 8.29 lb/hr with a potential operation of 8,760 hours per year. The post-control potential to emit is as follows:

8.29 lb/hour x 8,760 hours/year = 72,620 lbs NO_x/year

Since the post-controlled potential to emit exceeds the threshold of 50,000 pounds NOx/year, the uncontrolled potential to emit is greater than the major source threshold of 50,000 pounds NOx/year.

Since this unit is equipped with a CEMS for monitoring NOx emissions, CAM is satisfied by the conditions that require the CEMS to be installed, calibrated, maintained, and require the data to be reported. These conditions appear as condition numbers 7 through 14, and 26 on permit S-2265-1-13.

P. 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 38 of S-2265-0-3 assures compliance with the requirements.

Q. 40 CFR Part 72 – 78 Acid Rain Program

Per 40 CFR 72.6(b)(8) a non-utility unit is not affected unit subject to the acid rain program. A utility unit is defined in section 72.2 as a unit owned or operated by a utility:

- (1) That serves a generator in any State that produces electricity for sale, or
- (2) That during 1985, served a generator in any State that produced electricity for sale.
- (3) Notwithstanding paragraphs (1) and (2), a unit that was in operation during 1985, but did not serve a generator that produced electricity for sale during 1985, and did not commence commercial operation on or after November 15, 1990 is not a utility unit for purposes of the Acid Rain Program.
- (4) Notwithstanding paragraphs (1) and (2), a unit that cogenerates steam and electricity is not a utility unit for purposes of the Acid Rain Program, unless the unit is constructed for the purpose of supplying, or commences construction after November 15, 1990 and supplies, more than one-third of its potential electrical output capacity and more than 25 MWe output to any power distribution system for sale.

Unit S-2265-1-13 is a steam and electricity cogeneration unit constructed prior to November 15, 1990. Per 40 CFR 72.2 definition of an utility unit (4) this unit is not an utility unit and is therefore not subject to Title IV Acid Rain Program per 40CFR72.6(b)(8).

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

These regulations apply to servicing motor vehicles when this service involves the ozone-depleting refrigerant in the motor vehicle air conditioner (MVAC). Sections of this regulation were amended in 2007 and 2008, and conditions 30 and 31 of S-2265-0-3 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

The applicant is not requesting to use any model general permit templates for this Title V renewal project.

B. Requirements not Addressed by Model General Permit Templates

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

X. PERMIT CONDITIONS

See Attachment A - Renewed Title V Operating Permit.

XI. ATTACHMENTS

- A. Renewed Title V Operating Permit
- B. Previous Title V Operating Permit
- C. Detailed Facility List
- D. Rule 4601 Table of Standards

ATTACHMENT A

Renewed Title V Operating Permit

San Joaquin Valley Air Pollution Control District

FACILITY: S-2265-0-3

EXPIRATION Y2008

FACILITY-WIDE REQUIREMENTS

- 1. {118} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. Should the facility, as defined in 40 CFR Part 68.10 become subject to part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in 40 CFR, Part 68.10. The facility shall certify compliance as part of the annual certification as required by 40 CFR Part 70. [40 CFR, Part 68, Subpart G] Federally Enforceable Through Title V Permit
- All permits for facilities #S-1246 and #S-2265 are included in Berry Petroleum Company's Heavy Oil Western 3. Stationary Source. [District NSR Rule] Federally Enforceable Through Title V Permit
- {2285} The owner or operator shall notify the District of any breakdown condition as soon as reasonably possible, but 4. 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
- 5. {2286} 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
- {2287} The owner or operator of any stationary source operation that emits more than 25 tons per year of nitrogen 6. 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
- 7. 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
- {2289} The permittee must comply with all conditions of the permit including permit revisions originated by the 8. 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
- 9. {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
- 10. {2291} 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

FACILITY-WIDE REDUREMENTS CONTINUE ON NEXT PAGE These terms and conditions are part of the Facility-wide Permit & Operate, Any amendments to these Facility-Any amendments to these Facility-wide Requirements that affect specific Permit Units may constitute modification of those Permit Units

Facility-wide Requirements for S-2265-0-3 (continued)

- Page 2 of 4
- 11. {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
- 12. {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
- 13. {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
- 14. {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
- 15. {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
- 16. {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
- 17. {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
- {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
- 19. {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
- 20. {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
- 21. {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
- 22. {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
- 23. {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

