

Bay Area Air Quality Management District

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

Proposed

MAJOR FACILITY REVIEW PERMIT

Issued To:
Union Sanitary District
Facility #A1209

Facility Address:
5072 Benson Road
Union City, CA 94587

Mailing Address:
5072 Benson Road
Union City, CA 94587

Responsible Official
~~Stephen T. Hayashi~~ Richard B. Currie
(510) ~~790-0100~~ 477-7502

Facility Contact
James Chen
(510) ~~790-0100~~ 477-7500

Type of Facility:	Municipal Wastewater Treatment Plant (Publicly Owned Treatment Works)	<u>BAAQMD Engineering Division</u> <u>Contact</u>
Primary SIC:	4952	<u>[PSD Plant Engineer]</u> <u>Randy</u> <u>Frazier</u>
Product:	Treated Municipal Wastewater	

ISSUED BY THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT

~~Ellen Garvey~~ Jack P. Broadbent, Executive Officer/Air Pollution Control Officer

Date

TABLE OF CONTENTS

I.	STANDARD CONDITIONS.....	3
II.	EQUIPMENT LIST	7
III.	GENERAL APPLICABLE REQUIREMENTS	11
IV.	SOURCE-SPECIFIC APPLICABLE REQUIREMENTS.....	13
V.	SCHEDULE OF COMPLIANCE	26
VI.	PERMIT CONDITIONS	26
VII.	APPLICABLE LIMITS & COMPLIANCE MONITORING REQUIREMENTS....	41
VIII.	TEST METHODS	50
IX.	GLOSSARY	52
X.	APPENDIX A - STATE IMPLEMENTATION PLAN	57

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~~~~11/3/93~~);

SIP Regulation 1 - General Provisions and Definitions

(as approved by EPA through ~~6/288/27/99~~~~11/10/83~~);

BAAQMD Regulation 2, Rule 1 - Permits, General Requirements

(as amended by the District Board on ~~8/1/01~~~~6/7/95~~);

SIP Regulation 2, Rule 1 - Permits, General Requirements

(as approved by EPA through ~~1/262/25/99~~~~6/23/95~~);

BAAQMD Regulation 2, Rule 2 - Permits, New Source Review

(as amended by the District Board on ~~5/17/00~~~~6/7/95~~);

SIP Regulation 2, Rule 2 - Permits, New Source Review and Prevention of Significant Deterioration

(as approved by EPA through ~~1/262/25/99~~~~10/19/94~~);

BAAQMD Regulation 2, Rule 4 - Permits, Emissions Banking

(as amended by the District Board on ~~5/17/00~~~~6/15/94~~);

SIP Regulation 2, Rule 4 - Permits, Emissions Banking

(as approved by EPA through 1/26/99); and

BAAQMD Regulation 2, Rule 6 - Permits, Major Facility Review

(as amended by the District Board on ~~4/16/03~~).

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 5th 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 5th anniversary of issue date].** If the permit renewal has not been issued by [_____], but a complete application for renewal has been submitted in accordance with the above deadlines, the existing permit will continue in force until the District takes final action on the renewal application. (Regulation 2-6-307, 404.2, 407, & 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

I. Standard Conditions

Volume II, Part 3, §4.11)

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

I. Standard Conditions

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)

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-4	Reciprocating Engine, Rich burn	Waukesha IC Engine; Digester Gas Fueled	L5108G4	402 HP (Electrical Output = 300 KW)
S-5	Standby Engine/Generator #2	Waukesha; Diesel Fired		1115 1005 HP
S-6	Standby Engine/Generator #3	Waukesha; Diesel Fired		1115 1005 HP
S-14	Waste Gas Burner (Industrial Flare); Digester Gas Fired	Varee Digester Gas Burner	Varee	28 MM Btu/hr
S-15	Reciprocating Engine— Electrical /Generator #4, Rich Lean-Burn	Waukesha IC Engine; Digester Gas Fueled	9300 P9390G	1005 1000 HP (Electrical Output = 750 700 KW)
S-16	Reciprocating Engine/Generator #9, Lean Burn	Waukesha IC Engine, Digester Gas Fueled	L7042G	750 HP (Electrical Output = 535 KW)
S-30	Standby Engine/Generator #5	Cummins; Diesel Fired	KTA 38G1	1005 HP
S-31	Standby Engine/Generator #6	Cummins; Diesel Fired	KTA 38G1	1005 HP
S-40	Hot Water Sludge Heating Boiler #4	Weil McLain Steam Boiler; Digester Gas Fired, Front Firing, Forced Draft	R8-SG07GP101L H301R1	1.4 MM Btu/hr max
S-41	Hot Water Sludge Heating Boiler #5	Weil McLain Steam Boiler; Digester Gas Fired, Front Firing, Forced Draft	R8-SG07GP101L H301R1	1.4 MM Btu/hr max
S-42	Waste Gas Burner #3 (Industrial Flare)	Varee Varee; Digester Gas Fired	5,170,000 Btu/hr	5.17 MM Btu/hr
S-43	Hot Water Boiler #6 (digester gas, natural gas)	Cleaver-Brooks; Digester or Natural Gas	700-200-125/FGR	8370K Btu/hr max
S-44	Standby Engine/Generator #7	Caterpillar, Diesel Fired	3516	2578 HP
S-45	Standby Engine/Generator #8	Caterpillar, Diesel Fired	3516	2578 HP
S-100	Wastewater Treatment Plant	Custom	N/A	48 MM gal/day capacity
S-101	Gasoline Dispensing Island Facility G6873	Emco Wheaton	A3003/A3005	1,000 10,000 gal, 1 Nozzle
S-102	Diesel Storage Tank	Custom	N/A	10,000 gallon capacity, 7.11 ft diameter

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-110	Preliminary Treatment	Custom	N/A	48 MM gal/day capacity
S-111	Preliminary Treatment, 3 Barscreens	Custom	N/A	48 MM gal/day capacity
S-120	Primary Treatment	Custom	N/A	48 MM gal/day capacity
S-130	Secondary Treatment	Custom	N/A	48 MM gal/day capacity
S-131	Secondary Treatment	Custom	N/A	48 MM gal/day capacity
S-135	Secondary Treatment, INKA Process	Custom	N/A	48 MM gal/day capacity
S-140	Secondary Treatment; Clarifiers	Custom	N/A	48 MM gal/day capacity
S-145	Secondary Treatment, INKA Clarifiers	Custom	N/A	3.5 MM gal/day capacity
S-150	Disinfection	Custom	N/A	48 MM gal/day capacity
S-160	Sludge Handling Processes	Custom	N/A	3.56 MM gal/day capacity
S-161	Sludge Handling - Gravity Thickeners	Custom	N/A	3.56 MM gal/day capacity
S-162	Sludge Handling - Solids Handling Building	Custom	N/A	250,000 352,000 gal/day capacity
S-163	Sludge Handling - Pumping Station	Custom	N/A	43.2 MM gal/day capacity
S-164	Sludge Handling - Gravity Belt Thickeners	Custom	N/A	360,000 gal/day capacity
S-165	Water Reclamation	Custom	N/A	250,000 gal/day capacity
S-170	Anaerobic Digester	Custom	N/A	250,000 352,000 gal/day capacity

II. Equipment List

Table II B – Abatement Device

A-#	Description	Source(s) Controlled	Applicable Requirement	Operating Parameters	Required Efficiency
A-1	Permanganate Air Odor Scrubber	S-110 S-120	BAAQMD Reg. 1-301	none listed	N/A
A-2	Permanganate Air Odor Scrubber	S-110 S-120	BAAQMD Reg. 1-301	none listed	N/A
A-3	Permanganate Air Scrubber	S-160	BAAQMD Reg. 1-301	none listed	N/A
A-4	Permanganate Air Scrubber	S-160	BAAQMD Reg. 1-301	none listed	N/A
A-5	Turbulator	S-15		none listed	N/A
A-20	Atomizer Odor Scrubber	S-110	BAAQMD Reg. 1-301	none listed	N/A
A-21	Atomizer Odor Scrubber	S-120	BAAQMD Reg. 1-301	none listed	N/A
A-22	Atomizer Odor Scrubber	S-130 S-120	BAAQMD Reg. 1-301	none listed	N/A
A-23	Atomizer Odor Scrubber	S-120	BAAQMD Reg. 1-301	none listed	N/A
A-24	Atomizer Odor Scrubber	S-110, S-111	BAAQMD Reg. 1-301	none listed	N/A
A-25	Atomizer Odor Scrubber	S-110, S-111	BAAQMD Reg. 1-301	none listed	N/A
A-26	Atomizer Odor Scrubber	S-160, S-164	BAAQMD Reg. 1-301	none listed	N/A
A-27	Atomizer Odor Scrubber	S-160, S-164	BAAQMD Reg. 1-301	none listed	N/A
A-28	Atomizer Odor Scrubber	S-130	BAAQMD Reg. 1-301	none listed	N/A
A-29	Atomizer Odor Scrubber	S-130, S-131	BAAQMD Reg. 1-301	none listed	N/A
A-30	Atomizer Odor Scrubber	S-130, S-131	BAAQMD Reg. 1-301	none listed	N/A
A-31	Atomized Mist Scrubber	S-135	BAAQMD Reg. 1-301	No detection of odorous breakthrough	N/A

II. Equipment List

Table II B – Abatement Device

A-#	Description	Source(s) Controlled	Applicable Requirement	Operating Parameters	Required Efficiency
A-32	Atomizer <u>Odor</u> Scrubber	S-130 <u>S-131</u>	BAAQMD Reg. 1-301	none listed	N/A
A-33	Atomizer <u>Odor</u> Scrubber	S-160, S-161, S-163	BAAQMD Reg. 1-301	none listed	N/A
A-34	Atomizer <u>Odor</u> Scrubber	S-160, S-162	BAAQMD Reg. 1-301	none listed	N/A
A-35	Atomizer <u>Odor</u> Scrubber	S-160, S-162	BAAQMD Reg. 1-301	none listed	N/A
A-36	Atomizer Scrubber	S-160	BAAQMD Reg. 1-301	none listed	N/A
A-37	Soil Odor Scrubber	S-135	BAAQMD Reg. 1-301	No detection of odorous breakthrough	N/A
<u>A-401</u>	<u>Digester Gas Flare #1,</u> <u>4.7 MM Btu/hr</u>	<u>S-170</u>	<u>BAAQMD</u> <u>Reg. 1-301,</u> <u>8-2-301</u>	<u>None listed</u>	<u>< 15 lb/day &</u> <u>300 ppm C</u>
<u>A-402</u>	<u>Digester Gas Flare #2,</u> <u>4.7 MM Btu/hr</u>	<u>S-170</u>	<u>BAAQMD</u> <u>Reg. 1-301,</u> <u>8-2-301</u>	<u>None listed</u>	<u>< 15 lb/day &</u> <u>300 ppm C</u>
<u>A-403</u>	<u>Digester Gas Flare #3,</u> <u>5.17 MM Btu/hr</u>	<u>S-170</u>	<u>BAAQMD</u> <u>Reg. 1-301,</u> <u>8-2-301</u>	<u>None listed</u>	<u>< 15 lb/day &</u> <u>300 ppm C</u>

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. This section also contains provisions that may apply to temporary sources.

