

# Bay Area Air Quality Management District

939 Ellis Street  
San Francisco, CA 94109  
(415) 771-6000

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## Proposed

# MAJOR FACILITY REVIEW PERMIT

Issued To:

~~SAF (USA) LaSaffre Yeast Corporation~~  
~~Red Star Yeast and Products~~  
~~A Division of Universal Foods Corporation~~

~~Facility #B2975~~  
~~Facility #A3523~~

Facility Address:

1384 N 5th Street  
Oakland, CA 94607

Mailing Address:

1384 N 5th Street  
Oakland, CA 94607 P.O. Box 23712  
Oakland, CA 94623

### Responsible Official

~~William Tesch, Vice-President, Operations~~  
~~Mike Cunningham, Plant Manager~~  
(510) 272-9033

### Facility Contact

~~Mike Cunningham, Plant Manager~~  
~~Alan Bahl, Environmental Engineer~~  
~~(510) 272-9033 (410) 633-8575~~

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**Type of Facility:** Yeast Manufacturing  
**Primary SIC:** 2099  
**Product:** Commercial Yeast

BAAQMD Permit Division Contact:  
Thu H. Bui

ISSUED BY THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT

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Ellen Garvey, ~~Executive Officer~~/Air Pollution Control Officer

Date

Draft

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Application # 3924  
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## TABLE OF CONTENTS

I.	STANDARD CONDITIONS .....	3
II.	EQUIPMENT LIST .....	8
III.	GENERAL APPLICABLE REQUIREMENTS.....	9
IV.	SOURCE-SPECIFIC APPLICABLE REQUIREMENTS.....	11
V.	SCHEDULE OF COMPLIANCE.....	16
VI.	PERMIT CONDITIONS.....	17
VII.	APPLICABLE LIMITS & COMPLIANCE MONITORING REQUIREMENTS .....	20
VIII.	TEST METHODS.....	24
IX.	GLOSSARY .....	26
X.	APPENDIX A - APPLICABLE STATE IMPLEMENTATION PLAN.....	31

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## I. STANDARD CONDITIONS

### A. Administrative Requirements

The permit holder shall comply with all applicable requirements in the following regulations:

- BAAQMD Regulation 1 - General Provisions and Definitions  
(as amended by the District Board on 5/2/01);
- SIP Regulation 1 - General Provisions and Definitions  
(as approved by EPA through 8/27/99);
- BAAQMD Regulation 2, Rule 1 - Permits, General Requirements  
(as amended by the District Board on 8/1/01);
- SIP Regulation 2, Rule 1 - Permits, General Requirements  
(as approved by EPA through 2/25/99);
- BAAQMD Regulation 2, Rule 2 - Permits, New Source Review  
(as amended by the District Board on 5/17/00);
- SIP Regulation 2, Rule 2 - Permits, New Source Review and Prevention of Significant Deterioration  
(as approved by EPA through 2/25/99);
- BAAQMD Regulation 2, Rule 4 - Permits, Emissions Banking  
(as amended by the District Board on 5/17/00);
- SIP Regulation 2, Rule 4 - Permits, Emissions Banking  
(as approved by EPA through 2/25/99); and
- BAAQMD Regulation 2, Rule 6 - Permits, Major Facility Review  
(as amended by the District Board on 5/2/01).

### B. Conditions to Implement Regulation 2, Rule 6, Major Facility Review

1. This Major Facility Review Permit was issued on [ ] and expires on [when issued, enter 5<sup>th</sup> anniversary of issue date]. The permit holder shall submit a complete application for renewal of this Major Facility Review Permit no later than [when issued, enter date 6 months prior to permit expiration date] and no earlier than [when issued, enter date 12 months prior to expiration date]. **If a complete application for renewal has not been submitted in accordance with this deadline, the facility may not operate after** [when issued, enter 5<sup>th</sup> anniversary of issue date]. (Regulation 2-6-307, 404.2, & 409.6; MOP Volume II, Part 3, §4.2)
2. The permit holder shall comply with all conditions of this permit. The permit consists of this document and all appendices. Any non-compliance with the terms and conditions of this permit will constitute a violation of the law and will be grounds for enforcement action; permit termination, revocation and re-issuance, or modification; or denial of a permit renewal application. (Regulation 2-6-307; MOP Volume II, Part 3, §4.11)
3. In the event any enforcement action is brought as a result of a violation of any term or condition of this permit, the fact that it would have been necessary for the permittee to halt or reduce the permitted activity in order to maintain compliance with such term or condition shall not be a defense to such enforcement action. (MOP Volume II, Part 3, §4.11)

## I. Standard Conditions

4. This permit may be modified, revoked, reopened and reissued, or terminated for cause. (Regulation 2-6-307, 409.8, 415; MOP Volume II, Part 3, §4.11)
5. The filing of a request by the facility for a permit modification, revocation and re-issuance, or termination, or the filing of a notification of planned changes or anticipated non-compliance does not stay the applicability of any permit condition. (Regulation 2-6-409.7; MOP Volume II, Part 3, §4.11)
6. This permit does not convey any property rights of any sort, or any exclusive privilege. (Regulation 2-6-409.7; MOP Volume II, Part 3, §4.11)
7. The permit holder shall supply within 30 days any information that the District requests in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. (Regulation 1-441, Regulation 2-6-409.4 & 501; MOP Volume II, Part 3, §4.11)
8. Any records required to be maintained pursuant to this permit which the permittee considers to contain proprietary or trade secret information shall be prominently designated as such. Copies of any such proprietary or trade secret information which are provided to the District shall be maintained by the District in a locked confidential file, provided, however, that requests from the public for the review of any such information shall be handled in accordance with the District's procedures set forth in Section 11 of the District's Administrative Code. (Regulation 2-6-419; MOP Volume II, Part 3, §4.11)
9. Proprietary or trade secret information provided to EPA will be subject to the requirements of 40 CFR Part 2, Subpart B - Public Information, Confidentiality of Business Information. (40 CFR Part 2)
10. The emissions inventory submitted with the application for this Major Facility Review Permit is an estimate of actual emissions or the potential to emit for the time period stated and is included only as one means of determining applicable requirements for emission sources. It does not establish, or constitute a basis for establishing, any new emission limitations. (MOP Volume II, Part 3, §4.11)
11. The responsible official shall certify all documents submitted by the facility pursuant to the major facility review permit. The certification shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. The certifications shall be signed by a responsible official for the facility. (MOP Volume II, Part 3, §4.11)