Facility-wide Requirements for S-2265-0-3 (continued)

- 24. {2305} Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. [District Rule 2520, 9.13.2.4] Federally Enforceable Through Title V Permit
- 25. 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 (in all eight counties in the San Joaquin Valley)] Federally Enforceable Through Title V Permit
- 26. No person shall manufacture, blend, repackage, supply, sell, solicit or apply any architectural coating with a VOC content in excess of the corresponding limit specified in Table of Standards 1 effective until 12/30/10 or Table of Standards 2 effective on and after 1/1/11 of District Rule 4601 (12/17/09) for use or sale within the District. [District Rule 4601, 5.1] Federally Enforceable Through Title V Permit
- 27. All VOC-containing materials for architectural coatings subject to Rule 4601 (12/17/09) shall be stored in closed containers when not in use. [District Rule 4601, 5.4] Federally Enforceable Through Title V Permit
- 28. The permittee shall comply with all the Labeling and Test Methods requirements outlined in Rule 4601 sections 6.1 and 6.3 (12/17/09). [District Rule 4601, 6.1 and 6.3] Federally Enforceable Through Title V Permit
- 29. {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
- 30. {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
- 31. {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
- 32. Disturbances of soil related to any construction, demolition, excavation, extraction, or other earthmoving activities shall comply with the requirements for fugitive dust control in District Rule 8021 unless specifically exempted under Section 4.0 of Rule 8021 (8/19/04) or Rule 8011 (8/19/04). [District Rule 8021 and 8011] Federally Enforceable Through Title V Permit
- 33. Outdoor handling, storage and transport of any bulk material which emits dust shall comply with the requirements of District Rule 8031, unless specifically exempted under Section 4.0 of Rule 8031 (8/19/04) or Rule 8011 (8/19/04). [District Rule 8031 and 8011] Federally Enforceable Through Title V Permit
- 34. An owner/operator shall prevent or cleanup any carryout or trackout in accordance with the requirements of District Rule 8041 Section 5.0, unless specifically exempted under Section 4.0 of Rule 8041 (8/19/04) or Rule 8011 (8/19/04). [District Rule 8041 and 8011] Federally Enforceable Through Title V Permit
- 35. Whenever open areas are disturbed or vehicles are used in open areas, the facility shall comply with the requirements of Section 5.0 of District Rule 8051, unless specifically exempted under Section 4.0 of Rule 8051 (8/19/04) or Rule 8011 (8/19/04). [District Rule 8051 and 8011] Federally Enforceable Through Title V Permit
- 36. Any paved road or unpaved road shall comply with the requirements of District Rule 8061 unless specifically exempted under Section 4.0 of Rule 8061 (8/19/04) or Rule 8011 (8/19/04). [District Rule 8061 and Rule 8011] Federally Enforceable Through Title V Permit

Facility-wide Requirements for S-2265-0-3 (continued)

- 37. 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 (9/16/04) or Rule 8011 (8/19/04). [District Rule 8071 and Rule 8011] Federally Enforceable Through Title V Permit
- 38. {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
- 39. {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
- 40. {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
- 41. {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
- 42. {2323} 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
- 43. 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 (12/17/01); 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
- 44. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report begin December 20th of each year, unless alternative dates are approved by the District Compliance Division. These reports are due within 30 days after the end of the reporting period. [District Rule 2520] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate. Facility Name: BERRY PETROLEUM COMPANY Location: HEAVY OIL WESTERN, SE SECTION 28; TOWNSHIP 12N, PANGE 24W,CA

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-2265-1-13

SECTION: 28 TOWNSHIP: 12N RANGE: 24W

EQUIPMENT DESCRIPTION:

38.7 MW G.T.E. NATURAL GAS-FIRED COGENERATION SYSTEM - MIDWAY SUNSET FIELD

PERMIT UNIT REQUIREMENTS

- Operation shall include General Electric Frame 6, model PG-6531 (B), 503.4 MMBtu/hr gas-fired turbine engine, inlet air evaporator cooler, NOx water control injection system, and 38.7 MW electrical generator. [District NSR Rule] Federally Enforceable Through Title V Permit
- Operation shall include Coen 105.0 MMBtu/hr gas-fired, Low-NOx/Low-CO duct burner, VOGT #SMP-5034-D1 heat recovery steam generator (HRSG), and Johnson-Mathey fixed-bed selective catalytic reduction system built into HRSG. [District NSR Rule] Federally Enforceable Through Title V Permit
- 3. Operation shall include two Trion, model IMP-38, electrostatic precipitators (350 cfm each), one serving lube oil tank, and another serving load gear box vent and generator bearings vent. [District NSR Rule] Federally Enforceable Through Title V Permit
- 4. Gas turbine engine shall be equipped with water injection system for NOx control, and turbine exhaust shall be controlled with selective catalytic reduction (SCR) system achieving 90% NOx control. [District NSR Rule] Federally Enforceable Through Title V Permit
- 5. Gas turbine engine water injection rate shall be maintained such that water to fuel ratio is no less than that documented to result in maximum degree of NOx reduction. [District NSR Rule] Federally Enforceable Through Title V Permit
- Except during periods of startup/shutdown, emission rates (3-hr rolling average) shall not exceed any of the following: PM10: 5.70 lb/hr, SOx (as SO2): 0.49 lb/hr, NOx (as NO2): 8.29 lb/hr, VOC: 6.24 lb/hr, or CO: 22.88 lb/hr. [District NSR Rule and District Rule 4703] Federally Enforceable Through Title V Permit
- 7. The owner or operator shall install, certify, maintain, operate and quality-assure a system which continuously measures and records the exhaust gas NOx, O2 and CO concentrations. [District NSR Rule, 40 CFR 60.334(b) and District Rule 4703, 6.2.1] Federally Enforceable Through Title V Permit
- 8. 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
- 9. The NOx and O2 CEMS shall meet the requirements in 40 CFR 60, Appendix F Procedure 1 and Part 60, Appendix B Performance Specification 2 and 3, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [40 CFR 60.334(b)(1) and, District Rule 1080, 6.3, 6.5, 6.6, & 7.2] Federally Enforceable Through Title V Permit

EXPIRA

Permit Unit Requirements for S-2265-1-13 (continued)

- 10. 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
- 11. 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
- 12. 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 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
- 13. Excess emissions shall be defined as any operating hour in which 4-hour rolling average NOx concentration exceeds applicable emissions limit and a period of monitor downtime shall be any unit operating hour in which sufficient data are not obtained to validate the hour for either NOx or O2 (or both). [40 CFR 60.334(J)(1)(iii)] Federally Enforceable Through Title V Permit
- 14. 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
- 15. 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. [40 CFR 60.333(b), County Rules 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus County)] Federally Enforceable Through Title V Permit
- 16. The owner or operator shall not operate the gas turbine under load conditions, excluding start up, shut down, or reduced load period, which results in the measured NOx emissions concentration exceeding 5 ppmv @ 15% O2. [40 CFR 60.332(a)(1), (a)(2) and District Rule 4703, 5.1.2] Federally Enforceable Through Title V Permit
- 17. The owner or operator shall not operate the gas turbine under load conditions, excluding start up, shut down, or reduced load period, which results in the measured CO emissions concentration exceeding 200 ppmv @ 15% O2. [District Rule 4703, 5.2] Federally Enforceable Through Title V Permit
- 18. Reduced Load Period shall be defined as the time during which a gas turbine is operated at less than rated capacity in order to change the position of the exhaust gas diverter gate not exceeding one hour. [District Rule 4703, 3.19] Federally Enforceable Through Title V Permit
- 19. Start up time shall be defined as a time during the period of time 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. Shut down shall be defined as the period of time 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. The start up and shutdown time shall not to exceed two hours. [District Rule 4703, 3.26 and 3.29] Federally Enforceable Through Title V Permit
- 20. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit



Permit Unit Requirements for S-2265-1-13 (continued)