The dates in parentheses 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

~~Where an applicable requirement is a SIP requirement, the full language of the SIP requirement is included in Appendix A of this permit. The full language of SIP requirements is on EPA Region 9's website. The address is included in Section X 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	Federally Enforceable (Y/N)
BAAQMD Regulation 1	General Provisions and Definitions (5/2/0111/3/9311/3/93)	N
SIP Regulation 1	General Provisions and Definitions (6/28/9911/10/8211/10/82)	Y
<u>BAAQMD Regulation 2, Rule 1</u>	<u>General Requirements (8/1/01)</u>	<u>N</u>
<u>BAAQMD 2-1-429</u>	<u>Federal Emissions Statement (6/7/95)</u>	<u>Y</u>
<u>SIP Regulation 2, Rule 1</u>	<u>General Requirements (1/26/99)</u>	<u>Y</u>
BAAQMD Regulation 4	Air Pollution Episode Plan (3/20/91)	N
SIP Regulation 4	Air Pollution Episode Plan (8/06/90)	Y

III. General Applicable Requirements

**Table III
 Generally Applicable Requirements**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)
BAAQMD Regulation 5	Open Burning (3/6/02 11/2/94 11/2/94)	N
SIP Regulation 5	Open Burning (9/4/98 5/3/84 5/3/84)	Y
BAAQMD Regulation 6	Particulate Matter and Visible Emissions (12/19/90)	Y N
SIP Regulation 6	Particulate Matter and Visible Emissions (5/3/84)	Y
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 2	Organic Compounds - Miscellaneous Operations (6/15/94)	Y
BAAQMD Regulation 8, Rule 3	Organic Compounds - Architectural Coatings (11/21/01 12/20/95 12/20/95)	N
SIP Regulation 8, Rule 3	Organic Compounds - Architectural Coatings (2/18/98 11/16/83 11/16/83)	Y
<u>BAAQMD Regulation 8, Rule 40</u>	<u>Organic Compounds – Aeration of Contaminated Soil and Removal of Underground Storage Tanks (12/15/99)</u>	<u>Y</u>
<u>BAAQMD Regulation 8, Rule 47</u>	<u>Organic Compounds - Air Stripping and Soil Vapor Extraction Operations (6/15/94)</u>	<u>Y</u>
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 7/17/02)	N
<u>SIP Regulation 8, Rule 51</u>	<u>Organic Compounds - Adhesive and Sealant Products (2/26/02)</u>	<u>Y</u>
BAAQMD Regulation 9, Rule 1	Inorganic Gaseous Pollutants - Sulfur Dioxide (3/15/95)	Y
SIP Regulation 9, Rule 1	Inorganic Gaseous Pollutants – Sulfur Dioxide (5/3/84)	Y
BAAQMD Regulation 9, Rule 2	Inorganic Gaseous Pollutants - Hydrogen Sulfide (3/17/82)	
BAAQMD Regulation 11, Rule 2	Hazardous Pollutants - Asbestos Demolition, Renovation and Manufacturing (12/4/91)	Y
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
<u>California Health and Safety Code Section 44300 et seq.</u>	<u>Air Toxics “Hot Spots” Information and Assessment Act of 1987</u>	<u>N</u>
<u>40 CFR Part 61, Subpart M</u>	<u>National Emission Standards for Hazardous Air Pollutants – National Emission Standard for Asbestos (6/19/95)</u>	<u>Y</u>

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 parentheses 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 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-4, RECIPROCATING ENGINE, DIGESTER GAS FIRED~~

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 9, Rule 8	Inorganic Gaseous Pollutants – Nitrogen Oxides and Carbon Monoxide from Stationary Internal Combustion Engines (1/20/93)		
9-8-302	Emission Limits – Waste Derived Fuel Gas	N	
9-8-302.2	NOx Limits for Rich Burn Engines	N	
9-8-302.3	CO Limits	N	
BAAQMD Condition #14853			
part 1	Periodic monitoring (basis: Regulation 2-6-409.2)	Y	

Table IV-A
Source-specific Applicable Requirements
S-5, STANDBY ENGINE/GENERATOR #2, DIESEL FIRED
S-6 STANDBY ENGINE/GENERATOR #3, DIESEL FIRED
S-30 STANDBY ENGINE/GENERATOR #5, DIESEL FIRED
S-31 STANDBY ENGINE/GENERATOR #6, DIESEL FIRED
S-44 STANDBY ENGINE/GENERATOR #7, DIESEL FIRED
S-45 STANDBY ENGINE/GENERATOR #8, DIESEL FIRED

<u>Applicable Requirement</u>	<u>Regulation Title or Description of Requirement</u>	<u>Federally Enforceable (Y/N)</u>	<u>Future Effective Date</u>
<u>BAAQMD Regulation 6</u>	<u>Particulate Matter and Visible Emissions (12/19/90)</u>		
6-303	<u>Ringelmann No. 2 Limitation</u>	<u>Y</u>	
6-305	<u>Visible Particulates</u>	<u>Y</u>	
6-310	<u>Particulate Weight Limitation</u>	<u>Y</u>	
6-401	<u>Appearance of Emissions</u>	<u>Y</u>	
<u>BAAQMD Regulation 9, Rule 1</u>	<u>Inorganic Gaseous Pollutants, Sulfur Dioxide (3/15/95)</u>		
9-1-301	<u>Limitations on Ground Level Concentrations</u>	<u>Y</u>	
9-1-304	<u>Fuel Burning (Liquid and Solid Fuels)</u>	<u>Y</u>	
<u>BAAQMD Regulation 9, Rule 8</u>	<u>Inorganic Gaseous Pollutants - Nitrogen Oxides and Carbon Monoxide from Stationary Internal Combustion Engines (1/20/93)</u>		
9-8-110.4	<u>Exemption from 9-8-301, 302, 502 Standards, Emergency Standby Engines</u>	<u>N</u>	
9-8-330	<u>Hours of Operation, Emergency Standby Engines</u>	<u>N</u>	
9-8-331	<u>Hours of Operation, Essential Public Service Standby Engines</u>	<u>N</u>	
9-8-530	<u>Monitoring and Recordkeeping, Emergency Standby Engines</u>	<u>N</u>	
<u>BAAQMD Condition #17712</u>			
<u>Part 1</u>	<u>Hours of Operation (9-8-331)</u>	<u>Y</u>	
<u>Part 2</u>	<u>Definition: Emergency Operation (9-8-231)</u>	<u>Y</u>	
<u>Part 3</u>	<u>Definition: Reliability-Related Operation (9-8-232)</u>	<u>Y</u>	
<u>Part 4</u>	<u>Monitoring Equipment (9-8-530)</u>	<u>Y</u>	
<u>Part 5(a)</u>	<u>Limitations on Diesel Fuel Sulfur Content (9-1-304)</u>	<u>Y</u>	
<u>Part 5(b)</u>	<u>Diesel Fuel Delivery Records to State Sulfur Content (2-6-409.2; 2-6-501)</u>	<u>Y</u>	
<u>Part 6</u>	<u>Recordkeeping (9-8-530)</u>	<u>Y</u>	

Table IV-B
Source-specific Applicable Requirements
S-15, RECIPROCATING ENGINE/GENERATOR #4, DIGESTER GAS FIRED

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
<u>BAAQMD Regulation 6</u>	<u>Particulate Matter and Visible Emissions (12/19/90)</u>		
<u>6-301</u>	<u>Ringelmann No. 1 Limitation</u>	<u>Y</u>	
<u>6-305</u>	<u>Visible Particulates</u>	<u>Y</u>	
<u>6-310</u>	<u>Particulate Weight Limitation</u>	<u>Y</u>	
<u>6-310.3</u>	<u>Particulate concentration corrected to 6% oxygen, dry basis</u>	<u>Y</u>	
<u>6-401</u>	<u>Appearance of Emissions</u>	<u>Y</u>	
<u>BAAQMD Regulation 8, Rule 2</u>	<u>Organic Compounds, Miscellaneous Operations (6/15/94)</u>		
<u>8-2-301</u>	<u>Limitations on Total Carbon Emissions</u>	<u>Y</u>	
<u>BAAQMD Regulation 9, Rule 1</u>	<u>Inorganic Gaseous Pollutants, Sulfur Dioxide (3/15/95)</u>		
<u>9-1-301</u>	<u>Limitations on Ground Level Concentrations</u>	<u>Y</u>	
<u>9-1-302</u>	<u>General Emission limitations</u>	<u>Y</u>	
<u>BAAQMD Regulation 9, Rule 8</u>	<u>Inorganic Gaseous Pollutants - Nitrogen Oxides and Carbon Monoxide from Stationary Internal Combustion Engines (1/20/93)</u>		
<u>9-8-302</u>	<u>Emission Limits - Waste Derived Fuel Gas</u>	N	
<u>9-8-302.2</u>	<u>NOx Limits for Rich Burn Engines</u>	N	
<u>9-8-302.1</u>	<u>NOx Limits for Lean Burn Engines</u>	<u>N</u>	
<u>9-8-302.3</u>	<u>CO Limits</u>	N	
<u>BAAQMD Cond. 457</u>			
<u>Part 1</u>	<u>NOx Emission Rate (Cumulative Increase)</u>	<u>Y</u>	
<u>Part 2</u>	<u>CO Emission Limit (Cumulative Increase)</u>	<u>Y</u>	
<u>Part 3</u>	<u>Engine Control & Operation (Cumulative Increase)</u>	<u>Y</u>	
<u>Part 4</u>	<u>Periodic Monitoring (basis: Regulation 2-6-409.2)</u>	<u>Y</u>	
<u>BAAQMD Cond 21298</u>			
<u>Part 1</u>	<u>Allowable Fuel: Digester Gas Only (Cumulative Increase)</u>	<u>Y</u>	

Table IV-B
Source-specific Applicable Requirements
S-15, RECIPROCATING ENGINE/GENERATOR #4, DIGESTER GAS FIRED

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Part 2	Thermal Capacity Limitations (Cumulative Increase)	<u>Y</u>	
Part 3	NOx Limit (Cumulative Increase)	<u>Y</u>	
Part 4	CO Limits (BACT) Emission Limits (BACT)	<u>Y</u>	
Part 5	Fuel Flow Meter Requirements to Demonstrate Compliance with part 2-Thermal Capacity (Cumulative Increase)	<u>Y</u>	
Part 6	Control of Excess Digester Gas (1-301) Visible Emissions Limitation (Cumulative Increase)	<u>Y</u>	
Part 7	Annual Performance Test Requirements (2-6-409)	<u>Y</u>	
Part 8	Recordkeeping (2-6-409)	<u>Y</u>	