### C. Requirement to Pay Fees

The permit holder shall pay annual fees in accordance with District Regulation 3, including Schedule P. (Regulation 2-6-402 & 409.13, Regulation 3; MOP Volume II, Part 3, §4.12)

### D. Inspection and Entry

Access to Facility: The permit holder shall provide reasonable access to the facility and equipment which is subject to this permit to the APCO and/or to his or her designee. (Regulation 1-440, Regulation 2-6-409.3; MOP Volume II, Part 3, §4.14)

## I. Standard Conditions

### E. Records

1. The permit holder must provide any information, records, and reports requested or specified by the APCO. (Regulation 1-441, Regulation 2-6-409.4)
2. Notwithstanding the specific wording in any requirement, all records for federally enforceable requirements shall be maintained for at least five years from the date of creation of the record. (Regulation 2-6-501, Regulation 3; MOP Volume II, Part 3, §4.7)

### F. Monitoring Reports

Reports of all required monitoring must be submitted to the District at least once every six months, except where an applicable requirement specifies more frequent reporting. The first reporting period for this permit shall be [date of issuance] to [six months later]. The report shall be submitted by [one month after end of reporting period]. Subsequent reports shall be for the following periods: [\_\_\_\_\_ 1st through \_\_\_\_\_ 30th or 31st] and [\_\_\_\_\_ 1st through \_\_\_\_\_ 30th or 31st], and are due on the last day of the month after the end of the reporting period. All instances of non-compliance shall be clearly identified in these reports. The reports shall be certified by the responsible official as true, accurate, and complete. In addition, all instances of non-compliance with the permit shall be reported in writing to the District's Compliance and Enforcement Division within 10 calendar days of the discovery of the incident. Within 30 calendar days of the discovery of any incident of non-compliance, the facility shall submit a written report including the probable cause of non-compliance and any corrective or preventative actions. The reports shall be sent to the following address:

\_\_\_\_\_  
Director of Compliance and Enforcement  
\_\_\_\_\_  
Bay Area Air Quality Management District  
\_\_\_\_\_  
939 Ellis Street  
\_\_\_\_\_  
San Francisco, CA 94109  
\_\_\_\_\_  
Attn: Title V Reports

(Regulation 2-6-502, Regulation 3; MOP Volume II, Part 3, §4.7)

### G. Compliance Certification

Compliance certifications shall be submitted annually by the responsible official of this facility to the Bay Area Air Quality Management District and to the Environmental Protection Agency. The certification period will be \_\_\_\_\_ 1st to \_\_\_\_\_ 30th or 31st. The certification shall be submitted by \_\_\_\_\_ 30th or 31st of each year. The certification must list each applicable requirement, the compliance status, whether compliance was continuous or intermittent, the method used to determine compliance, and any other specific information required by the permit. The permit holder may satisfy this requirement through submittal of District-generated Compliance Certification forms. The certification should be directed to the District's Compliance and Enforcement Division at the address above, and a copy of the certification shall be sent to the Environmental Protection Agency at the following address:

## I. Standard Conditions

Director of the Air Division  
USEPA, Region IX  
75 Hawthorne Street  
San Francisco, CA 94105  
Attention: Air-3

(MOP Volume II, Part 3, §4.5 and 4.15)

## H. Emergency Provisions

1. The permit holder may seek relief from enforcement action in the event of a breakdown, as defined by Regulation 1-208 of the District's Rules and Regulations, by following the procedures contained in Regulations 1-431 and 1-432. The District will thereafter determine whether breakdown relief will be granted in accordance with Regulation 1-433. (MOP Volume II, Part 3, §4.8)
2. The permit holder may seek relief from enforcement action for a violation of any of the terms and conditions of this permit ~~caused by conditions beyond the permit holder's reasonable control~~ by applying to the District's Hearing Board for a variance pursuant to Health and Safety Code Section 42350. The Hearing Board will determine after notice and hearing whether variance relief should be granted in accordance with the procedures and standards set forth in Health and Safety Code Section 42350 et seq. ~~Any variance granted by the Hearing Board from any term or condition of this permit which lasts longer than 90 days will be subject to EPA approval~~ (MOP Volume II, Part 3, §4.8)
3. ~~Notwithstanding the foregoing,~~ The granting by the District of breakdown relief or the issuance by the Hearing Board of a variance will not provide relief from federal enforcement ~~unless the Major Facility Review Permit has been modified pursuant to Regulation 2, Rule 6.~~ (MOP Volume II, Part 3, §4.8)

## I. Severability

In the event that any provision of this permit is invalidated by a court or tribunal of competent jurisdiction, or by the Administrator of the EPA, all remaining portions of the permit shall remain in full force and effect. (Regulation 2-6-409.5; MOP Volume II, Part 3, §4.10)

## J. Miscellaneous Conditions

1. The maximum capacity for each source as shown in Table II-A is the maximum allowable capacity. Exceedance of the maximum allowable capacity for any source is a violation of Regulation 2, Rule 1, Section 301. (Regulation 2-1-301)

## K. Accidental Release

This facility is subject to 40 CFR Part 68, Chemical Accident Prevention Provisions. The permit holder shall submit a risk management plan (RMP) by the date specified in §68.10. The permit holder shall also certify compliance with the requirements of Part 68 as part of

## **I. Standard Conditions**

the annual compliance certification, as required by Regulation 2, Rule 6. (40 CFR Part 68, Regulation 2, Rule 6)

## II. EQUIPMENT LIST

**Table II A - Permitted Sources**

Each of the following sources has been issued a permit to operate pursuant to the requirements of BAAQMD Regulation 2, Permits. The capacities in this table are the maximum allowable capacities for each source, pursuant to Standard Condition I.J and Regulation 2-1-301.