- Page 3 of 3
- 21. The sulfur content of each fuel source shall be: (i) documented in a valid purchase contract, a supplier certification, a tariff sheet or transportation contract or (ii) monitored weekly using ASTM Methods D4084, D5504, D6228, or Gas Processors Association Standard 2377. If sulfur content is less than 1.0 gr/scf for 8 consecutive weeks, then the Monitoring frequency shall be every six (6) months. If any six (6) month monitoring show an exceedance, weekly monitoring shall resume. [40 CFR 60.334(h)(3) and District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 22. Performance testing shall be conducted annually to measure NOx and CO emission concentrations using following test methods: EPA Methods 7E or 20 for NOx emissions, EPA Methods 10 or 10B for CO emissions, EPA Methods 3, 3A, or 20 for Oxygen content of the exhaust gas. The 3-run tests shall be performed at four evenly spaced load points in the normal operating range of the gas turbine. [40 CFR 60.335(a), (b)(2) and District Rule 4703, 6.3.1, 6.4.1, 6.4.2, & 6.4.3] Federally Enforceable Through Title V Permit
- 23. 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
- 24. 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
- 25. Performance testing shall be witnessed or authorized District personnel. Test results must be submitted to the District within 60 day of performance testing. [District Rule 1081, 7.2, 7.3] Federally Enforceable Through Title V Permit
- 26. 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 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 27. 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 and District Rule 4703, 5.1, 6.4] Federally Enforceable Through Title V Permit
- 28. 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
- 29. Any gas turbine with an intermittently operated auxiliary burner shall demonstrate compliance with the auxiliary burner both on and off. [40 CFR 60.335(b)(3) and District Rule 4703, 6.3.3] Federally Enforceable Through Title V Permit
- 30. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: 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
- 31. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: 40 CFR 60.332 (a)(1), (a)(2), 60.333 (a); 60.334(b) (b)(1), (b)(2), (h)(3), (j), (j)(1)(iii), and (j)(5), and 60.335(a), (b)(2), (b)(3), (b)(10), and District Rule 4703 (as amended 4/25/02), Sections 5.1.2.1, 5.2, 6.2.2, 6.2.6, 6.3, and 6.4. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 32. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: 40 CFR 60.7(b), 60.8, 60.13, and District Rules 1080 (as amended 12/17/92), Sections 6.3, 6.4, 6.5, , 7.1, 7.2, 7.3, 8.0, and 11.0; and 1081, Section 3.0, 6.0, 7.1, 7.2, and 7.3 (as amended 12/16/93). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

ATTACHMENT B

Previous Title V Operating Permit

San Joaquin Valley Air Pollution Control District

FACILITY: S-2265-0-2

EXPIRATION DATE: 12/31/2008

FACILITY-WIDE REQUIREMENTS

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. Should the facility, as defined in 40 CFR Part 68.3 become subject to part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in 40 CFR, Part 68.10. The facility shall certify compliance as part of the annual certification as required by 40 CFR Part 70. [40 CFR, Part 68, Subpart G] Federally Enforceable Through Title V Permit
- 3. All permits for facilities #S-1246 and #S-2265 are included in Berry Petroleum Company's Heavy Oil Western Stationary Source. [District NSR Rule] Federally Enforceable Through Title V Permit
- 4. 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
- 5. 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
- 6. 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
- 7. 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
- 8. 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
- 9. 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
- 10. 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

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

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

Facility-wide Requirements for S-2265-0-2 (continued)

- 11. 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
- 12. 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
- 13. 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
- 14. 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
- 15. 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
- 16. 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
- 17. 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
- 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
- 19. 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
- 20. 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
- 21. 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
- 22. 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
- 23. 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

Facility-wide Requirements for S-2265-0-2 (continued)

- 24. 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
- 25. 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
- 26. 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
- 27. 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
- 28. 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
- 29. 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
- 30. 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
- 31. 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
- 32. 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
- 33. 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
- 34. 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
- 35. 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
- 36. 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

Facility-wide Requirements for S-2265-0-2 (continued)

- 37. 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
- 38. 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
- 39. 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
- 40. 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
- 41. 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
- 42. 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
- 43. 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
- 44. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report begin December 20th of each year, unless alternative dates are approved by the District Compliance Division. These reports are due by January 31st of each year. [District Rule 2520] Federally Enforceable Through Title V Permit

.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-2265-1-12

EXPIRATION DATE: 12/31/2008

SECTION: 28 TOWNSHIP: 12N RANGE: 24W

EQUIPMENT DESCRIPTION:

38.7 MW G.T.E. NATURAL GAS-FIRED COGENERATION SYSTEM - MIDWAY SUNSET FIELD

PERMIT UNIT REQUIREMENTS

- Operation shall include General Electric Frame 6, model PG-6531 (B), 503.4 MMBtu/hr gas-fired turbine engine, inlet air evaporator cooler, NOx water control injection system, and 38.7 MW electrical generator. [District NSR Rule] Federally Enforceable Through Title V Permit
- Operation shall include Coen 105.0 MMBtu/hr gas-fired, Low-NOx/Low-CO duct burner, VOGT #SMP-5034-D1 heat recovery steam generator (HRSG), and Johnson-Mathey fixed-bed selective catalytic reduction system built into HRSG. [District NSR Rule] Federally Enforceable Through Title V Permit
- 3. Operation shall include two Trion, model IMP-38, electrostatic precipitators (350 cfm each), one serving lube oil tank, and another serving load gear box vent and generator bearings vent. [District NSR Rule] Federally Enforceable Through Title V Permit
- 4. Gas turbine engine shall be equipped with water injection system for NOx control, and turbine exhaust shall be controlled with selective catalytic reduction (SCR) system achieving 90% NOx control. [District NSR Rule] Federally Enforceable Through Title V Permit
- 5. Gas turbine engine water injection rate shall be maintained such that water to fuel ratio is no less than that documented to result in maximum degree of NOx reduction. [District NSR Rule] Federally Enforceable Through Title V Permit
- Except during periods of startup/shutdown, emission rates (3-hr rolling average) shall not exceed any of the following: PM10: 5.70 lb/hr, SOx (as SO2): 0.49 lb/hr, NOx (as NO2): 8.29 lb/hr, VOC: 6.24 lb/hr, or CO: 22.88 lb/hr. [District NSR Rule and District Rule 4703] Federally Enforceable Through Title V Permit
- 7. The owner or operator shall install, certify, maintain, operate and quality-assure a system which continuously measures and records the exhaust gas NOx, O2 and CO concentrations. [District NSR Rule, 40 CFR 60.334(b) and District Rule 4703, 6.2.1] Federally Enforceable Through Title V Permit
- 8. 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
- 9. The NOx and O2 CEMS shall meet the requirements in 40 CFR 60, Appendix F Procedure 1 and Part 60, Appendix B Performance Specification 2 and 3, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [40 CFR 60.334(b)(1) and, District Rule 1080, 6.3, 6.5, 6.6, & 7.2] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-2265-1-12 (continued)

- 10. 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
- 11. 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
- 12. 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 guarter and shall include the following: Time intervals, data and magnitude of excess NOx emissions, nature and 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
- 13. Excess emissions shall be defined as any operating hour in which 4-hour rolling average NOx concentration exceeds applicable emissions limit and a period of monitor downtime shall be any unit operating hour in which sufficient data are not obtained to validate the hour for either NOx or O2 (or both). [40 CFR 60.334(J)(1)(iii)] Federally Enforceable Through Title V Permit
- 14. 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
- 15. 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. [40 CFR 60.333(b), County Rules 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus County)] Federally Enforceable Through Title V Permit
- 16. The owner or operator shall not operate the gas turbine under load conditions, excluding the thermal stabilization period or reduced load period, which results in the measured NOx emissions concentration exceeding 5 ppmv @ 15% O2. [40 CFR 60.332(a)(1), (a)(2) and District Rule 4703, 5.1.2.1] Federally Enforceable Through Title V Permit
- 17. The owner or operator shall not operate the gas turbine under load conditions, excluding the thermal stabilization period or reduced load period, which results in the measured CO emissions concentration exceeding 200 ppmv @ 15% O2. [District Rule 4703, 5.2] Federally Enforceable Through Title V Permit
- 18. Reduced Load Period shall be defined as the time during which a gas turbine is operated at less than rated capacity in order to change the position of the exhaust gas diverter gate not exceeding one hour. [District Rule 4703, 3.19] Federally Enforceable Through Title V Permit
- 19. Thermal Stabilization Period shall be defined as the start up or shut down time during which the exhaust gas is not within the normal operating temperature range, not to exceed two hours. [District Rule 4703, 3.25] Federally Enforceable Through Title V Permit
- 20. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
- The sulfur content of each fuel source shall be: (i) documented in a valid purchase contract, a supplier certification, 21. tariff or transportation contract or (ii) demonstrated by the representative fuel sampling data showing that sulfur content of gas does not exceed 1.0 gr/100 scf. [40 CFR 60.334(h)(3) and District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

Location:

Permit Unit Requirements for S-2265-1-12 (continued)