Table IV-C
Source-specific Applicable Requirements
S-16, RECIPROCATING ENGINE/GENERATOR #9, DIGESTER GAS FIRED

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
<u>BAAQMD Regulation 6</u>	<u>Particulate Matter and Visible Emissions (12/19/90)</u>		
<u>6-301</u>	<u>Ringelmann No. 1 Limitation</u>	<u>Y</u>	
<u>6-305</u>	<u>Visible Particulates</u>	<u>Y</u>	
<u>6-310</u>	<u>Particulate Weight Limitation</u>	<u>Y</u>	
<u>6-310.3</u>	<u>Particulate concentration corrected to 6% oxygen, dry basis</u>	<u>Y</u>	
<u>6-401</u>	<u>Appearance of Emissions</u>	<u>Y</u>	
<u>BAAQMD Regulation 8, Rule 2</u>	<u>Organic Compounds, Miscellaneous Operations (6/15/94)</u>		
<u>8-2-301</u>	<u>Limitations on Total Carbon Emissions</u>	<u>Y</u>	
<u>BAAQMD Regulation 9, Rule 1</u>	<u>Inorganic Gaseous Pollutants, Sulfur Dioxide (3/15/95)</u>		
<u>9-1-301</u>	<u>Limitations on Ground Level Concentrations</u>	<u>Y</u>	
<u>9-1-302</u>	<u>General Emission limitations</u>	<u>Y</u>	
<u>BAAQMD Regulation 9, Rule 8</u>	<u>Inorganic Gaseous Pollutants - Nitrogen Oxides and Carbon Monoxide from Stationary Internal Combustion Engines (1/20/93)</u>		
<u>9-8-302</u>	<u>Emission Limits - Waste Derived Fuel Gas</u>	N	
<u>9-8-302.1</u>	<u>NOx Limits for Lean Burn Engines</u>	<u>N</u>	
<u>9-8-302.3</u>	<u>CO Limits</u>	N	
<u>BAAQMD Cond 20905</u>			
<u>Part 1</u>	<u>Allowable Fuel: Digester Gas Only (Cumulative Increase)</u>	<u>Y</u>	
<u>Part 2</u>	<u>Thermal Capacity Limitations (Cumulative Increase)</u>	<u>Y</u>	
<u>Part 3</u>	<u>NOx Limit (BACT)</u>	<u>Y</u>	
<u>Part 4</u>	<u>CO Limits (BACT) Emission Limits (BACT)</u>	<u>Y</u>	
<u>Part 5</u>	<u>Fuel Flow Meter Requirements to Demonstrate Compliance with part 2-Thermal Capacity (Cumulative Increase)</u>	<u>Y</u>	
<u>Part 6</u>	<u>Control of Excess Digester Gas (1-301)</u>	<u>Y</u>	
<u>Part 7</u>	<u>Annual Performance Test Requirements (2-6-409)</u>	<u>Y</u>	
<u>Part 8</u>	<u>Recordkeeping (2-6-409)</u>	<u>Y</u>	

Table IV-D
Source-specific Applicable Requirements
S-40 HOT WATER SLUDGE HEATING BOILER, STAND-BY SERVICE
S-41 HOT WATER SLUDGE HEATING BOILER, STAND-BY SERVICE

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 6	Particulate Matter and Visible Emissions (12/19/90)		
6-301	Ringelmann No. 1 Limitation	Y	
6-305	Visible Particulates	Y	
6-310	Particulate Weight Limitation	Y	
<u>6-310.3</u>	<u>Particulate Concentration Correction to 6% Oxygen, Dry</u>	<u>Y</u>	
6-401	Appearance of Emissions	Y	
<u>BAAQMD Regulation 8, Rule 2</u>	<u>Organic Compounds, Miscellaneous Operations (6/15/94)</u>		
8-2-301	<u>Limitations on Total Carbon Emissions</u>	<u>Y</u>	
BAAQMD Regulation 9, Rule 1	Inorganic Gaseous Pollutants, Sulfur Dioxide (3/15/95)		
9-1-301	Limitations on Ground Level Concentrations	Y	
9-1-302	General Emission limitations	Y	
BAAQMD Regulation 9, Rule 7	Inorganic Gaseous Pollutants - Nitrogen Oxides and Carbon Monoxide from Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters (9/15/93)		
9-7-111	<u>Limited Exemption, Low Fuel Usage</u>	<u>N</u> <u>Y</u>	
9-7-304	Low Fuel Usage Requirement	<u>N</u> <u>Y</u>	
9-7-304.2	<u>Annual Tune Up Requirement</u>	<u>Y</u>	
<u>9-7-504</u>	<u>Monitoring & Records</u>	<u>Y</u>	
BAAQMD Cond. 389			
Part 1	Stack gas O2 (Reg. 9-7-304)	N	
<u>BAAQMD Cond 20796</u>			
<u>Part 1</u>	<u>Allowable fuel (Cumulative Increase)</u>	<u>Y</u>	
<u>Part 2</u>	<u>Annual Inspection & Tune Up (9-7-304.2)</u>	<u>Y</u>	
<u>Part 3</u>	<u>Tune Up Documentation (9-7-503.1)</u>	<u>Y</u>	

**Table IV-E
 Source-specific Applicable Requirements
 S-43, HOT WATER BOILER, DIGESTER OR NATURAL GAS FIRED**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
<u>BAAQMD Regulation 6</u>	<u>Particulate Matter and Visible Emissions (12/19/90)</u>		
<u>6-301</u>	<u>Ringelmann No. 1 Limitation</u>	<u>Y</u>	
<u>6-305</u>	<u>Visible Particulates</u>	<u>Y</u>	
<u>6-310</u>	<u>Particulate Weight Limitation</u>	<u>Y</u>	
<u>6-310.3</u>	<u>Particulate Concentration Correction to 6% Oxygen, Dry</u>	<u>Y</u>	
<u>6-401</u>	<u>Appearance of Emissions</u>	<u>Y</u>	
<u>BAAQMD Regulation 8, Rule 2</u>	<u>Organic Compounds, Miscellaneous Operations (6/15/94)</u>		
<u>8-2-301</u>	<u>Limitations on Total Carbon Emissions</u>	<u>Y</u>	
<u>BAAQMD Regulation 9, Rule 1</u>	<u>Inorganic Gaseous Pollutants, Sulfur Dioxide (3/15/95)</u>		
<u>9-1-301</u>	<u>Limitations on Ground Level Concentrations</u>	<u>Y</u>	
<u>9-1-302</u>	<u>General Emission limitations</u>	<u>Y</u>	
<u>BAAQMD Regulation 9, Rule 7</u>	<u>Inorganic Gaseous Pollutants - Nitrogen Oxides and Carbon Monoxide from Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters (9/15/93)</u>		
<u>9-7-301.1</u>	<u>Emission Limits - Gaseous Fuel - NO_x</u>	<u>N</u>	
<u>9-7-301.2</u>	<u>Emission Limits - Gaseous Fuels - CO</u>	<u>N</u>	
<u>9-7-304</u>	<u>Low Fuel Usage Requirements</u>	<u>NY</u>	
<u>9-7-304.2</u>	<u>Annual Tune Up Requirement</u>	<u>Y</u>	
<u>9-7-402</u>	<u>Compliance Schedule - Low Fuel Usage Requirements</u>	<u>YN</u>	
<u>9-7-503</u>	<u>Records</u>	<u>YN</u>	
<u>BAAQMD Cond 9238</u>			
<u>part 1</u>	<u>Fuel throughput (Cumulative Increase)</u>	<u>Y</u>	
<u>part 2</u>	<u>NO_x Limit (BACT)</u>	<u>Y</u>	
<u>part 3</u>	<u>H₂S Limit from Scrubbers (BACT)</u>	<u>Y</u>	
<u>part 4</u>	<u>Protocol for source testing (BACT)</u>	<u>Y</u>	
<u>part 5</u>	<u>Records (BACT)</u>	<u>Y</u>	
<u>BAAQMD Cond 18803</u>			
<u>Part 1</u>	<u>Allowable Fuel: Digester Gas or Natural Gas (Cumulative Increase)</u>	<u>Y</u>	
<u>Part 2</u>	<u>Fuel throughput (Cumulative Increase)</u>	<u>Y</u>	

Table IV-E
Source-specific Applicable Requirements
S-43, HOT WATER BOILER, DIGESTER OR NATURAL GAS FIRED

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Part 3	NOx, CO, Limits (BACT)	<u>Y</u>	
Part 4	Annual Inspection & Tune Up (9-7-304.2)	<u>Y</u>	
Part 5	Records (BACT)	<u>Y</u>	

Table IV-F
Source-specific Applicable Requirements
S-100, MUNICIPAL WASTEWATER TREATMENT PLANT

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 8, Rule 2	Organic Compounds-Miscellaneous Operation (6/15/94)	Y	
8-2-301	Miscellaneous Operations	Y	
BAAQMD Cond 9236			
part 1	Consequences of odor complaints (Reg. 1-301; Public Nuisance)	N	

Table IV-G
Source-specific Applicable Requirements
S-101, GASOLINE DISPENSING ISLAND FACILITY G6873

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 8, Rule 7	Organic Compounds - Gasoline Dispensing Facilities (11/6/02 6/1/94)		
8-7-113	Tank Gauging and Inspection Exemption	<u>Y</u>	
8-7-114	Stationary Tank Testing Exemption	<u>Y</u>	
8-7-116	Periodic Testing Requirements Exemption	<u>N</u>	

Table IV-IG
Source-specific Applicable Requirements
S-101, GASOLINE DISPENSING ISLAND FACILITY G6873