S-#	Description	Make or Type	Model	Capacity
S-1	Boiler #1	Ocean Shore	SDB 579	6.3 MMBTU/hr; natural gas, fuel oil #2
S-2	Boiler #2	Ocean Shore	SDB 579	6.3 MMBTU/hr; natural gas, fuel oil #2
S-3	Yeast Fermenter #1	Custom	Custom	Trade Secret
S-4	Yeast Fermenter #2	Custom	Custom	Trade Secret
S-5	Yeast Fermenter #3	Custom	Custom	Trade Secret
S-6	Yeast Fermenter #4	Custom	Custom	Trade Secret
S-7	Yeast Fermenter #5	Custom	Custom	Trade Secret

### III. GENERAL APPLICABLE REQUIREMENTS

The permit holder shall comply with all applicable requirements, including those specified in the BAAQMD and SIP Rules and Regulations and other federal requirements cited below. These requirements apply in a general manner to the facility and/or to sources exempt from the requirement to obtain a District Permit to Operate. The District has determined that these requirements will not be violated under normal, routine operations, and that no additional periodic monitoring or reporting to demonstrate compliance is warranted. In cases where a requirement, in addition to being generally applicable, is also specifically applicable to one or more sources, the requirement and the source are also included in Section IV, Source-Specific Applicable Requirements, of this permit.

The dates in parenthesis in the Title column identify the versions of the regulations being cited and are, as applicable:

1. BAAQMD regulation(s): The date(s) of adoption or most recent amendment of the regulation by the District Board of Directors
2. Any federal requirement, including a version of a District regulation that has been approved into the SIP: The most recent date of EPA approval of any portion of the rule, encompassing all actions on the rule through that date

The full language of SIP requirements is on EPA Region 9's website. The address is included in Appendix A of this permit.

**NOTE:**

There are differences between the current BAAQMD rules and the versions of the rules in the SIP. All sources must comply with both versions of the rule until US EPA has reviewed and approved the District's revision of the regulation.

**Table III  
 Generally Applicable Requirements**

Applicable Requirement	Regulation Title or Description of Requirement	FE (Y/N)
BAAQMD Regulation 1	General Provisions and Definitions ( <a href="#">5/2/01+3/93</a> )	N
SIP Regulation 1	General Provisions and Definitions ( <a href="#">8/27/99+10/82</a> )	Y
<a href="#">BAAQMD Regulation 2, Rule 1</a>	<a href="#">General Requirements (8/1/01)</a>	<u>N</u>
<a href="#">BAAQMD 2-1-429</a>	<a href="#">Federal Emissions Statement (6/7/95)</a>	<u>Y</u>
<a href="#">SIP Regulation 2, Rule 1</a>	<a href="#">General Requirements (8/27/99)</a>	<u>Y</u>
BAAQMD Regulation 4	Air Pollution Episode Plan (3/20/91)	N
SIP Regulation 4	Air Pollution Episode Plan (8/6/90)	Y
BAAQMD Regulation 5	Open Burning (11/2/94)	N
SIP Regulation 5	Open Burning (5/3/84)	Y

### III. General Applicable Requirements

**Table III**  
**Generally Applicable Requirements**

Applicable Requirement	Regulation Title or Description of Requirement	FE (Y/N)
BAAQMD Regulation 6	Particulate Matter and Visible Emissions (12/19/90)	<del>NY</del>
<del>SIP Regulation 6</del>	<del>Particulate Matter and Visible Emissions (5/3/84)</del>	<del>Y</del>
BAAQMD Regulation 7	Odorous Substances (3/17/82)	N
BAAQMD Regulation 8, Rule 1	Organic Compounds - General Provisions (6/15/94)	Y
BAAQMD Regulation 8, Rule 3	Organic Compounds - Architectural Coatings (12/20/95)	N
SIP Regulation 8, Rule 3	Organic Compounds - Architectural Coatings (11/16/83)	Y
BAAQMD Regulation 8, Rule 49	Organic Compounds - Aerosol Paint Products (12/20/95)	N
SIP Regulation 8, Rule 49	Organic Compounds - Aerosol Paint Products (3/22/95)	Y
BAAQMD Regulation 8, Rule 51	Organic Compounds - Adhesive and Sealant Products (12/20/95)	N
BAAQMD Regulation 9, Rule 1	Inorganic Gaseous Pollutants - Sulfur Dioxide (3/15/95)	<del>NY</del>
<del>SIP Regulation 9, Rule 1</del>	<del>Inorganic Gaseous Pollutants - Sulfur Dioxide (5/3/84)</del>	<del>Y</del>
BAAQMD Regulation 11, Rule 2	Hazardous Pollutants - Asbestos Demolition, Renovation and Manufacturing (12/4/91)	Y
BAAQMD Regulation 11, Rule 10	Hazardous Pollutants - Hexavalent Chromium Emissions from Cooling Towers (11/15/89)	N
BAAQMD Regulation 12, Rule 4	Miscellaneous Standards of Performance - Sandblasting (7/11/90)	N
SIP Regulation 12, Rule 4	Miscellaneous Standards of Performance - Sandblasting (9/2/81)	Y

## IV. SOURCE-SPECIFIC APPLICABLE REQUIREMENTS

The permit holder shall comply with all applicable requirements, including those specified in the BAAQMD and SIP Rules and Regulations and other federal requirements cited below. The requirements cited in the following tables apply in a specific manner to the indicated source(s).

The dates in parenthesis in the Title column identify the versions of the regulations being cited and are, as applicable:

1. BAAQMD regulation(s): The date(s) of adoption or most recent amendment of the regulation by the District Board
2. Any federal requirement, including a version of a District regulation that has been approved into the SIP: The most recent date of EPA approval of any portion of the rule, encompassing all actions on the rule through that date

The full text of each permit condition cited is included in Section VI, Permit Conditions, of this permit. The full language of SIP requirements is on EPA Region 9's website. The address is included in Appendix A of this permit. All other text may be found in the regulations themselves.

