Bay Area Air Quality Management District

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

Final

MAJOR FACILITY REVIEW PERMIT

Issued To:

City of Santa Rosa Wastewater Treatment Facility #A1403

Facility Address:
4300 Llano Road
Santa Rosa CA 95407

Mailing Address:
4300 Llano Road
Santa Rosa CA 95407

Responsible Official	**Facility Contact**
Miles Ferris,	Dean Paige,
Director Of Utilities	Environmental Compliance Officer
(707) 543-3350	(707) 543-3375

Type of Facility: Municipal Wastewater Treatment Facility (Publicly Owned Treatment Works)
Primary SIC: 4952
Product: Treated Municipal Wastewater

BAAQMD Engineering Division Contact
Randy Frazier, P.E.

ISSUED BY THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Signed by Jack P. Broadbent — January 8, 2007
Jack P. Broadbent, Executive Officer/Air Pollution Control Officer — Date

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I. STANDARD CONDITIONS

A. Administrative Requirements

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

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

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

1. This Major Facility Review Permit was issued on January 8, 2007 and expires on January 7, 2012. The permit holder shall submit a complete application for renewal of this Major Facility Review Permit no later than July 12, 2011 and no earlier than January 7, 2011. **If a complete application for renewal has not been submitted in accordance with this deadline, the facility may not operate after** January 7. 2012**.** (Regulation 2-6-307, 404.2, & 409.6; MOP Volume II, Part 3, §4.2)

2. The permit holder shall comply with all conditions of this permit. The permit consists of this document and all appendices. Any non-compliance with the terms and conditions of this permit will constitute a violation of the law and will be grounds for enforcement action; permit termination, revocation and re-issuance, or modification; or denial of a permit renewal application. (Regulation 2-6-307; MOP Volume II, Part 3, §4.11)

3. In the event any enforcement action is brought as a result of a violation of any term or condition of this permit, the fact that it would have been necessary for the permittee to halt or reduce the permitted activity in order to maintain compliance with such term or condition shall not be a defense to such enforcement action. (MOP Volume II, Part 3, §4.11)

4. This permit may be modified, revoked, reopened and reissued, or terminated for

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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

equipment which is subject to this permit to the APCO and/or to his or her designee. (Regulation 1-440, Regulation 2-6-409.3; MOP Volume II, Part 3, §4.14)

E. Records

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

F. Monitoring Reports

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

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

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

G. Compliance Certification

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

Director of the Air Division
USEPA, Region IX

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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 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. (MOP Volume II, Part 3, §4.8)
3. 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. (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-3	Compost Facil, 31E3 sq ft	N/A	Custom	31,000 sq ft
S-4	Stockpiles/Finished Compost & Yard Waste	N/A	Custom	36,500 tons
S-5	Trommel Screen, Portable	N/A	Custom	36,500 tons
S-17	Reclaimed Water Pond C, 216 MM Gal Cap	N/A	Custom	216 MM gal capacity
S-18	Reclaimed Water Pond D, 358 MM Gal Cap	N/A	Custom	358 MM gal capacity
S-28	Hot water Boilers (2) (digester gas, natural gas)	Cleaver Brooks	CB-125	8.4 MM Btu/hr each
S-29	Internal Combustion lean burn engine #1 (digester gas, natural gas)	Waukesha	L7042G0	1160 h.p
S-31	Internal Combustion lean burn engine #3 (digester gas, natural gas)	Waukesha	L7042G0	1160 HP
S-32	Waste Recycle Grinder, Diesel Fired	John Deere	375JD	375 HP
S-33	Emergency Standby Generator #1, Diesel Fired	Caterpillar	3516	2836 HP, 2000 KW
S-34	Emergency Standby Generator #2, Diesel Fired	Caterpillar	3516	2836 HP, 2000 KW
S-35	Internal Combustion lean burn engine #4 (digester gas, natural gas)	Waukesha	L7042GL	1160 HP, 800 KW
S-36	Diesel Engine Compressor, portable	John Deere	300	70 HP
S-37	Diesel Engine Pump, portable	Deutz	F4L912	51 HP
S-38	Diesel Engine Pump, portable	Deutz	F4L912	51 HP
S-100	Municipal Wastewater Treatment Plant	Custom	N/A	21.3 MM gal/day calendar month average, dry weather 42 MM gal/day, calendar month average, wet weather
S-110	Preliminary Treatment; Aeration + Settling + Flotation	Custom	Custom	42 MM gal/day
S-120	Primary Treatment; Sedimentation + Flotation	Custom	Custom	42 MM gal/day
S-130	Flow Equalization; 2 Tanks, 6.4 MM	Custom	Custom	42 MM gal/day