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-7-301	Phase I Requirements	Y	
8-7-301.1	Requirement for CARB Phase I System <u>Transfers into Stationary Tanks, Cargo Tanks, and Mobile Refuelers</u>	Y	
8-7-301.2	Installation of Phase I Equipment per CARB Requirements <u>Carb Certification Requirements</u>	Y	
8-7-301.3	Submerged Fill Pipes <u>Requirement</u>	Y	
8-7-301.5	Maintenance of Phase I Equipment per Manufacturers Guidelines <u>and Operating Requirement</u>	Y	
8-7-301.6	Leak-Free <u>and Vapor-Tight Requirement for Components</u>	Y	
8-7-301.7	Poppeted Drybreaks Fitting <u>Requirements for Vapor Return Line</u>	Y	
8-7-301.8	<u>Coaxial Phase I Systems Certified by CARB prior to January 1, 1994 may not be installed on New or Modified Systems</u>	<u>Y</u>	
8-7-301.9	<u>Anti-rotational Coupler or Swivel Adapter Required</u>	<u>Y</u>	
8-7-301.10	<u>Vapor Recovery Efficiency Requirements for New and Modified Systems</u>	<u>Y</u>	
8-7-301.12	<u>Spill Box Drain Valve Limitation</u>	<u>Y</u>	
8-7-301.13	<u>Annual Vapor Tightness Test Requirement</u>	<u>N</u>	
8-7-302	Phase II Requirements	Y	
8-7-302.1	Requirement for CARB Certified Phase II System <u>Transfers into Motor Vehicle Fuel Tanks</u>	Y	
8-7-302.2	Maintenance of Phase II System per CARB Requirements	Y	
8-7-302.3	Maintenance of All Equipment as Specified by Manufacturer <u>Proper Operation and Free of Defects Requirements</u>	<u>N</u>	
8-7-302.4	Repair of Defective Parts Within 7 Days <u>Time Limit for Defective Components</u>	<u>N</u>	
8-7-302.5	Leak-Free <u>and Vapor-Tight Requirement for Components</u>	Y	
8-7-302.6	<u>Requirements for Bellows Nozzles</u>	<u>Y</u>	
8-7-302.7	<u>Requirements for Vapor Recovery Nozzles on Balance Systems</u>	<u>Y</u>	
8-7-302.8	<u>Minimum Liquid Removal Rate</u>	<u>Y</u>	
8-7-302.9	<u>Coaxial Hose Requirement</u>	<u>Y</u>	
8-7-302.10	<u>Construction Materials Specifications</u>	<u>N</u>	
8-7-302.12	<u>Liquid Retain Limitation</u>	<u>N</u>	
8-7-302.13	<u>Nozzle Spitting Limitation</u>	<u>N</u>	

Table IV-IG
Source-specific Applicable Requirements
S-101, GASOLINE DISPENSING ISLAND FACILITY G6873

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-7-302.14	Annual Back Pressure Test Requirements for Balance Systems	<u>N</u>	
8-7-302.15	Annual Testing Requirements for Vacuum Assist Systems	<u>N</u>	
8-7-303	Topping Off	Y	
8-7-304	Certification Requirements	Y	
8-7-306	Prohibition of Use	Y <u>N</u>	
8-7-307	Posting of Operating Instructions	Y	
8-7-308	Operating Practices	Y	
8-7-309	Contingent Vapor Recovery Requirements	Y	
8-7-312	Removal of Gasoline	Y	
8-7-313	Requirements for New or Modified Phase II Installations	<u>Y</u>	
8-7-314	Hold Open Latch Requirements	<u>Y</u>	
8-7-316	Pressure Vacuum Valve Requirements, Aboveground Storage Tanks and Vaulted Below Grade Storage Tanks	<u>Y</u>	
8-7-401	Equipment Installation and Modification	Y	
8-7-404	Certification of New Installations	Y	
8-7-406	Testing Requirements, New and Modified Installations	<u>Y</u>	
8-7-407	Periodic Testing Requirements	<u>N</u>	
8-7-408	Periodic Testing Notification and Submission Requirements	<u>N</u>	
8-7-501	Burden of Proof	Y	
8-7-502	Right of Access	Y	
8-7-503	Recordkeeping Requirements	<u>Y</u>	
8-7-503.1	Gasoline Throughput Records	<u>Y</u>	
8-7-503.2	Maintenance Records	<u>Y</u>	
8-7-503.3	Records Retention Time	<u>N</u>	
SIP Regulation 8, Rule 7	Organic Compounds, Gasoline Dispensing Facilities (7/25/2001)		
8-7-302.3	Proper Operation and Free of Defects Requirements	<u>Y</u> ¹	
8-7-302.4	Repair Time Limit for Defective Components	<u>Y</u> ¹	
8-7-302.10	Construction Materials Specifications	<u>Y</u> ¹	
8-7-302.12	Liquid Retain Limitation	<u>Y</u> ¹	
8-7-302.13	Nozzle Spitting Limitation	<u>Y</u> ¹	
8-7-306	Prohibition of Use	<u>Y</u> ¹	

Table IV-IG
Source-specific Applicable Requirements
S-101, GASOLINE DISPENSING ISLAND FACILITY G6873

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-7-503.3	Records Retention Time	Y¹	
BAAQMD Condition # 14098	Gasoline Throughput Limit (Toxic Risk Management Policy)	N	

Table IV-FH
Source-specific Applicable Requirements
S-110, PRELIMINARY TREATMENT
S-111, PRELIMINARY TREATMENT, 3 BARSCREENS
S-120, PRIMARY TREATMENT
S-130, S-131, SECONDARY TREATMENT
S-140, SECONDARY TREATMENT
S-150, DISINFECTION
~~**S-160 SLUDGE HANDLING PROCESSES**~~
~~**S-161, SLUDGE HANDLING-GRAVITY THICKENERS**~~
S-162, SLUDGE HANDLING – SOLIDS HANDLING BUILDING
~~**S-163, SLUDGE HANDLING-PUMPING STATION**~~
S-164, SLUDGE HANDLING-GRAVITY BELT THICKENERS
S-170, ANAEROBIC DIGESTER

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 8, Rule 2	Organic Compounds-Miscellaneous Operation (6/15/94)	Y	
8-2-301	Miscellaneous Operations	Y	

Table IV-G
~~**Source-specific Applicable Requirements**~~
~~**S-135 SECONDARY TREATMENT (INKA)**~~

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 8, Rule 2	Organic Compounds-Miscellaneous Operation (6/15/94)	Y	
8-2-301	Miscellaneous Operations	Y	
BAAQMD Cond 9236			
part 1	Atomized-Scrubber Abatement (Reg. 1-301; Public Nuisance)	N	
part 2	Consequences of detection of odors (Reg. 1-301; Public Nuisance)	N	

Table IV-H
Source-specific Applicable Requirements
S-165 WATER RECLAMATION (0.25 MGD)

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 8, Rule 2	Organic Compounds Miscellaneous Operation (6/15/94)	Y	
8-2-301	Miscellaneous Operations	Y	
BAAQMD Cond 11145			
part 1	Water throughput (Cumulative Increase)	Y	
part 2	Records (Cumulative Increase)	Y	
part 3	Prohibition of odors (Reg. 1-301; Public Nuisance)	N	
part 4	Consequences of public nuisance odors (Reg. 1-301; Public Nuisance)	N	

Table IV-F1
Source-specific Applicable Requirements
S-170 ANAEROBIC DIGESTERS

<u>Applicable Requirement</u>	<u>Regulation Title or Description of Requirement</u>	<u>Federally Enforceable (Y/N)</u>	<u>Future Effective Date</u>
<u>BAAQMD Regulation 8, Rule 2</u>	<u>Organic Compounds, Miscellaneous Operations (6/15/94)</u>		
<u>8-2-301</u>	<u>Limitations on Total Carbon Emissions</u>	<u>Y</u>	
<u>BAAQMD Cond 18785</u>			
<u>Part 1</u>	<u>Primary Abatement of Digester Gas (1-301)</u>	<u>N</u>	
<u>Part 2</u>	<u>Secondary Abatement of Digester Gas (Cumulative Increase)</u>	<u>Y</u>	
<u>Part 3</u>	<u>Digester Gas Sulfide ppm Limit (BACT)</u>	<u>Y</u>	
<u>Part 4</u>	<u>Monthly Sulfide Content Monitoring (9-1-302)</u>	<u>Y</u>	
<u>Part 5</u>	<u>Recordkeeping (2-6-409.2)</u>	<u>Y</u>	

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.

~~The permit holder shall continue to comply with all applicable requirements cited in Parts III and IV of this permit. The permit holder shall also comply with applicable requirements that become effective during the term of this permit.~~

VI. PERMIT CONDITIONS

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

~~A. Source Specific Permit Conditions~~

The following table lists the sources in order with their current and future condition status

<u>Source Number(s)</u>	<u>Current Condition No</u>	<u>Post-Permit Cond No.</u>
<u>4</u>	<u>14853</u>	<u>archived</u>
<u>5</u>	<u>None</u>	<u>17712</u>
<u>6</u>	<u>None</u>	<u>17712</u>
<u>15</u>	<u>457 (17987)</u>	<u>21298</u>
<u>16</u>	<u>(17987)</u>	<u>20905</u>
<u>30</u>	<u>None</u>	<u>17712</u>
<u>31</u>	<u>None</u>	<u>17712</u>
<u>40</u>	<u>389</u>	<u>20796</u>
<u>41</u>	<u>389</u>	<u>20796</u>
<u>43</u>	<u>9238</u>	<u>18803</u>
<u>44</u>	<u>None</u>	<u>17712</u>
<u>45</u>	<u>None</u>	<u>17712</u>
<u>100</u>	<u>9236</u>	<u>9236</u>
<u>101</u>	<u>none</u>	<u>14098</u>
<u>135</u>	<u>9728</u>	<u>archived</u>
<u>165</u>	<u>11145</u>	<u>archived</u>
<u>170</u>	<u>none</u>	<u>18785</u>

All conditions referenced above are listed in condition numerical order as follows. This note will be deleted before final issuance of the permit.

Condition #389 (Condition 389 was replaced by Condition 20796. See Statement of Basis for a detailed explanation)

VI. Permit Conditions

~~For Sources S-40 and S-41 (Hot Water Sludge Heating Boilers
— # 4 & #5 respectively)~~

- ~~*1. S-40 and S-41 shall meet one of the following: a)
— Operate in a manner that maintain stack gas oxygen
— concentrations at less than or equal to 3 percent by
— volume on a dry basis; or b) Tune at a frequency of at
— least once every twelve months by a technician as
— directed by the BAAQMD Manual of Procedures, Volume I,
— Chapter 5 (Basis: BAAQMD Regulation 9-7-304)~~

**Condition #457 --(Condition 457 was replaced by Condition 17987 per AN 2437, and
Condition 17987 is being replaced by Condition 20905, as part of this Title V renewal
permit. These changes are explained in detail in the Statement of Basis)**

~~— For S-15 Reciprocating Engine, Digester Gas Fired~~

- ~~— 1. The NO_x (Calculated as NO₂) emission rate from this
— engine shall not exceed 2 gram/hp-hr. (Basis:
— Cumulative Increase)~~
- ~~— 2. The CO Emission shall not exceed 550 pounds per day.
— (Basis: Cumulative Increase)~~
- ~~— 3. Union Sanitary shall maintain the following elements in
— its engine system and shall not operate this engine
— without them unless the District gives prior approval:
— (Basis: Cumulative Increase)~~
- ~~— 3.1 Automatic Air-to-fuel control system~~
- ~~— 3.2 Addition of ferrous chloride to the digester.~~
- ~~— 3.3 Sulfide gas scrubbers (iron sponge) following the
— digester.~~
- ~~— 3.4 Chemical element gas filter (Nelson Winslow).~~
- ~~— 3.5 Non-metallic gasketed joints in the engine exhaust
— system.~~
- ~~— 3.6 Lubricating oil which is relatively phosphorus and
— heavy metal free.~~
- ~~— 3.7 A turbulator thermal reactor with a centrifugal
— air blower to supply oxygen for combustion to
— reduce emissions as an exhaust emissions abatement~~