**Table IV-A**  
**Source-specific Applicable Requirements**  
**S-1: BOILER #1**  
**S-2: BOILER #2**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
<b>BAAQMD Regulation 6</b>	<b>Particulate Matter and Visible Emission (12/19/90)</b>		
6-301	Ringelmann Number 1 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particulate Weight Limitation	Y	
6-310.3	Heat Transfer Operations	Y	
<b>BAAQMD Regulation 9, Rule 1</b>	<b>Inorganic Gaseous Pollutants - Sulfur Dioxide (3/15/95)</b>		
9-1-301	Limitations on Ground Level Concentrations	NY	
9-1-302	General Emission Limitations, or 9-1-304	Y	
9-1-304	Fuel Burning - Liquid and Solid Fuels, or 9-1-302	Y	
<b>SIP Regulation 9, Rule 1</b>	<b><del>PROVISIONS NO LONGER IN CURRENT RULE</del> Inorganic Gaseous Pollutants - Sulfur Dioxide (5/3/84)</b>		
9-1-301	<del>Limitations on Ground Level Concentrations</del>	Y <sup>+</sup>	

## IV. Source-Specific Applicable Requirements

**Table IV-A**  
**Source-specific Applicable Requirements**  
**S-1: BOILER#1**  
**S-2: BOILER#2**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
<b>BAAQMD Regulation 9, Rule 7</b>	<b>Inorganic Gaseous Pollutants - Nitrogen Oxides and Carbon Monoxide from Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters (9/16/92)</b>		
9-7-304	Low Fuel Usage Requirements	<u>NY</u>	
9-7-304.2	Operating Standard, Tuning	<u>NY</u>	
9-7-305	Natural Gas Curtailment - Non-Gaseous Fuel	<u>NY</u>	
9-7-305.1	Performance Standard, NOx	<u>YN</u>	
9-7-305.2	Performance Standard, CO	<u>YN</u>	
9-7-306	Equipment Testing - Non-Gaseous Fuel	<u>YN</u>	
9-7-306.1	Performance Standard, NOx	<u>YN</u>	
9-7-306.2	Performance Standard, CO	<u>YN</u>	
9-7-306.3	Operating Standard, Equipment Testing	<u>YN</u>	
9-7-502	Modified Maximum Heat Input	<u>YN</u>	
9-7-503	Records	<u>YN</u>	
9-7-503.1	§304.2 Records	<u>YN</u>	
9-7-503.2	Records, Curtailment	<u>YN</u>	
9-7-503.3	§306.3 Records	<u>YN</u>	
9-7-503.4	§403 Records and Record Retention	<u>YN</u>	
9-7-603	Compliance Determination	<u>YN</u>	
9-7-604	Tune-Up Procedures	<u>YN</u>	
<b>BAAQMD Condition # 1993</b>			
part 1	Fuel oil #2 sulfur concentration limit (basis: Cumulative Increase)	Y	
part 2	Fuel oil #2 firing situational limit (basis: Cumulative Increase)	Y	
Part 3	Sulfur content certification or lab analysis (basis: Cumulative Increase)	Y	
Part 4	Records of fuel use and sulfur content records (basis: Cumulative Increase)	Y	
Part 5	<u>Maximum natural gas usage &lt; 550,368 therms/yr each</u>	<u>Y</u>	
Part 6	<u>Record of natural gas usage and operating hours</u>	<u>Y</u>	

## IV. Source-Specific Applicable Requirements

<sup>+</sup>—This section of the SIP rule has been removed from or revised in the current BAAQMD rule. Nevertheless, the source must comply with this SIP requirement until US EPA has reviewed and approved the District's revisions of the regulation.

**Table IV-B**  
**Source-specific Applicable Requirements**

**S-3: FERMENTER #1**

**S-4: FERMENTER #2**

**S-5: FERMENTER #3**

**S-6: FERMENTER #4**

**S-7: FERMENTER #5**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
<b>BAAQMD Regulation 8 Rule 2</b>	<b>Organic Compounds - Miscellaneous Operations (6/15/94)</b>		
8-2-111	Exemption - Food Preparation; Provided the best modern practices are used.	Y	
<b><u>40 CFR 63 Subpart CCCC</u></b>	<b><u>National Emission Standards for Hazardous Air Pollutants: Manufacturing of Nutritional Yeast</u></b>	<b><u>Y</u></b>	
<u>63.1 – 63.15</u>	<u>General Provisions</u>	<u>Y</u>	<u>5/21/04</u>
<u>63.2130</u>	<u>What is the purpose of this subpart?</u>	<u>Y</u>	<u>5/21/04</u>
<u>63.2131</u>	<u>Am I subject to this subpart?</u>	<u>Y</u>	<u>5/21/04</u>
<u>63.2132</u>	<u>What parts of the plant does this subpart cover?</u>	<u>Y</u>	<u>5/21/04</u>
<u>63.2133(b)</u>	<u>Compliance date</u>	<u>Y</u>	<u>5/21/04</u>
<u>63.2133(c)(1)</u>	<u>Compliance date for modified source</u>	<u>Y</u>	<u>5/21/04</u>
<u>63.2133(d)</u>	<u>Notification requirements</u>	<u>Y</u>	<u>5/21/04</u>
<u>63.2140</u>	<u>What emission limitations must I meet?</u>	<u>Y</u>	<u>5/21/04</u>
<u>63.2150</u>	<u>What are my general requirements for complying with this subpart?</u>	<u>Y</u>	<u>5/21/04</u>
<u>63.2160(a)</u>	<u>Initial compliance demonstration date</u>	<u>Y</u>	<u>5/21/04</u>
<u>63.2162(b)</u>	<u>Subsequent performance tests</u>	<u>Y</u>	<u>5/21/04</u>
<u>63.2163</u>	<u>If I monitor fermenter exhaust, what are my monitoring installation, operation, and maintenance requirements?</u>	<u>Y</u>	<u>5/21/04</u>
<u>63.2165</u>	<u>How do I demonstrate initial compliance with the emission limitations if I monitor fermenter exhaust?</u>	<u>Y</u>	<u>5/21/04</u>
<u>63.2170</u>	<u>How do I monitor and collect data to demonstrate continuous compliance?</u>	<u>Y</u>	<u>5/21/04</u>