- 22. Performance testing shall be conducted annually to measure NOx and CO emission concentrations using following test methods: EPA Methods 7E or 20 for NOx emissions, EPA Methods 10 or 10B for CO emissions, EPA Methods 3, 3A, or 20 for Oxygen content of the exhaust gas. The 3-run tests shall be performed at four evenly spaced load points in the normal operating range of the gas turbine. [40 CFR 60.335(a), (b)(2) and District Rule 4703, 6.3.1, 6.4.1, 6.4.2, & 6.4.3] Federally Enforceable Through Title V Permit
- 23. 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
- 24. 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
- 25. Performance testing shall be witnessed or authorized District personnel. Test results must be submitted to the District within 60 day of performance testing. [District Rule 1081, 7.2, 7.3] Federally Enforceable Through Title V Permit
- 26. 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 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 27. 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 and District Rule 4703, 5.1, 6.4] Federally Enforceable Through Title V Permit
- 28. 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
- 29. Any gas turbine with an intermittently operated auxiliary burner shall demonstrate compliance with the auxiliary burner both on and off. [40 CFR 60.335(b)(3) and District Rule 4703, 6.3.3] Federally Enforceable Through Title V Permit
- 30. 24. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: 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
- 31. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: 40 CFR 60.332 (a)(1), (a)(2), 60.333 (a); 60.334(b) (b)(1), (b)(2), (h)(3), (j), (j)(1)(iii), and (j)(5), and 60.335(a), (b)(2), (b)(3), (b)(10), and District Rule 4703 (as amended 4/25/02), Sections 5.1.2.1, 5.2, 6.2.2, 6.2.6, 6.3, and 6.4. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 32. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: 40 CFR 60.7(b), 60.8, 60.13, and District Rules 1080 (as amended 12/17/92), Sections 6.3, 6.4, 6.5, , 7.1, 7.2, 7.3, 8.0, and 11.0; and 1081, Section 3.0, 6.0, 7.1, 7.2, and 7.3 (as amended 12/16/93). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

ATTACHMENT C

Detailed Facility List

SJVUAPCD Detailed Facility Report SOUTHERN For Facility=2265					12/10/09 7:56 am					
		S	Sorted by		me and Per	mit Numbe	er			
BERRY PETROLEI HEAVY OIL WEST SE SECTION 28; T CA				# TUS: EPHONE:	S 2265 A (661) 616-483	6	TYPE: TOXIC ID:	TitleV 51655	EXPIRE ON: AREA: INSP. DATE:	12/31/2008 3 / 02/10
PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION	_		
S-2265-1-12	38.7 MW	3020-08A G	1	10,215.00	10,215.00	Α	38.7 MW G.T.E. NATURAL G/ MIDWAY SUNSET FIELD	AS-FIRED	COGENERATION	SYSTEM -

. Number of Facilities Reported: 1

.

ATTACHMENT D

Rule 4601 Table of Standards

Unit S-2265-1-13 is a steam and electricity cogeneration unit constructed prior to November 15, 1990. Per 40 CFR 72.2 definition of an utility unit (4) this unit is not an utility unit and is therefore not subject to Title IV Acid Rain Program per 40CFR72.6(b)(8).

R. 40 CFR Part 82, Subparts B and F, <u>Stratospheric Ozone</u>

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 30 and 31 of S-2265-0-3 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

The applicant is not requesting to use any model general permit templates for this Title V renewal project.

B. Requirements not Addressed by Model General Permit Templates

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

X. PERMIT CONDITIONS

See Attachment A - Renewed Title V Operating Permit.

XI. ATTACHMENTS

- A. Renewed Title V Operating Permit
- B. Previous Title V Operating Permit
- C. Detailed Facility List
- D. Rule 4601 Table of Standards

TABLE OF STANDARDS

Limits are expressed in grams of VOC per liter^a of coating thinned to the manufacturer's maximum recommendation, excluding the volume of any water, exempt compounds, or colorant added to tint bases. Manufacturer's maximum recommendation means the maximum recommendation for thinning that is indicated on the label or lid of the coating container.