VI. Permit Conditions

~~_____measure.~~

~~4. The owner/operator shall ensure that an annual performance test is conducted in accordance with the District test procedures to demonstrate compliance with the NOx and CO limits. The owner/operator may submit an alternative monitoring plan to the District for approval. If the alternative monitoring plan is approved, the plan shall supersede the annual source test requirement. Approvals shall be processed using the permit modification procedure contained in Regulation 2, Rule 6. (Basis: Regulation 2-6-409.2)~~

~~In addition to the italicized changes to the parts of Condition 457, a number of additional requirements (parts) were added to the conditions for sources S-15 and S-16. The above changes as well as the several additions were added to form Condition 17987.~~

Condition #9236

For S-100 Municipal Wastewater Treatment Plant

*1. Nuisance

In the event that a public nuisance odor source is identified at this facility, Union Sanitary District shall employ all measures, practices, or modifications necessary to abate the nuisance. (Basis: 1-301)

Condition #9238 (For Source S-43. Replaced by Condition 18803, see Statement of Basis for a detailed explanation)

~~For S-43 Hot Water Boiler 200 HP~~

~~1. Throughput~~

~~Digester gas usage at S-43 boiler shall not exceed 52.8 E3 MM Btu/yr (gross basis). (Basis: Cumulative Increase)~~

~~2. Flue Gas NOx, CO Concentrations~~

~~The maximum S-43 flue gas NOx concentration shall not exceed 40 ppmv (@3% oxygen). The maximum S-43 flue gas CO concentrations shall not exceed 100 ppmv (@3% oxygen). (Basis: BACT)~~

VI. Permit Conditions

~~3. Digester Gas H₂S Content~~

~~Union Sanitary District shall operate the ferric chloride addition at S-161 to maintain the concentration of hydrogen sulfide in the digester gas being fired in S-43 at a level not to exceed 100 ppmv hydrogen sulfide. (Basis: BACT)~~

~~4. Source Testing~~

~~To demonstrate compliance with permit condition 2, above, Union Sanitary District shall within 60 days of startup of this source, conduct a District approved source test pursuant to the following protocols. Source test results shall be submitted to the District within 60 days of completion of the source test. (Basis: BACT)~~

~~Protocol NO_x Determination: The methods by which sample of exhaust gases are collected and analyzed to determine concentrations of nitrogen oxides are set forth in the District's Manual of Procedures, Volume IV, ST-13A.~~

~~Protocol CO, O₂ Determination: The methods by which samples of exhaust gases are collected and analyzed to determine concentrations of carbon monoxide and stack gas oxygen are set forth in the District's Manual of Procedures, Volume IV, ST-6 (carbon monoxide) and ST-14 (oxygen).~~

~~5. Recordkeeping~~

~~To demonstrate compliance with permit conditions 1 and 3 above, USD shall keep monthly records (on site) of S-43 operation. Such records shall include hours of operation, quantities of fuel being fired, and average H₂S concentration of the digester gas. Such records shall be maintained on site for a period of at least five years. The log shall be kept on site and made available to the District staff upon request. (Basis: Cumulative Increase, BACT, BAAQMD Regulation 2-6-501).~~

Condition #9728 (S-135 archived, process train corrected. See Statement of Basis for a detailed explanation)

For S-135 Secondary Treatment (INKA)

~~*1. Abatement~~

~~S-135 Secondary Treatment Compressed Air Basins shall not be operated unless the basins are covered and vented to abatement device A-31 Atomized Mist Scrubber or A-37 Soil Odor Scrubber. (Basis: BAAQMD Regulation 1-301)~~

~~*2. Odor Detection~~

~~Upon detection of odorous breakthrough, Union Sanitary District shall follow established~~

VI. Permit Conditions

~~operating procedures to abate the odors. (Basis: BAAQMD Regulation 1-301)~~

Condition #11145 (S-165 archived, process train corrected. See Statement of Basis for a detailed explanation)

~~For S-165 Water Reclamation, 0.25 MGD with 2 FLOC basins, 20' dia Clarifier, 2 granular media filters and 21 Mgal chlorine tank~~

- ~~1. The total throughput of wastewater treated at S-165 shall not exceed 0.25 Million Gallons in any single day. (Basis: Cumulative Increase)~~
- ~~2. The Daily throughput of wastewater to S-165 shall be recorded in a district approved log. This log shall be kept on site for at least five years and made available to District staff on request. (Basis: Cumulative Increase, BAAQMD Regulation 2-6-501).~~
- ~~*3. S-165 shall not operate in such a manner so as to cause an odor public nuisance per Regulations 1-301 and 7-302. (Basis: BAAQMD Regulation 1-301)~~
- ~~*4. If three or more BAAQMD Notices of Violation are received by the owner/operator of S-165 within a 40 day period, the owner/operator shall submit to the BAAQMD an application for an Authority to Construct additional odor abatement equipment as deemed necessary by the BAAQMD within 60 days of reviewing the third notice. (Basis: BAAQMD Regulation 1-301)~~

Condition #14098 (generic throughput condition established, See Statement of Basis for a detailed explanation)

~~For: S-101, Non-Retail Gasoline Dispensing Facility G# 6873~~

- ~~1. Pursuant to BAAQMD Toxic Section Policy, this facility's annual gasoline throughput shall not exceed 940,000 gallons in any consecutive 12-month period. (Basis: Toxic Risk Management)~~

Condition #14853 (S-4 archived, per AN 2437. See Statement of Basis for a detailed explanation)

~~For Source S-4, Reciprocating Engine, Rich burn~~

VI. Permit Conditions

1. ~~Effective upon effective date of approval of Regulation 9, Rule 8 into the California State Implementation Plan by EPA:
The owner/operator shall ensure that an annual performance test is conducted in accordance with the District test procedures to demonstrate compliance with the NOx and CO limits. The owner/operator may submit an alternative monitoring plan to the District for approval. If the alternative monitoring plan is approved, the plan shall supercede the annual source test requirement. Approvals shall be processed using the permit modification procedure contained in Regulation 2, Rule 6. (Basis: Regulation 2-6-409.2)~~

Condition #17712 (Condition 17712 established per AN 1706, Loss of Exemption, see Statement of Basis for a detailed explanation)

For Sources S-5, S-6, S-30, S-31, S-44, S-45 Emergency Standby Diesel Engine Generators

1. Hours of Operation

The emergency standby engine generators S-5, S-6, S-30, S-31, S-44, S-45 each shall only be operated to mitigate emergency conditions or for reliability-related activities. Operation for reliability-related activities shall not exceed 200 hours in any calendar year per engine. Operation while mitigating emergency conditions is unlimited. (Basis: 9-8-331)

2. Emergency Conditions is defined as any of the following: (Basis: 9-8-231)

- a. Loss of regular natural gas supply.
- b. Failure of regular power supply.
- c. Flood mitigation.
- d. Sewage overflow mitigation.
- e. Fire.
- f. Failure of a primary motor, but only for such time as needed to repair or replace the primary motor.

3. Reliability-related activities is defined as any of the following: (Basis: 9-8-232)

- a. Operation of an emergency standby engine to test its ability to perform for an emergency use, or
- b. Operation of an emergency standby engine during maintenance of a primary motor.

VI. Permit Conditions

4. Each of the emergency standby engine generators shall be equipped with either a) a non-resettable totalizing meter that measures and records the hours of operation for the engine (the maximum hourly fuel rate shall be used to convert hours of operation to fuel usage), or b) a non-resettable fuel usage meter (the maximum hourly fuel rate shall be used to convert fuel usage to hours of operation). (Basis: 9-8-530)

5a. The permit holder shall not burn diesel fuel with a sulfur content in excess of 0.5% by weight (Basis: 9-1-304).

5b. To demonstrate compliance with this limit, every delivery of diesel fuel received shall be accompanied by either 1) a vendor certification of sulfur content or 2) a written certification stating the diesel meets the CARB 500 ppmw maximum sulfur content standard, or 3) test results showing sulfur content from a District-approved test. The certifications or test results shall be maintained onsite for at least 5 years and shall be made available to the District upon request. (Basis: 2-6-409.2, 2-6-501)

6. Records

The following monthly records shall be maintained in a District-approved log for at least 52 years and shall be made available for District inspection upon request. (Basis: 9-8-530)

- a. Total hours of operation.
- b. Hours of operation under emergency conditions and a description of the nature of each emergency condition.
- c. Fuel usage.
- d. Fuel sulfur content documentation (see part 5b).

Condition 18803 (For Source S-43. Replaces Condition 9238 per Application 3905, Title V renewal application. See Statement of Basis for detailed explanation)

S-43 Hot Water Boiler, Digester or Natural Gas fired

1. S-43 may be fired on any combination of sewage sludge digester gas or natural gas only. (Basis: Cumulative Increase)

2. Throughput

Total fuel usage at S-43 boiler shall not exceed 52,800 MM Btu/yr (gross basis). (Basis: Cumulative Increase)

VI. Permit Conditions

3. Flue Gas NO_x, CO Concentrations

The maximum S-43 flue gas NO_x concentration shall not exceed 40 ppmv (at 3% oxygen). The maximum S-43 flue gas CO concentrations shall not exceed 100 ppmv (at 3% oxygen). (Basis: BACT)

4. The owner/operator of S-43 Boiler shall perform a regular inspection and tune up of the combustion section to ensure the proper air-to-fuel ratio is being used to maximize efficiency and minimize the production of nitrogen oxides and carbon monoxide, following the procedures of Regulation 9 Rule 7, Section 604 (CARB-BARCT Tune Up Procedures). The time interval between boiler tune-ups shall not exceed 12 months. (Basis: 9-7-304.2)

5. Recordkeeping

To demonstrate compliance with parts 1, 2 and 3, above, the owner/operator of hot water boiler S-43 shall document the operation and tune ups by keeping the following records:

- a. Monthly records of operation including hours of operation and quantities and type of fuel fired.
- b. Time and date of the tune up and the identity of the qualified technician.
- c. Stack gas oxygen concentrations (ppm dry) and carbon monoxide concentrations (ppm dry) before and after any adjustments are made.

The records associated with the above requirements shall be maintained for a period of at least 5 years from the date of the inspection or test and be available for review by District personnel upon request. (Basis: 2-6-501)

Condition 18785 (For Source S-170. This is a new condition. For a detailed explanation of the condition requirements, see the Statement of Basis)

For S-170 Anaerobic Digesters

1. Emissions from S-170 shall be abated at all times by combustion at any or all of the following sources: S-1, S-2, S-3, S-15, S-16, S-40, S-41, S-43, except as specified in Part 2. (Basis: Regulation 1-301)
2. Emissions from S-170 shall be abated by A-401, A-402 or A-403 when equipment failure or other emergencies require the flaring of digester gas, or when digester gas production exceeds the combustion capacity of the sources noted in part 1, above.