II. Equipment List (continued)

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
	gal each			
S-140	Secondary Treatment, 2 Equalization Basins, 4 Aeration Basins	Custom	Custom	42 MM gal/day
S-150	Secondary Clarifiers; 5 Clarifiers	Custom	Custom	42 MM gal/day
S-160	Tertiary Treatment, 14 Filter Cells	Custom	Custom	42 MM gal/day
S-170	Disinfection, UV Light Treatment	Custom	Custom	42 MM gal/day
S-180	Sludge Handling Processes, 4 Belt Filter Presses	Custom	Custom	42 MM gal/day
S-190	Anaerobic Digesters; 4 Digesters	Custom	Custom	42 MM gal/day

Table II B – Abatement Devices

A-#	Description	Source(s) Controlled	Applicable Requirement	Operating Parameters	Required Efficiency
A-1	Biofilter 50,000 sq. ft	S-3, S-4, S-5	7-300	None Listed	90%
A-35	Digester Gas Flare	S-190	BAAQMD Reg. 1-301	None Listed	N/A

III. GENERAL APPLICABLE REQUIREMENTS

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

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

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

The full language of SIP requirements is on the EPA Region 9 website. The address is http://yosemite.epa.gov/r9/r9sips.nsf/Agency?ReadForm&count=500&state=California&cat=Bay+Area+Air+Quality+Management+District-Agency-Wide+Provisions

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 (11/3/93)	N
SIP Regulation 1	General Provisions and Definitions (11/10/82)	Y
BAAQMD Regulation 4	Air Pollution Episode Plan (3/20/91)	N
SIP Regulation 4	Air Pollution Episode Plan (8/06/90)	Y
BAAQMD Regulation 5	Open Burning (11/2/94)	N
SIP Regulation 5	Open Burning (5/3/84)	Y
BAAQMD Regulation 6	Particulate Matter and Visible Emissions (12/19/90)	N

III. General Applicable Requirements

Table III
Generally Applicable Requirements

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (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
SIP Regulation 8, Rule 3	Organic Compounds - Architectural Coatings (11/16/83)	Y
BAAQMD Regulation 8, Rule 4	Organic Compounds-General Solvent and Surface Coating Operations (12/20/95)	Y
BAAQMD Regulation 8, Rule 16	Organic Compounds-Solvent Cleaning Operation (12/20/95)	Y
BAAQMD Regulation 8, Rule 49	Organic Compounds - Aerosol Paint Products (12/20/95)	
SIP Regulation 8, Rule 49	Organic Compounds - Aerosol Paint Products (3/22/95)	Y
BAAQMD Regulation 8, Rule 51	Organic Compounds - Adhesive and Sealant Products (12/20/95)	N
BAAQMD Regulation 9, Rule 1	Inorganic Gaseous Pollutants-Sulfur Dioxide (3/15/95)	N
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)	N
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)	
SIP Regulation 12, Rule 4	Miscellaneous Standards of Performance - Sandblasting (9/2/81)	Y

IV. SOURCE-SPECIFIC APPLICABLE REQUIREMENTS

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

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

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

The full text of each permit condition cited is included in Section VI, Permit Conditions, of this permit. The full language of SIP requirements is on the EPA Region 9 website at: http://yosemite.epa.gov/r9/r9sips.nsf/Agency?ReadForm&count=500&state=California&cat=Bay+Area+Air+Quality+Management+District-Agency-Wide+Provisions.1. All other text may be found in the regulations themselves.

Table IV – A
Source-specific Applicable Requirements
S-3 COMPOST BAY, S-4 STOCKPILES, S-5 SCREENS

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 Number 1 Limitation	N	
6-401	Appearance of Emissions	Y	
BAAQMD Regulation 7	**Odorous Substances (3/17/82)**	**N**	
7-303	Limit on Odorous Compounds	N	
BAAQMD Regulation 8, Rule 2	**Organic Compounds-Miscellaneous Operation (6/15/94)**		
8-2-301	Miscellaneous Operations Standards	Y	
BAAQMD Condition #12848			
Part 1	Ringelmann limit (basis: BACT, 1-301)	Y	
Part 2	Biofilter source test requirement (Basis: Reg 7)	N	
Part 3	Throughput limit (basis: cumulative increase)	Y	
Part 4	Minimize Particulate Emissions (basis: 6-301)	Y	

IV. Source-Specific Applicable Requirements

Table IV – A
Source-specific Applicable Requirements
S-3 COMPOST BAY, S-4 STOCKPILES, S-5 SCREENS