COATING CATEGORY	EFFECTIVE DATES			
	10/31/01	1/1/2003		
Flat Coatings	250	100		
Nonflat Coatings	250	150		
Nonflat - High Gloss Coatings	250	250		
Specialty Coatings				
Antenna Coatings	530	530		
Antifouling Coatings	400	400		
Bituminous Roof Coatings	300	300		
Bituminous Roof Primers	350	350		
Bond Breakers	350	350		
Clear Wood Coatings:				
Clear Brushing Lacquers	680	680		
Lacquers (including lacquer sanding sealers)	680	550		
Sanding Sealers (other than lacquer sanding	350	350		
sealers)				
Varnishes	350	350		
Concrete Curing Compounds	350	350		
Dry Fog Coatings	400	400		
Faux Finishing Coatings	350	350		
Fire Resistive Coatings	350	350		
Fire-Retardant Coatings				
Clear	650	650		
Opaque	350	350		
Floor Coatings	250	250		
Flow Coatings 🕅	420	420		
Form-Release Compounds	250	250		
Graphic Arts Coatings (Sign Paints)	500	500		
High Temperature Coatings	420	420		
Industrial Maintenance Coatings	340	250 (Effective 1/1/04)		
Low Solids Coatings	120 ^b	120 ^b		
Magnesite Cement Coatings	450	450		
Mastic Texture Coatings	300	300		
Metallic Pigmented Coatings	500	500		
Multi-Color Coatings	420	250		
Pre-Treatment Wash Primers	420	420		
Primers, Sealers, and Undercoaters	350	200		
Quick-Dry Enamels	400	250		
Quick-Dry Primers, Sealers and Undercoaters	450	200		
Recycled Coatings	250	250		

TABLE OF STANDARDS, continued

SJVUAPCD	

I

EFFECTIVE DATES

	10/31/01	1/1/2003
Roof Coatings	250	250
Rust Preventative Coatings	400	400
Shellacs:		
Clear	730	730
Opaque	550	550
Specialty Primers, Sealers, and Undercoaters	350	350
Stains	350	250
Swimming Pool Coatings	340	340
Swimming Pool Repair and Maintenance	340	340
Coatings		
Temperature-Indicator Safety Coatings	550	550
Traffic Marking Coatings	150	150
Waterproofing Sealers	400	250
Waterproofing Concrete/Masonry Sealers	400	400
Wood Preservatives	350	350

a Conversion factor: one pound VOC per gallon (U.S.) = 119.95 grams VOC per liter.

b Units are grams of VOC per liter of coating, including water and exempt compounds in accordance with Section 3.27.

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 6.1.1 through 6.1.9 on the coating container (or label) in which the coating is sold or distributed.
 - 6.1.1 Date Code: The date the coating was manufactured, or a date code representing the date, shall be indicated on the label, lid or bottom of the container. If the manufacturer uses a date code for any coating, the manufacturer shall file an explanation of each code with the Executive Officer of the ARB.
 - 6.1.2 Thinning Recommendations: A statement of the manufacturer's recommendation regarding thinning of the coating shall be indicated on the label or lid of the container. This requirement does not apply to the thinning of architectural coatings with water. If thinning of the coating prior to use is not necessary, the recommendation must specify that the coating is to be applied without thinning.
 - 6.1.3 VOC Content: Each container of any coating subject to this rule shall display either the maximum or actual VOC content of the coating, as supplied, including the maximum thinning as recommended by the manufacturer. VOC content shall be displayed in grams of VOC per liter of coating. VOC content displayed shall be calculated using product formulation data, or shall be determined using the test methods in Section 6.3.1. The equations in Sections 3.25 or 3.26, as appropriate, shall be used to calculate VOC content.

TABLE OF STANDARDS 1 (Effective through 12/31/10)

Limits are expressed in grams of VOC per liter^a of coating thinned to the manufacturer's maximum recommendation, excluding the volume of any water, exempt compounds, or colorant added to tint bases. Manufacturer's maximum recommendation means the maximum recommendation for thinning that is indicated on the label or lid of the coating container.

COATING CATEGORY	Effective Date: 1/1/2003
Flat Coatings	100
Nonflat Coatings	150
Nonflat - High Gloss Coatings	250
Specialty Coatings	
Antenna Coatings	530
Antifouling Coatings	400
Bituminous Roof Coatings	300
Bituminous Roof Primers	350
Bond Breakers	350
Clear Wood Coatings:	
Clear Brushing Lacquers	680
Lacquers (including lacquer sanding sealers)	550
Sanding Sealers (other than lacquer sanding sealers)	350
Varnishes	350
Concrete Curing Compounds	350
Dry Fog Coatings	400
Faux Finishing Coatings	350
Fire Resistive Coatings	350
Fire-Retardant Coatings:	
Clear	650
Opaque	350
Floor Coatings	250
Flow Coatings	420
Form-Release Compounds	250
Graphic Arts Coatings (Sign Paints)	500
High Temperature Coatings	420
Industrial Maintenance Coatings	250
Low Solids Coatings	120 ^b
Magnesite Cement Coatings	450
Mastic Texture Coatings	300
Metallic Pigmented Coatings	500
Multi-Color Coatings	250