VI. Permit Conditions

(Basis: Cumulative Increase)

3. Digester gas total sulfur content shall not exceed 300 ppm. (Basis: BACT)

4. To demonstrate compliance with the standard noted in part 3, the permit holder shall monitor and record the sulfur content of the digester gas at a frequency of at least once every calendar month. If the observed sulfur content of the digester gas meets or exceeds 100 ppm, the permit holder shall automatically increase the monitoring frequency to at least once every calendar week. The monitoring frequency may return to a calendar month basis with four consecutive digester gas sulfur content measurements less than 100 ppm. (Basis: 1-441)

5. Records of monthly digester gas sulfur content measurements shall be maintained in a District-approved log. Records shall be maintained for at least 5 years and shall be made available for District inspection upon request. (Basis: 1-441)

CONDITION 20796 (replaces Condition 389. See Statement of Basis for detailed explanation)

For sources S-40 and S-41 (Standby Hot Water Boilers #4 & #5 respectively)

1. S-40 & S-41 may be fired on sewage sludge digester gas only. (Basis: Cumulative Increase)

2. The owner/operator of the hot water boilers S-40 and S-41 shall perform a regular inspection and tune up of the combustion section(s) to ensure the proper air-to-fuel ratio is being used to maximize efficiency and minimizes the production of nitrogen oxides and carbon monoxide, following the procedure of Regulation 9, Rule 7, Section 604 (CARB BARCT tune up procedure). The time interval between boiler tune-ups shall not exceed 12 months. (Basis: 9-7-304.2)

3. In order to demonstrate compliance with the requirements of part #2, the owner/operator of the hot water boilers S-40 and S-41 shall document each tune up as follows: (Basis: 9-7-503.1)

a. Time and date of the tune up and the identity of the qualified technician.

b. Stack gas oxygen concentrations (ppm dry) and carbon monoxide concentrations (ppm dry) before and after any adjustments are made.

The records associated with the above requirements shall be maintained for a period of at least 5 years from the date of the inspection or test and be available for review by District personnel upon request. (Basis: 2-6-501)

VI. Permit Conditions

CONDITION 20905 for S-16 (Application 3905, Title V renewal application. See Statement of Basis for a detailed explanation)

S-16 Lean Burn Engine, 535 KW

1. Engine S-16 may be fired on sewage sludge digester gas only.
(Basis: Cumulative Increase)
2. Thermal Capacity Limitations: Total thermal throughput shall not exceed 51,684 million Btu in any consecutive 12-month period.
(Basis: Cumulative Increase)
3. Nitrogen Oxide (NOx) emissions shall not exceed 1.0 grams of NOx (calculated as NO2) per brake-horsepower-hour. The permit holder may demonstrate compliance with this emission rate limit by demonstrating a NOx concentration in the engine exhaust of no more than 73 ppm of NOx, corrected to 15% oxygen, dry basis. An exhaust concentration measurement of more than 73 ppm of NOx shall not be deemed a violation of this part, if the permit holder can demonstrate that NOx emissions did not exceed 1.0 g/bhp-hr during the test period.
(Basis: BACT)
4. Carbon Monoxide (CO) emissions shall not exceed 2.65 grams of CO per brake-horsepower-hour. The owner/operator may demonstrate compliance with this emission rate limit by demonstrating a CO concentration in the engine exhaust of no more than 318 ppm of CO, corrected to 15% oxygen, dry basis. An exhaust concentration measurement of more than 318 ppm of CO shall not be deemed a violation of this part, if the permit holder can demonstrate that CO emissions did not exceed 2.65 g/bhp-hr during the test period.
(Basis: BACT)
5. To demonstrate compliance with part 2, above, a District approved totalizing flowmeter shall be installed, maintained and used to monitor and record the fuel flow and heat input to engines S-15 and S-16. Engine fuel and heat input parameters shall be calculated as follows:(Basis: Cumulative Increase)
 - a. Individual engine digester gas flow shall be calculated by ratioing the respective engine generator electrical production against the total digester gas flow to the engines.

VI. Permit Conditions

- b. Digester gas heat content shall be determined by multiplying the digester gas methane fraction by 1020 Btu/dscf. The methane fraction shall be calculated by averaging the three most recent source test derived digester gas methane fractions. Where three digester gas methane fractions are not available, the operator shall assume a methane fraction of 0.59 for the missing data points.
 - c. Individual engine heat input shall be calculated by using the digester gas heat content in conjunction with the calculated individual engine digester gas flow.
6. Any amount of collected digester gas that exceeds the capacity of engine generator S-16 shall be combusted in any of the heat recovery sources S-1, S-2, S-3, S-15, S-40, S-41, S-43, or abated in any of the digester gas flares A-401, A-402, and A-403. In no case shall raw digester gas be vented to the atmosphere.
(Basis: 1-301, 8-2-301)
7. The owner/operator shall ensure that a performance test is conducted on the engine on an annual basis. Source tests to demonstrate annual compliance shall be conducted no sooner than 6 months and no later than 12 months after the previous source test. The Source Test Section of the District shall be contacted to obtain approval of the source test procedures at least 14 days in advance of each source test. The Source Test Section of the District shall be notified of the scheduled test date at least 7 days in advance of each source test. The source test report shall be submitted to the Compliance and Enforcement Division and the Source Test Section within 45 days of the test date. The annual source tests shall determine the following:
- a. Total flow rate of digester gas to the IC engine (dry basis).
 - b. Digester gas composition: Concentration (dry basis) of carbon dioxide (CO₂), nitrogen (N₂), oxygen (O₂), total reduced sulfur compounds (TRS), methane (CH₄), and total non-methane organic compounds.
 - c. Exhaust Gas Composition: Concentration (dry basis) of NO_x, CO, and O₂ in the exhaust gases from the IC engine. Corrected concentration of NO_x and CO at 15% oxygen.
 - d. NO_x, CO emissions. The owner/operator may use any of the aforementioned allowable emission units specified in parts 3 and 4, above to demonstrate compliance with the applicable emission standard.

The owner/operator may submit an alternative monitoring plan to the District for approval. If the alternative monitoring plan is approved, the plan shall supercede the annual source

VI. Permit Conditions

test requirement. Approvals shall be processed using the permit modification procedure contained in Regulation 2, Rule 6.

(Basis: 2-6-409.2)

8. In order to demonstrate compliance with parts 2, 3, and 4, the owner/operator shall maintain the following records in a District approved logbook for IC engine S-16.
(Basis: Cumulative Increase, BACT)
 - a. Total heat input and digester gas input to the engine tabulated on a monthly basis (determined in accordance with part 5 above).
 - b. Records of all digester gas methane content measurements and digester gas heat content calculations.
 - c. Records of all compliance demonstration test results and any calculation procedures used to show compliance with these conditions.
 - d. Monthly records shall be totaled for each consecutive 12-month period.

All records shall be retained onsite for five years from the date of entry, and made available for inspection by District staff upon request. These recordkeeping requirements shall not replace the recordkeeping requirements contained in any applicable District Regulations.

(Basis: 2-6-409.2)

CONDITION 21298 for S-15 (Application 3905, Title V renewal application. See Statement of Basis for a detailed explanation)

S-15 Lean Burn Engine, 700 KW

1. Engine S-15 may be fired on sewage sludge digester gas only.
(Basis: Cumulative Increase)
2. Thermal Capacity Limitations: Total thermal throughput shall not exceed 75,336 million Btu in any consecutive 12-month period.
(Basis: Cumulative Increase)

VI. Permit Conditions

3. Nitrogen Oxide (NO_x) emissions shall not exceed 1.34 grams of NO_x (calculated as NO₂) per brake-horsepower-hr.. The permit holder may demonstrate compliance with this emission limit by demonstrating a NO_x concentration in the engine exhaust of no more than 98 ppm of NO_x corrected to 15% oxygen, dry basis. An exhaust concentration measurement of more than 98 ppm of NO_x shall not be deemed a violation of this part if the permit holder can demonstrate that NO_x emissions did not exceed 1.34 g/bhp-hr during the test period.
(Basis: Cumulative Increase)
4. Carbon Monoxide (CO) emissions shall not exceed 2.65 grams of CO per brake-horsepower-hour. The owner/operator may demonstrate compliance with this emission rate limit by demonstrating a CO concentration in the engine exhaust of no more than 318 ppm of CO, corrected to 15% oxygen, dry basis. An exhaust concentration measurement of more than 318 ppm of CO shall not be deemed a violation of this part, if the permit holder can demonstrate that CO emissions did not exceed 2.65 g/bhp-hr during the test period.
(Basis: BACT)
5. To demonstrate compliance with part 2, above, a District approved totalizing flowmeter shall be installed, maintained and used to monitor and record the fuel flow and heat input to engines S-15 and S-16. Engine fuel and heat input parameters shall be calculated as follows:
(Basis: Cumulative Increase)
 - a. Individual engine digester gas flow shall be calculated by ratioing the respective engine generator electrical production against the total digester gas flow to the engines.
 - b. Digester gas heat content shall be determined by multiplying the digester gas methane fraction by 1020 Btu/dscf. The methane fraction shall be calculated by averaging the three most recent source test derived digester gas methane fractions. Where three digester gas methane fractions are not available, the operator shall assume a methane fraction of 0.59 for the missing data points.
 - c. Individual engine heat input shall be calculated by using the digester gas heat content in conjunction with the calculated individual engine digester gas flow.
6. Any amount of collected digester gas that exceeds the capacity of engine generator S-15 shall be combusted in any of the heat recovery sources S-1, S-2, S-3, S-16, S-40, S-41, S-43, or abated in any of the digester gas flares A-401, A-402, and A-403. In no case shall raw digester gas be vented to the atmosphere.

VI. Permit Conditions

(Basis: 1-301, 8-2-301)

7. The owner/operator shall ensure that a performance test is conducted on the engine on an annual basis. Source tests to demonstrate annual compliance shall be conducted no sooner than 6 months and no later than 12 months after the previous source test. The Source Test Section of the District shall be contacted to obtain approval of the source test procedures at least 14 days in advance of each source test. The Source Test Section of the District shall be notified of the scheduled test date at least 7 days in advance of each source test. The source test report shall be submitted to the Compliance and Enforcement Division and the Source Test Section within 45 days of the test date. The annual source tests shall determine the following:
 - a. Total flow rate of digester gas to the IC engine (dry basis).
 - b. Digester gas composition: Concentration (dry basis) of carbon dioxide (CO₂), nitrogen (N₂), oxygen (O₂), total reduced sulfur compounds (TRS), methane (CH₄), and total non-methane organic compounds.
 - c. Exhaust Gas Composition: Concentration (dry basis) of NO_x, CO, and O₂ in the exhaust gases from the IC engine. Corrected concentration of NO_x and CO at 15% oxygen.
 - d. NO_x, CO emissions. The owner/operator may use any of the aforementioned allowable emission units specified in parts 3 and 4, above to demonstrate compliance with the applicable emission standard.
 - e. The owner/operator may submit an alternative monitoring plan to the District for approval. If the alternative monitoring plan is approved, the plan shall supercede the annual source test requirement. Approvals shall be processed using the permit modification procedure contained in Regulation 2, Rule 6. (Basis: 2-6-409.2)
8. In order to demonstrate compliance with parts 2, 3, and 4, the owner/operator shall maintain the following records in a District approved logbook for engine S-15. (Basis: Cumulative Increase, BACT)
 - a. Total heat input and digester gas input to each engine tabulated on a monthly basis (determined in accordance with part 5 above).
 - b. Records of all digester gas methane content measurements and digester gas heat content calculations.