## IV. Source-Specific Applicable Requirements

**Table IV-B**  
**Source-specific Applicable Requirements**

**S-3: FERMENTER #1**  
**S-4: FERMENTER #2**  
**S-5: FERMENTER #3**  
**S-6: FERMENTER #4**  
**S-7: FERMENTER #5**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
<a href="#">63.2171</a>	<a href="#">How do I demonstrate continuous compliance with the emission limitations?</a>	<u>Y</u>	<u>5/21/04</u>
<a href="#">63.2180</a>	<a href="#">What notifications must I submit and when?</a>	<u>Y</u>	<u>5/21/04</u>
<a href="#">63.2181</a>	<a href="#">What reports must I submit and when?</a>	<u>Y</u>	<u>5/21/04</u>
<a href="#">63.2182</a>	<a href="#">What records must I keep?</a>	<u>Y</u>	<u>5/21/04</u>
<a href="#">63.2183</a>	<a href="#">In what form and how long must I keep my records?</a>	<u>Y</u>	<u>5/21/04</u>
<a href="#">63.2190</a>	<a href="#">What parts of the General Provisions apply to me?</a>	<u>Y</u>	<u>5/21/04</u>
<a href="#">63.2191</a>	<a href="#">Who implements and enforces this subpart?</a>	<u>Y</u>	<u>5/21/04</u>
<a href="#">63.2192</a>	<a href="#">What definitions apply to this subpart?</a>	<u>Y</u>	<u>5/21/04</u>
<b>BAAQMD Condition # 12754</b>			
part 1a <sup>+</sup>	Fermenter gas carbon concentration limits (basis: Regulation 8-2-111, RACT)	Y	
part 1b	Fermenter airflow limits (basis: Regulation 8-2-111, RACT)	Y	
part 2	Fermenter off-property odor correction or abatement requirement (basis: Regulation 1-301)	N	
part 3	Records (basis: Regulation 2-6-501)	Y	
part 3a <sup>+</sup>	Fermenter exhaust gas carbon concentrations (basis: Regulation 8-2-111, RACT)	Y	
part 3b	Yeast production data and measurements (basis: AB-2588)	Y	
part 3c <sup>+</sup>	Monitor weekly calibration requirement (basis: Regulation 8-2-111, RACT)	Y	
<a href="#">Part 4</a>	<a href="#">Compliance with 40 CFR 63, Subpart CCCC</a>	<u>Y</u>	<u>5/21/04</u>
<a href="#">Part 5</a>	<a href="#">Maximum yeast production from each of the fermenters &lt; 4,200 tpy</a>	<u>Y</u>	

<sup>1</sup> Condition is federally enforceable only for volatile organic compound emissions, not for acetaldehyde emissions.

## **IV. Source-Specific Applicable Requirements**

## **V. SCHEDULE OF COMPLIANCE**

The permit holder shall comply with all applicable requirements cited in this permit. The permit holder shall also comply with applicable requirements that become effective during the term of this permit on a timely basis.

## VI. PERMIT CONDITIONS

Any condition that is preceded by an asterisk is not federally enforceable.

### A. Source Specific Permit Conditions

#### **Condition #1993**

**For: S-1: Boiler #1; S-2: Boiler #2**

1. The sulfur content in the fuel oil #2 used for firing in the boilers, S-1 and S-2, shall not exceed 0.4 percent, by weight. [basis: Cumulative Increase]
2. Fuel oil #2 shall be fired only in the event of gas curtailment or when the price of oil is lower than natural gas calculated as "dollars per million BTU" heat input. [basis: Cumulative Increase]
3. Every load of fuel oil #2 received onsite shall be accompanied by a vendor certification of sulfur content or the fuel oil shall be tested for sulfur content using a District-approved test method. [basis: Cumulative Increase]
4. Daily records of all fuel oil #2 usage and vendor certification or lab analysis of sulfur content for each load of fuel oil #2 received shall be maintained in a District approved log. The log shall be maintained for at least 5 years and shall be made available to the District upon request. [basis: Cumulative Increase; Regulation 2-6-501]
5. The maximum natural gas usage at each boiler, S-1 or S-2, shall not exceed 550,368 therms during any 12 consecutive month period. [basis: Cumulative increase, Regulation 2-1-234.3]
6. The following monthly records shall be maintained in a District-approved log for at least 5 years and shall be made available for District inspection upon request. [basis: Regulation 1-441]
  - a. Total hours of operation
  - b. Natural gas fuel usage.

## VI. Permit Conditions

### Condition #12754

**For: S-3: Fermenter #1**

**S-4: Fermenter #2**

**S-5: Fermenter #3**

**S-6: Fermenter #4**

**S-7: Fermenter #5**

- 1a.<sup>+</sup> The total carbon concentration in the exhaust gas from sources S-3, S-4, S-5, S-6 and S-7 shall not exceed the following limits as emitted, averaged over the batch duration. [basis: Regulation 8-2-111, RACT, [NESHAPS](#)]

Fermentation Type	Fermentation Products	Offgas VOC Concentration (as carbon)
Trade	Liquid Yeast for Sale	300 ppmv
First Generation	Pitch Yeast for Trade	450 ppmv
Stock	Pitch Yeast for First Generation	900 ppmv

- 1b. The annual fermenter airflow shall not exceed the following quantities:

Batch Type	Standard Cubic Feet/yr
Trade	7,558,394,235
Stock	241,471,470
1 <sup>st</sup> Generation	3,733,973,901

- \*2. Fermenters causing an off-property odor nuisance problem per District Regulations 7-302 or 1-301, shall be managed to reduce or contain odors to comply with District regulations. Within 72 hours of the nuisance, the owner/operator shall submit to the District, a summary of the problem(s) causing the odor and clearly outline all corrective and/or preventive measures taken. [basis: Regulation 1-301]

- ~~3.~~<sup>+</sup> The following records shall be maintained in a District approved log. These records shall be kept on site and made available for District inspection for at least 5 years from the date on which the record was made. [basis: Regulation 2-6-501, [NESHAPS](#)].