12/17/09

COATING CATEGORY	Effective Date: 1/1/2003
Pre-Treatment Wash Primers	420
Primers, Sealers, and Undercoaters	200
Quick-Dry Enamels	250
Quick-Dry Primers, Sealers and Undercoaters	200
Recycled Coatings	250
Roof Coatings	250
Rust Preventative Coatings	400
Shellacs:	
Clear	730
Opaque	550
Specialty Primers, Sealers, and Undercoaters	350
Stains	250
Swimming Pool Coatings	340
Swimming Pool Repair and Maintenance Coatings	340
Temperature-Indicator Safety Coatings	550
Traffic Marking Coatings	150
Waterproofing Sealers	250
Waterproofing Concrete/Masonry Sealers	400
Wood Preservatives	350

 TABLE OF STANDARDS 1, continued (Effective through 12/31/10)

a Conversion factor: one pound VOC per gallon (U.S.) = 119.95 grams VOC per liter.

b Units are grams of VOC per liter of coating, including water and exempt compounds in accordance with Section 3.27.

TABLE OF STANDARDS 2 (Effective on and after 1/1/11)

Limits are expressed as VOC Regulatory, thinned to the manufacturer's maximum thinning recommendation, excluding any colorant added to tint bases.

COATING CATEGORY	VOC Limit (g/l) Effective 1/1/2011 through 12/31/2011 ²	VOC Limit (g/l) Effective on and after 1/1/2012 ²	
Flat Coatings	50	50	
Nonflat Coatings	100	100	
Nonflat - High Gloss Coatings	150	150	
Specialty Coatings			
Aluminum Roof Coatings	400	400	
Basement Specialty Coatings	400	400	
Bituminous Roof Coatings	50	50	
Bituminous Roof Primers	350	350	
Bond Breakers	350	350	
Concrete Curing Compounds	350	350	
Concrete/Masonry Sealers 4	100	100	
Driveway Sealers 😽	50	50	
Dry Fog Coatings	150	150	
Faux Finishing Coatings	350	350	
Fire Resistive Coatings	350	350 ·	
Floor Coatings	100	100	
Form-Release Compounds	250	250	
Graphic Arts Coatings (Sign Paints)	500	500	
High Temperature Coatings	420	420	
Industrial Maintenance Coatings	250	250	
Low Solids Coatings ¹	120 ¹	120 ¹	
Magnesite Cement Coatings	450	450	
Mastic Texture Coatings	100	100	
Metallic Pigmented Coatings	500	500	
Multi-Color Coatings	250	250	
Pre-Treatment Wash Primers	420	420	
Primers, Sealers, and Undercoaters	100	100	
Reactive Penetrating Sealers &	350	350	
Recycled Coatings	250	250	
Roof Coatings	50	50	
Rust Preventative Coatings	400	250	

TABLE OF STANDARDS 2 (continued) (Effective on and after 1/1/11) Limits are expressed as VOC Regulatory, thinned to the manufacturer's maximum thinning recommendation, excluding any colorant added to tint bases.

COATING CATEGORY	VOC Limit (g/l) Effective 1/1/2011 through 12/31/2011 ²	VOC Limit (g/l) Effective on and after 1/1/2012 ²
Shellacs:		
Clear	730	730
Opaque	550	550
Specialty Primers, Sealers, and Undercoaters	350	100
Stains	250	250
Stone Consolidants 🐐	450	450
Swimming Pool Coatings	340	340
Traffic Marking Coatings	100	100
Tub and Tile Refinish Coatings	420	420
Waterproofing Membranes *	250	250
Wood Coatings 🛠	275	275
Wood Preservatives	350	350
Zinc-Rich Primers 🔻	340	340

1 Units are grams of VOC per liter of coating, including water and exempt compounds in accordance with Section 3.77.

2 The dates listed do not preclude voluntary compliance with the applicable limit prior to those dates.

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 6.1.1 through 6.1.14 on the coating container (or label) in which the coating is sold or distributed.
 - 6.1.1 Date Code: The date the coating was manufactured, or a date code representing the date, shall be indicated on the label, lid or bottom of the container. If the manufacturer uses a date code for any coating, the manufacturer shall file an explanation of each code with the Executive Officer of the ARB.