VI. Permit Conditions

- c. Records of all compliance demonstration test results and any calculation procedures used to show compliance with these conditions.
- d. Monthly records shall be totaled for each consecutive 12-month period.

All records shall be retained onsite for five years from the date of entry, and made available for inspection by District staff upon request. These recordkeeping requirements shall not replace the recordkeeping requirements contained in any applicable District Regulations.

(Basis: 2-6-409.2)

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-4, RECIPROCATING ENGINE, DIGESTER GAS FIRED

<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>
NO _x	BAAQMD 9-8-302.2	N [†]		210 ppmv @ 15% O ₂ , dry	BAAQMD Cond #14853, part 1 [†]	P/A [†] Effective after approval into SIP	Source test or alternate monitoring plan [†]
CO	BAAQMD 9-8-302.3	N [†]		2000 ppmv @ 15% O ₂ , dry	BAAQMD Cond #14853, part 1 [†]	P/A [†] Effective after approval into SIP	Source test or alternate monitoring plan [†]

[†]This condition will become effective after Regulation 9, Rule 8 is approved into the California SIP.

VII. Applicable Emission Limits & Compliance Monitoring Requirements

Table VII-A
Applicable Limits and Compliance Monitoring Requirements
S-5, STANDBY ENGINE/GENERATOR #2, DIESEL FIRED
S-6 STANDBY ENGINE/GENERATOR #3, DIESEL FIRED
S-30 STANDBY ENGINE/GENERATOR #5, DIESEL FIRED
S-31 STANDBY ENGINE/GENERATOR #6, DIESEL FIRED
S-44 STANDBY ENGINE/GENERATOR #7, DIESEL FIRED
S-45 STANDBY ENGINE/GENERATOR #8, DIESEL FIRED

<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>
<u>Hrs of Operation</u>	<u>BAAQMD 9-8-331</u>	<u>N</u>		<u>200 hours/calendar year</u>	<u>BAAQMD 9-8-530, Cond 17712, Part 5</u>	<u>P</u>	<u>Records</u>
<u>Diesel Sulfur Content</u>	<u>BAAQMD 9-1-304</u>	<u>N</u>		<u>0.5% by weight</u>	<u>Condition 17712, part 5a</u>	<u>P/E</u>	<u>Certification of diesel sulfur content</u>
<u>Diesel Sulfur Content</u>	<u>BAAQMD Condition 17712, part 5a</u>	<u>Y</u>		<u>0.5% by weight</u>	<u>Condition 17712, part 5a</u>	<u>P/E</u>	<u>Certification of diesel sulfur content</u>
<u>Opacity</u>	<u>BAAQMD 6-303</u>	<u>Y</u>		<u>> Ringelmann 2.0 for no more than 3 min in any hour</u>		<u>N</u>	
<u>FP</u>	<u>BAAQMD 6-310</u>	<u>Y</u>		<u>0.15 gr/dscf</u>		<u>N</u>	

VII. Applicable Emission Limits & Compliance Monitoring Requirements

Table VII-B
Applicable Limits and Compliance Monitoring Requirements
S-15, RECIPROCATING ENGINE, DIGESTER GAS FIRED

<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>
NOx	BAAQMD 9-8-302.2 9-8-302.29-8-302.1	N		210 ppmv @ 15% O₂, dry 210 ppmv @ 15% O₂, dry 140 ppmv at 15% O ₂ , dry	Cond 457, part 4 Cond 20905 part 8-Part 4	P/A	Source Test
NOx	BAAQMD Cond 457, Part 4	Y		2 g/hp-hr	Cond 457, Part 4	P/A	Source test or alternate monitoring plan
NOx	Cond 21298 part 3	Y		1.34 g/hp-hr or 98 ppm at 15% Oxygen	Cond 21298 Part 4 part 7	A	Source Test
CO	BAAQMD 9-8-302.3	Y		2000 ppmv at 15% O ₂ dry	Cond 457, Part 4-Cond 21298 part 7	P/A	Source test or alternate monitoring plan
CO	BAAQMD Cond 17987, part 3 21298 part 4	N Y		2.65 g/hp-hr or 318 ppm at 15% oxygen	BAAQMD Cond 21298, part 7	P/A	Source Test
CO	BAAQMD Cond 457, Part 2	Y		550 lb/day	Cond 457, Part 4	P/A	Source test or alternate monitoring plan
SO ₂	BAAQMD 9-1-301	Y		GLC 0.5 ppm (3 min ave) 0.25 ppm (60 min ave) 0.05 ppm (24 hr ave)		N	
SO ₂	BAAQMD 9-1-302	Y		300 ppm		N	
Opacity	BAAQMD 6-301	Y		> Ringelmann 1.0 for no more than 3 min in any hour		N	

VII. Applicable Emission Limits & Compliance Monitoring Requirements

**Table VII-B
 Applicable Limits and Compliance Monitoring Requirements
 S-15, RECIPROCATING ENGINE, DIGESTER GAS FIRED**

<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
FP	<u>BAAQMD</u> 6-310	Y		0.15 gr/dscf		N	
Organic Compounds	<u>BAAQMD</u> 8-1-110.3	Y		>90% of Organic Compounds oxidized to CO ₂	N	N	N
Thermal Capacity	<u>BAAQMD</u> <u>Cond</u> 21298, part 2	N		<u>S-15: 75,336 E6 Btu/yr</u>	<u>BAAQMD</u> <u>Cond 21298,</u> <u>part 8</u>	P/M	<u>Records</u>

**Table VII-C
 Applicable Limits and Compliance Monitoring Requirements
 S-16, RECIPROCATING ENGINE, DIGESTER GAS FIRED**

<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
NO _x	<u>BAAQMD</u> 9-8-302.2 9-8-302.1	N		210 ppmv @ 15% O ₂ , dry 140 ppmv at 15% O ₂ dry	<u>Cond</u> 457, part 4 <u>Cond 20905</u> <u>part 7</u>	P/A	<u>Source Test</u>
NO _x	<u>BAAQMD</u> <u>Cond 457,</u> <u>Part 4</u>	Y		2 g/hp-hr	<u>Cond 457,</u> <u>Part 4</u>	P/A	<u>Source test</u> <u>or alternate</u> <u>monitoring</u> <u>plan</u>
NO _x	<u>Cond 20905</u> <u>part 3</u>	Y		1.0 g/hp-hr or 70 ppm at 15% Oxygen	<u>Cond 20905</u> <u>Part 4 part 7</u>	A	<u>Source Test</u>
CO	<u>BAAQMD</u> 9-8-302.3	Y		2000 ppmv at 15% O ₂ dry	<u>Cond 457</u> <u>Part 4-Cond</u> <u>20905 part 7</u>	P/A	<u>Source test</u> <u>or alternate</u> <u>monitoring</u> <u>plan</u>
CO	<u>BAAQMD</u> <u>Cond 47987,</u> <u>part 3-20905</u> <u>part 4</u>	N Y		2.65 g/hp-hr or 318 ppm at 15% oxygen	<u>BAAQMD</u> <u>Cond 20905,</u> <u>part 7</u>	P/A	<u>Source Test</u>

VII. Applicable Emission Limits & Compliance Monitoring Requirements

Table VII-C
Applicable Limits and Compliance Monitoring Requirements
S-16, RECIPROCATING ENGINE, DIGESTER GAS FIRED

<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>
CO	BAAQMD Cond 457, Part 2	Y		550 lb/day	Cond 457, Part 4	P/A	Source test or alternate monitoring plan
SO ₂	BAAQMD 9-1-301	Y		GLC 0.5 ppm (3 min ave) 0.25 ppm (60 min ave) 0.05 ppm (24 hr ave)		N	
SO ₂	BAAQMD 9-1-302	Y		300 ppm		N	
Opacity	BAAQMD 6-301	Y		> Ringelmann 1.0 for no more than 3 min in any hour		N	
FP	BAAQMD 6-310	Y		0.15 gr/dscf		N	
Organic Compounds	BAAQMD 8-1-110.3	Y		>90% of Organic Compounds oxidized to CO ₂	N	N	N
Thermal Capacity	BAAQMD Cond 20905, part 2	N		S-16: 51,684 E6 Btu/yr	BAAQMD Cond 20905, part 8	P/M	Records

Table VII-D
Applicable Limits and Compliance Monitoring Requirements
S-40, S-41, STANDBY HOT WATER BOILERS, DIGESTER GAS FIRED

<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>
----------------------	--------------------------	-----------	-----------------------------	--------------	--	-------------------------------------	------------------------

VII. Applicable Emission Limits & Compliance Monitoring Requirements

Table VII-D
Applicable Limits and Compliance Monitoring Requirements
S-40, S-41, STANDBY HOT WATER BOILERS, DIGESTER GAS FIRED

<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
SO ₂	<u>BAAQMD</u> <u>9-1-301</u>	<u>Y</u>		<u>GLC 0.5 ppm</u> <u>(3 min ave)</u> <u>0.25 ppm</u> <u>(60 min ave)</u> <u>0.05 ppm (24 hr ave)</u>		<u>N</u>	
SO ₂	<u>BAAQMD</u> <u>9-1-302</u>	<u>Y</u>		<u>300 ppm</u>		<u>N</u>	
Opacity	<u>BAAQMD</u> <u>6-301</u>	<u>Y</u>		<u>> Ringelmann 1.0 for no</u> <u>more than 3 min in any</u> <u>hour</u>		<u>N</u>	
PM	<u>BAAQMD</u> <u>6-310</u>	<u>Y</u>		<u>0.15 gr/dscf at 6%</u> <u>Oxygen</u>		<u>N</u>	
Organic Compounds	<u>BAAQMD</u> <u>8-1-110.3</u>	<u>Y</u>		<u>>90% of Organic</u> <u>Compounds oxidized to</u> <u>CO₂</u>	<u>N</u>	<u>N</u>	<u>N</u>

Table VII-E
Applicable Limits and Compliance Monitoring Requirements
S-43, HOT WATER BOILER, DIGESTER GAS OR NATURAL GAS FIRED