<sup>1</sup> ~~Condition is federally enforceable only for volatile organic compound emissions, not for acetaldehyde emissions.~~

## VI. Permit Conditions

**Condition #12754 for: S-3: Fermenter #1; S-4: Fermenter #2; S-5: Fermenter #3; S-6: Fermenter #4; S-7: Fermenter #5**

- a. The exhaust gas total carbon concentration shall be recorded, using a District approved monitor, at least once per hour during each fermentation batch, and the average carbon concentration shall be calculated and recorded for each batch. [basis: Regulation 8-2-111, RACT]
- b. All yeast production data and measurements needed to determine actual emissions from the facility annually. [basis: AB2588]
  - i) The number of each type of yeast batch (trade, stock, or first generation),
  - ii) The annual production of yeast from each type of fermentation process, and;
  - iii) The average air flow rate for each type of fermentation.
  - iv) The annual air flow rate for each type of fermentation.
- c. The VOC measuring instrument calibrations shall occur and be recorded at least once each week. [basis: Regulation 8-2-111, RACT]

4.4. Effective May 21, 2004, Sources S-3, S-4, S-5, S-6 and S-7 shall comply with all standards and requirements of NESHAPS 40 CFR 63, Subpart CCCC. [basis: NESHAPS]

5. The maximum yeast production from each of the fermenters (S-1, or S-2, or S-3, or S-4, or S-5) shall not exceed 4,200 ton/yr during any consecutive 12-month period. [basis: Cumulative Increase, Regulation 2-1-234.3]

### B. Facility-wide Permit Conditions

None.

## VII. APPLICABLE LIMITS & COMPLIANCE MONITORING REQUIREMENTS

This section has been included to summarize the applicable emission limits contained in Section IV, Source-Specific Applicable Requirements, of this permit. The following tables show the relationship between each emission limit and the associated compliance monitoring provisions, if any. The monitoring frequency column indicates whether periodic (P) or continuous (C) monitoring is required. For periodic monitoring, the frequency of the monitoring has also been shown using the following codes: annual (A), quarterly (Q), monthly (M), weekly (W), daily (D), or on an event basis (E). No monitoring (N) has been required if the current applicable rule or regulation does not require monitoring, and the operation is unlikely to deviate from the applicable emission limit based upon the nature of the operation.

**Table VII-A**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-1, BOILER #1**  
**S-2, BOILER #2**

<u>Type of Limit</u>	<u>Citation of Limit</u>	<u>FE Y/N</u>	<u>Future Effective Date</u>	<u>Limit</u>	<u>Monitoring Requirement Citation</u>	<u>Monitoring Frequency (P/C/N)</u>	<u>Monitoring Type</u>
SO <sub>2</sub>	BAAQMD Regulation 9-1-301	<del>Y</del>		GLC > 0.5 ppm continuously for 3 consecutive minutes or 0.25 ppm averaged over 60 consecutive minutes or 0.05 ppm averaged over 24 hrs	None	N	
	<del>SIP Regulation 9-1-301</del>	<del>Y</del>		<del>Federal std: GLC of 140 ppb, 24 hr average, once/yr and 30 ppb, annual average State std: GLC of 40 ppb, 24 hr average, and 250 ppb, 1 hr average</del>	<del>None</del>	<del>N</del>	
	BAAQMD Regulation 9-1-302	Y		≤ 300 ppm SO <sub>2</sub> , dry	None	N	
SO <sub>2</sub> <del>(cont'd.)</del>	BAAQMD Regulation 9-1-304	Y		≤ 0.5% by weight, fuel oil sulfur concentration	Condition #1993, Part 3	P/E	sulfur certification or analysis

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII-A**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-1, BOILER #1**  
**S-2, BOILER #2**

<u>Type of Limit</u>	<u>Citation of Limit</u>	FE Y/N	Future Effective Date	<u>Limit</u>	<u>Monitoring Requirement Citation</u>	<u>Monitoring Frequency (P/C/N)</u>	<u>Monitoring Type</u>
<a href="#">SO<sub>2</sub></a>	Condition #1993, part 1	Y		≤ 0.4% by weight, fuel oil sulfur concentration	Condition #1993, Part 3	P/E	sulfur certification or analysis
NO <sub>x</sub>	BAAQMD Regulation 9-7-305.1	<a href="#">NY</a>		150 ppmv dry, @ 3% O <sub>2</sub>	None	N	
	BAAQMD Regulation 9-7-306.1	<a href="#">NY</a>		150 ppmv dry, @ 3% O <sub>2</sub>	None	N	
CO	BAAQMD Regulation 9-7-305.2	<a href="#">NY</a>		400 ppmv dry, @ 3% O <sub>2</sub>	None	N	
	BAAQMD Regulation 9-7-306.2	<a href="#">NY</a>		400 ppmv dry, @ 3% O <sub>2</sub>	None	N	
NO <sub>x</sub> and CO	BAAQMD Regulation 9-7-304.1	<a href="#">NY</a>		≤ 3% O <sub>2</sub> , dry, volume basis, exhaust concentration	None	N	
	BAAQMD Regulation 9-7-306.3	<a href="#">NY</a>		48 hours non-gaseous fuel testing	Regulation 9-7-503.3	P/M	test records
<a href="#">Opacity</a>	<a href="#">BAAQMD 6-301</a>	<a href="#">Y</a>		<a href="#">Ringelmann 1 for no more than 3 minutes in any hour</a>		<a href="#">N</a>	
<a href="#">FP</a>	<a href="#">BAAQMD 6-310.3</a>	<a href="#">Y</a>		<a href="#">0.15 gr/dscf @ 6% O<sub>2</sub></a>		<a href="#">N</a>	
<a href="#">All Usage</a>	<a href="#">BAAQMD Condition # 1993, Part 5</a>	<a href="#">Y</a>		<a href="#">Max. natural gas usage &lt; 550,368</a>	<a href="#">BAAQMD Condition # 1993, Part 6</a>	<a href="#">P/M</a>	<a href="#">Records</a>

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII-B**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-3: FERMENTER #1, S-4: FERMENTER #2, S-5: FERMENTER #3,**  
**S-6: FERMENTER #4 AND S-7: FERMENTER #5**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
VOC and acetaldehyde	40 CFR 63, Subpart CCCC Sec. 63.2140 & BAAQMD Condition 12754 Part 4	Y	5/21/04	At least 98% of all batches in 12 months <del>does</del> shall not exceed 100 ppmv (C <sub>3</sub> ) last stage, 200 ppmv (C <sub>3</sub> ) second to last stage, 300 ppmv (C <sub>3</sub> ) third to last stage	40 CFR 63, Subpart CCCC Sec. 63.2163	C	Continuous Monitoring and records
VOC and acetaldehyde	BAAQMD Condition 12754 Part 1a	Y <sup>1</sup>		300 ppmv carbon trade yeast batch average, as emitted	BAAQMD Condition 12754 part 3a	P/E <sup>2</sup>	sampling and analysis
	BAAQMD Condition 12754 Part 1a	Y <sup>1</sup>		450 ppmv carbon first generation yeast batch average, as emitted	BAAQMD Condition 12754 part 3a	P/E <sup>2</sup>	sampling and analysis
	BAAQMD Condition 12754 Part 1a	Y <sup>1</sup>		900 ppmv carbon stock yeast batch average, as emitted	BAAQMD Condition 12754 part 3a	P/E <sup>2</sup>	sampling and analysis
VOC and acetaldehyde	BAAQMD Condition 12754 Part 5	Y		Max. yeast production < 4,200 tpy	BAAQMD Condition 12754 part 3b	P/M	Records

<sup>1</sup> Condition is federally enforceable only for volatile organic compound emissions, not for acetaldehyde emissions.

<sup>2</sup> hourly during each fermentation batch

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII-B**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-3: FERMENTER #1, S-4: FERMENTER #2, S-5: FERMENTER #3,**  
**S-6: FERMENTER #4 AND S-7: FERMENTER #5**

<u>Type of Limit</u>	<u>Citation of Limit</u>	FE Y/N	Future Effective Date	<u>Limit</u>	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
<a href="#">Air flow rates</a>	<a href="#">BAAQMD Condition 12754 Part 1b</a>	<a href="#">Y</a>		<a href="#">Air flow rates limits:</a> <a href="#">Trade &lt; 7,558,394,235 ft<sup>3</sup>/yr</a> <a href="#">Stock &lt; 241,471,470 ft<sup>3</sup>/yr</a> <a href="#">1<sup>st</sup> Generation &lt; 3,733,973,901 ft<sup>3</sup>/yr</a>	<a href="#">BAAQMD Condition 12754 part 3b</a>	<a href="#">P/A</a>	<a href="#">Record</a>

## VIII. TEST METHODS

The test methods associated with the emission limit of a District regulation are generally referenced in Section 600 *et seq.* of the regulation. The following table indicates only the test methods associated with the emission limits referenced in Section VII, Applicable Emission Limits & Compliance Monitoring Requirements, of this permit.

**Table VIII  
 Test Methods**

<b>Applicable Requirement</b>	<b>Description of Requirement</b>	<b>Acceptable Test Methods</b>
<a href="#">BAAQMD 6-301</a>	<a href="#">Ringelmann No. 1 Limitation</a>	<a href="#">Manual of Procedures, Volume I, Evaluation of Visible Emissions</a>
<a href="#">BAAQMD 6-310.3</a>	<a href="#">Particulate Weight Limitation</a>	<a href="#">Manual of Procedures, Volume IV, ST-15, Particulates Sampling</a>
BAAQMD Regulation 9-1-302	General Emission Limitation	Manual of Procedures, Volume IV, ST-19A, Sulfur Dioxide, Continuous Sampling, or ST-19B, Total Sulfur Oxides Integrated Sample
BAAQMD Regulation 9-1-304	Fuel Burning (Liquid and Solid Fuels)	Manual of Procedures, Volume III, Method 10, Determination of Sulfur in Fuel Oils.
BAAQMD Regulation 9-7-304.1	Low Fuel Usage Requirements, O <sub>2</sub> Operating Standard, O <sub>2</sub>	Manual of Procedures, Volume IV, ST-14, Oxygen, Continuous Sampling
BAAQMD Regulation 9-7-305.1	Natural Gas Curtailment Performance Standard, NO <sub>x</sub>	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
BAAQMD Regulation 9-7-305.2	Natural Gas Curtailment Performance Standard, CO	Manual of Procedures, Volume IV, ST-6, Carbon Monoxide, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
BAAQMD Regulation 9-7-306.1	Equipment Testing - Non-Gaseous Fuel NO <sub>x</sub> Performance Standard	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
BAAQMD Regulation 9-7-306.2	Equipment Testing - Non-Gaseous Fuel CO Performance Standard	Manual of Procedures, Volume IV, ST-6, Carbon Monoxide, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
<a href="#">40 CFR 63.2163</a>	<a href="#">Performance Evaluation of Continuous Monitor</a>	<a href="#">PS8 of 40 CFR 60, Appendix B, Calibration Drift Test for Flame Ionization Analyzer</a>
<a href="#">40 CFR</a>	<a href="#">Total Organic Concentration</a>	<a href="#">EPA Test Method 25A, Determination of Total Gaseous</a>

## VI. Test Methods

**Table VIII**  
**Test Methods**

Applicable Requirement	Description of Requirement	Acceptable Test Methods
<a href="#">63.2163</a>		<a href="#">Organic Concentration Using a Flame Ionization Analyzer</a>
BAAQMD Condition #1993, part 1	Fuel Oil #2 Sulfur Concentration Limit	Manual of Procedures, Volume III, Method 10, Determination of Sulfur in Fuel Oils
BAAQMD Condition 12754 part 1	Carbon Concentration Limits	1) BAAQMD Manual of Procedures, Volume IV, ST-7, or 2) EPA Method 25 or 25A

## **IX. GLOSSARY**

### **ACT**

Federal Clean Air Act

### **BAAQMD**

Bay Area Air Quality Management District

### **BACT**

Best Available Control Technology

### **Basis**

The underlying authority that allows the District to impose requirements.