<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
NO _x	<u>BAAQMD</u> <u>9-7-301.1</u>	<u>N</u>		<u>30 ppmv</u> <u>@ 3% O₂, dry</u>		<u>N</u>	
NO _x	<u>BAAQMD</u> <u>Cond 9238,</u> <u>18803 Part 3</u>	<u>Y</u>		<u>40 ppmv</u> <u>at 3% O₂</u>	<u>BAAQMD</u> <u>Condition</u> <u>18803, part 4</u>	<u>P/A</u>	<u>Boiler</u> <u>Tuning</u> <u>Records</u>
				<u>None</u>	<u>BAAQMD</u> <u>9-7-304.2</u>	<u>P/A</u>	<u>Inspection</u> <u>& Tune-up</u>
CO	<u>BAAQMD</u> <u>9-7-301.2</u>	<u>N</u>		<u>400 ppmv</u> <u>@ 3% O₂, dry</u>		<u>N</u>	

VII. Applicable Emission Limits & Compliance Monitoring Requirements

Table VII-E
Applicable Limits and Compliance Monitoring Requirements
S-43, HOT WATER BOILER, DIGESTER GAS OR NATURAL GAS FIRED

<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>
<u>CO</u>	<u>BAAQMD Cond 9238, 18803, Part 3</u>	<u>Y</u>		<u>100 ppmv at 15% O₂</u>	<u>BAAQMD Condition 18803, part 4</u>	<u>P/A</u>	<u>Boiler Tuning Records</u>
				<u>None</u>	<u>BAAQMD 9-7-304.2</u>	<u>P/A</u>	<u>Inspection & Tune-up</u>
<u>Thermal Capacity</u>	<u>BAAQMD Cond 9238, 18803 Part 2</u>	<u>Y</u>		<u>52, 800 MM BTU/yr</u>	<u>BAAQMD Cond 9238, part 4-18803 Part 5</u>	<u>P/M</u>	<u>Records</u>
<u>Opacity</u>	<u>BAAQMD 6-301</u>	<u>Y</u>		<u>> Ringelmann 1.0 for no more than 3 min in any hour</u>	<u>N/A</u>	<u>N</u>	<u>N/A</u>
<u>PM</u>	<u>BAAQMD 6-305</u>	<u>Y</u>		<u>No Visible emissions impacting Off-Site Locations</u>	<u>N/A</u>	<u>N</u>	<u>N/A</u>
<u>PM</u>	<u>BAAQMD 6-310.3</u>	<u>Y</u>		<u>0.15 gr/dscf at 6% oxygen</u>	<u>N/A</u>	<u>N</u>	<u>N/A</u>
<u>Organic Compounds</u>	<u>BAAQMD 8-1-110.3</u>	<u>Y</u>		<u>>90% of Organic Compounds oxidized to CO₂</u>	<u>N</u>	<u>N</u>	<u>N</u>
<u>SO₂</u>	<u>BAAQMD 9-1-301</u>	<u>Y</u>		<u>GLC 0.5 ppm (3 min ave)</u> <u>0.25 ppm (60 min ave)</u> <u>0.05 ppm (24 hr ave)</u>		<u>N</u>	
<u>SO₂</u>	<u>BAAQMD 9-1-302</u>	<u>Y</u>		<u>300 ppm</u>		<u>N</u>	

VII. Applicable Emission Limits & Compliance Monitoring Requirements

Table VII-F
Applicable Limits and Compliance Monitoring Requirements
S-100, MUNICIPAL WASTEWATER TREATMENT PLANT
S-110, PRELIMINARY TREATMENT
S-111, PRELIMINARY TREATMENT, 3 BARSCREENS
S-120, PRIMARY TREATMENT
S-130, SECONDARY TREATMENT
S-131, SECONDARY TREATMENT
~~**S-135 SECONDARY TREATMENT (INKA)**~~
S-140, SECONDARY TREATMENT
S-150, DISINFECTION
~~**S-160 SLUDGE HANDLING PROCESSES**~~
S-161, SLUDGE HANDLING-GRAVITY THICKENERS
S-162, SLUDGE HANDLING-SOLIDS HANDLING BUILDING
~~**S-163, SLUDGE HANDLING-PUMPING STATION**~~
S-164, SLUDGE HANDLING-GRAVITY BELT THICKENERS
~~**S-170, ANAEROBIC DIGESTER**~~

<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
VOC	BAAQMD 8-2-301	Y		15 lb/day & 300 ppm total carbon on dry basis	N	N	N

Table VII-G
Applicable Limits and Compliance Monitoring Requirements
S-101, GASOLINE DISPENSING FACILITY

<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
VOC	BAAQMD 8-7-301.2	Y		95% recovery of gasoline vapors		N	
Gasoline	BAAQMD Condition 14098, part <u>1</u>	<u>Y</u>		<u>940,000 gal in any consecutive 12 month period</u>	BAAQMD 8-7-503	P/A	<u>Records</u>

VII. Applicable Emission Limits & Compliance Monitoring Requirements

Table VII-F
Applicable Limits and Compliance Monitoring Requirements
S-165, WATER RECLAMATION – 0.25 MGD

<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>
Waste-water		N		0.25 MGD	BAAQMD Cond 11145	P	daily records

Table VII-H
Applicable Limits and Compliance Monitoring Requirements

S-170, ANAEROBIC DIGESTER

<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>
Organic Compounds	<u>BAAQMD 8-1-110.3</u>	<u>Y</u>		≥90% of Organic Compounds oxidized to CO2	<u>N</u>	<u>N</u>	<u>N</u>
<u>Sulfur Content</u>	<u>BAAQMD Cond 18785, part 3</u>	<u>N</u>		<u>300 ppm</u>	<u>BAAQMD Cond 18785, part 4</u>	<u>P/M</u>	<u>Testing</u>

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**

Applicable Requirement	Description of Requirement	Acceptable Test Methods
BAAQMD 6-301	Ringelmann No. 1 Limitation	Manual of Procedures, Volume I, Evaluation of Visible Emissions
<u>BAAQMD 6-303</u>	<u>Ringelmann No. 2 Limitation</u>	<u>Manual of Procedures, Volume I, Evaluation of Visible Emissions</u>
BAAQMD 6-310	Particulate Weight Limitation	Manual of Procedures, Volume IV, ST-15, Particulates Sampling <u>or EPA Method 5, Determination of Particulate Matter Emissions from Stationary Sources</u>
<u>BAAQMD 6-310.3</u>	<u>PM Concentration at 6% Oxygen</u>	Manual of Procedures, Volume IV, ST-15, Particulates Sampling <u>or EPA Method 5, Determination of Particulate Matter Emissions from Stationary Sources</u>
BAAQMD 8-2-301	Miscellaneous Operations	Manual of Procedures, Volume IV, ST-7, Non-Methane Organic Carbon Sampling or EPA Method 25 or 25A.
BAAQMD Regulation 8-7-301.2	Gasoline Vapor Recovery	BAAQMD Manual of Procedures, Volume IV, ST-36
BAAQMD 9-1-302	Sulfur Dioxide - General Emission Limitation	Manual of Procedures, Volume IV, ST-19A, Sulfur Dioxide, Continuous Sampling, or ST-19B, Total Sulfur Oxides Integrated Sample
<u>BAAQMD 9-1-304</u>	<u>Fuel Burning (Liquid and Solid Fuels)</u>	<u>Manual of Procedures, Volume III, Method 10, Determination of Sulfur in Fuel Oils.</u>
BAAQMD 9-7-301.1	Performance Standard, NOx, Gaseous Fuel	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
BAAQMD 9-7-301.2	Performance Standard, CO, Gaseous Fuel	Manual of Procedures, Volume IV, ST-6, Carbon Monoxide, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
<u>BAAQMD 9-8-302.1</u>	<u>Waste Derived Fuel Gas, NOx Limits for Lean Burn Engines</u>	<u>Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen, Continuous Sampling and ST-14, Oxygen, Continuous Sampling</u>
BAAQMD 9-8-302.3	Waste Derived Fuel Gas, CO Limits	Manual of Procedures, Volume IV, ST-6, Carbon Monoxide, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
<u>BAAQMD Cond# 17712, part 5a</u>	<u>Diesel Sulfur Content</u>	<u>Manual of Procedures, Volume III, Lab 10 or Vendor Fuel Certification</u>

VII. Test Methods

**Table VIII
 Test Methods**

Applicable Requirement	Description of Requirement	Acceptable Test Methods
BAAQMD Cond # 18803, part 3	Flue Gas NOx Concentrations	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
BAAQMD Cond # 18803, part 3	Flue Gas CO Concentrations	Manual of Procedures, Volume IV, ST-6, Carbon Monoxide, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
BAAQMD Cond# 18785 part 3	Digester Gas Sulfur	Draeger Tube or Manual of Procedures, Volume IV, ST-21, Total Reduced Sulfur
<u>BAAQMD Cond #20905, part 3</u>	<u>NOx Limit</u>	<u>Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen, Continuous Sampling and ST-14, Oxygen, Continuous Sampling</u>
BAAQMD Cond #20905, part 4	CO Limit	Manual of Procedures, Volume IV, ST-6, Carbon Monoxide, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
BAAQMD Cond #20905, part 7	Digester Gas Composition	Manual of Procedures, Volume III, ST-44 (Total reduced sulfur), ST-15a (CO ₂ , N ₂ , O ₂), EPA Method 25 (NMOC), or EPA Reference Method 3C (40 CFR 60, Appendix A), or equivalent
<u>BAAQMD Cond #21298, part 3</u>	<u>NOx Limit</u>	<u>Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen, Continuous Sampling and ST-14, Oxygen, Continuous Sampling</u>
<u>BAAQMD Cond #21298, part 4</u>	<u>CO Limit</u>	<u>Manual of Procedures, Volume IV, ST-6, Carbon Monoxide, Continuous Sampling and ST-14, Oxygen, Continuous Sampling</u>
<u>BAAQMD Cond #21298, part 7</u>	<u>Digester Gas Composition</u>	<u>Manual of Procedures, Volume III, ST-44 (Total reduced sulfur), ST-15a (CO₂, N₂, O₂), EPA Method 25 (NMOC), or EPA Reference Method 3C (40 CFR 60, Appendix A), or equivalent</u>

IX. GLOSSARY

ACT

Federal Clean Air Act

BAAQMD

Bay Area Air Quality Management District

BACT

Best Available Control Technology

Basis

The underlying authority which 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.

GLC

Ground Level Concentration

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_x

Oxides of nitrogen.

IX. Glossary

NSPS

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.)

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_x, PM₁₀, and SO₂.

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

PTE

Potential To Emit

PM

~~Total~~-Particulate Matter

PM₁₀

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.

SO₂

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 ²	=	square meter
min	=	minute
mm	=	million
ppmv	=	parts per million, by volume
ppmw	=	parts per million, by weight
psia	=	pounds per square inch, absolute

IX. Glossary

psig	=	pounds per square inch, gauge
scfm	=	standard cubic feet per minute
yr	=	year

X. APPENDIX A - 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>