### **CAA**

The federal Clean Air Act

### **CAAQS**

California Ambient Air Quality Standards

### **CEQA**

California Environmental Quality Act

### **CFR**

The Code of Federal Regulations. 40 CFR contains the implementing regulations for federal environmental statutes such as the Clean Air Act. Parts 50-99 of 40 CFR contain the requirements for air pollution programs.

### **CO**

Carbon Monoxide

### **Cumulative Increase**

The sum of permitted emissions from each new or modified source since a specified date pursuant to BAAQMD Rule 2-1-403, Permit Conditions (as amended by the District Board on 7/17/91) and SIP Rule 2-1-403, Permit Conditions (as approved by EPA on 6/23/95). Used to determine whether threshold-based requirements are triggered.

### **District**

The Bay Area Air Quality Management District

### **EPA**

The federal Environmental Protection Agency.

### **Excluded**

Not subject to any District regulations.

## **IX Glossary**

### **Federally Enforceable, FE**

All limitations and conditions which are enforceable by the Administrator of the EPA including those requirements developed pursuant to 40 CFR Part 51, subpart I (NSR), Part 52.21 (PSD), Part 60 (NSPS), Part 61 (NESHAPs), Part 63 (MACT), and Part 72 (Permits Regulation, Acid Rain), including limitations and conditions contained in operating permits issued under an EPA-approved program that has been incorporated into the SIP.

### **FP**

Filterable Particulate as measured by BAAQMD Method ST-15, Particulate.

### **HAP**

Hazardous Air Pollutant. Any pollutant listed pursuant to Section 112(b) of the Act. Also refers to the program mandated by Title I, Section 112, of the Act and implemented by 40 CFR Part 63.

### **Major Facility**

A facility with potential emissions of: (1) at least 100 tons per year of regulated air pollutants, (2) at least 10 tons per year of any single hazardous air pollutant, and/or (3) at least 25 tons per year of any combination of hazardous air pollutants, or such lesser quantity of hazardous air pollutants as determined by the EPA administrator.

### **MFR**

Major Facility Review. The District's term for the federal operating permit program mandated by Title V of the Federal Clean Air Act and implemented by District Regulation 2, Rule 6.

### **MOP**

The District's Manual of Procedures.

### **NAAQS**

National Ambient Air Quality Standards

### **NESHAPS**

National Emission Standards for Hazardous Air Pollutants. Contained in 40 CFR Parts 61 and 63

### **NMHC**

Non-methane Hydrocarbons (Same as NMOC)

### **NMOC**

Non-methane Organic Compounds (Same as NMHC)

### **NO<sub>x</sub>**

Oxides of nitrogen.

### **NSPS**

## IX. Glossary

Standards of Performance for New Stationary Sources. Federal standards for emissions from new stationary sources. Mandated by Title I, Section 111 of the Federal Clean Air Act, and implemented by 40 CFR Part 60 and District Regulation 10.

### **NSR**

New Source Review. A federal program for pre-construction review and permitting of new and modified sources of pollutants for which criteria have been established in accordance with Section 108 of the Federal Clean Air Act. Mandated by Title I of the Federal Clean Air Act and implemented by 40 CFR Parts 51 and 52 and District Regulation 2, Rule 2. (Note: There are additional NSR requirements mandated by the California Clean Air Act.)

### O<sub>2</sub>

### Oxygen

### **Offset Requirement**

A New Source Review requirement to provide federally enforceable emission offsets for the emissions from a new or modified source ~~and any pre-existing cumulative increase minus any on-site contemporaneous emission reduction credits~~. Applies to emissions of POC, NO<sub>x</sub>, PM<sub>10</sub>, and SO<sub>2</sub>.

### **Phase II Acid Rain Facility**

A facility that generates electricity for sale through fossil-fuel combustion and is not exempted by 40 CFR 72 from Titles IV and V of the Clean Air Act.

### **POC**

Precursor Organic Compounds

### **PM**

~~Total~~-Particulate Matter

### **PM<sub>10</sub>**

Particulate matter with aerodynamic equivalent diameter of less than or equal to 10 microns

### **PSD**

Prevention of Significant Deterioration. A federal program for permitting new and modified sources of those air pollutants for which the District is classified "attainment" of the National Air Ambient Quality Standards. Mandated by Title I of the Act and implemented by both 40 CFR Part 52 and District Regulation 2, Rule 2.

### **SIP**

State Implementation Plan. State and District programs and regulations approved by EPA and developed in order to attain the National Air Ambient Quality Standards. Mandated by Title I of the Act.

### **SO<sub>2</sub>**

## IX. Glossary

Sulfur dioxide

### THC

Total Hydrocarbons (NMHC + Methane)

### **Title V**

Title V of the federal Clean Air Act. Requires a federally enforceable operating permit program for major and certain other facilities.

### TOC

Total Organic Compounds (NMOC + Methane, Same as THC)

### TPH

Total Petroleum Hydrocarbons

### TRMP

Toxic Risk Management Plan

### TSP

Total Suspended Particulate

### **VOC**

Volatile Organic Compounds

### **Units of Measure:**

bhp	=	brake-horsepower
btu	=	British Thermal Unit
cfm	=	cubic feet per minute
g	=	grams
gal	=	gallon
gpm	=	gallons per minute
hp	=	horsepower
hr	=	hour
lb	=	pound
in	=	inches
max	=	maximum
m <sup>2</sup>	=	square meter
min	=	minute
mm	=	million
ppmv	=	parts per million, by volume
ppmw	=	parts per million, by weight
psia	=	pounds per square inch, absolute
psig	=	pounds per square inch, gauge

## **IX. Glossary**

scfm = standard cubic feet per minute  
yr = year

## **X. APPENDIX A - APPLICABLE STATE IMPLEMENTATION PLAN**

The Bay Area Air Quality Management District's portion of the State Implementation Plan can be found at EPA Region 9's website. The address is:

<http://yosemite1.epa.gov/r9/r9sips.nsf/California?ReadForm&Start=1&Count=30&Expand=3.1>