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Part 5	Minimum processing time (basis: Reg 7)	N	
Part 6	Odor Limitation (basis: 7-301)	N	
Part 7	Daily Record Keeping of usage (basis: cumulative increase)	Y	

Table IV - B
Source-specific Applicable Requirements
S-17, S-18 RECLAIMED WATER PONDS

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 - C
Source-specific Applicable Requirements
S-28 HOT WATER BOILERS (2), BURNING NATURAL AND DIGESTER GAS

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 6	**Particulate and Visible Emissions (12/19/90))**		
6-301	Ringelmann No. 1 Limitation	Y	
6-305	Visible Particulates	Y	
6-310	Particulate Weight Limitation	Y	
6-310.3	Particulate Concentration Correction to 6% Oxygen, Dry	Y	
BAAQMD Regulation 8, Rule 2	**Organic Compounds-Miscellaneous Operation (6/15/94)**		
8-2-301	Miscellaneous Operations Standards	Y	
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	

IV. Source-Specific Applicable Requirements

Table IV - C
Source-specific Applicable Requirements
S-28 HOT WATER BOILERS (2), BURNING NATURAL AND DIGESTER GAS

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 9 Rule 7	**Inorganic Gaseous Pollutants-NOx and CO from Industrial, and Commercial Boilers, Steam Generators, and Process Heaters (9/15/93)**		
9-7-111	Limited Exemption, Low Fuel Usage	~~N~~Y	
9-7-304	Low Fuel Usage Requirements	~~N~~Y	
9-7-304.1	Oxygen concentration limit	~~N~~Y	
9-7-304.2	Tuning requirement	~~N~~Y	
9-7-304.3	Emission limits	~~N~~Y	
BAAQMD Condition #1541			
Part 1	Allowable fuel type (Basis: Cumulative Increase)	Y	
Part 2	Thermal Capacity limitation (Basis: Cumulative Increase)	Y	
Part 3	Annual tune-up requirement (Basis: 9-7-304.2)	Y	
Part 4	Recordkeeping (Basis: 2-6-501)	Y	

Table IV - D
Source-specific Applicable Requirements
S-29, S-31 INTERNAL COMBUSTION ENGINES AT 1160 HP.

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 6			
6-301	Ringelmann No. 1 Limitation	Y	
6-305	Visible Particulates	Y	
6-310	Particulate Weight Limitation	Y	
6-310.3	Particulate concentration corrected to 6% oxygen, dry basis	Y	
6-401	Appearance of Emissions	Y	
BAAQMD Regulation 8, Rule 2	**Organic Compounds-Miscellaneous Operation (6/15/94)**		
8-2-301	Miscellaneous Operations Standards	Y	

IV. Source-Specific Applicable Requirements

Table IV - D
Source-specific Applicable Requirements
S-29, S-31 INTERNAL COMBUSTION ENGINES AT 1160 HP.

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 9 Rule 8	**NOx and CO requirements for Stationary Internal Combustion Engines (1/20/93)**		
9-8-301	Emission Limits - Fossil Derived Fuel Gas	Y	
9-8-301.2	NOx Emission Limit for Lean Burn Engines	Y	
9-8-301.3	CO Emission Limit for Lean Burn Engines	Y	
9-8-302	Emission Limits - Waste Derived Fuel Gas	Y	
9-8-302.1	NOx Emission Limit for Lean Burn Engines	Y	
9-8-302.3	CO Emission Limit for Lean Burn Engines	Y	
BAAQMD Condition 18867			
Part 1	NOx Limit (Basis: Reg 9-8-301.2, 302.1)	Y	
Part 2	CO Limit (Basis: Reg 9-8-301.3, 302.1)	Y	
Part 3	Flowmeters Required (basis: 1-441, Cumulative Increase)	Y	
Part 4	Periodic Monitoring for NOx, CO (basis: Reg 2-6-409.2)	Y	
Part 5	Records (basis: Reg 2-6-501)	Y	

Table IV-E
Source-specific Applicable Requirements
S-32 WASTE RECYCLE GRINDER, DIESEL FIRED

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)**		
6-303	Ringelmann No. 2 Limitation		
6-303.1	Internal combustion engines below 1500 cubic inches displacement or standby engines	Y	
6-305	Visible Particulates	Y	
6-310	Particulate Weight Limitation	Y	
6-401	Appearance of Emissions	Y	

IV. Source-Specific Applicable Requirements

Table IV-E
Source-specific Applicable Requirements
S-32 WASTE RECYCLE GRINDER, DIESEL FIRED

BAAQMD Regulation 8, Rule 2	**Organic Compounds-Miscellaneous Operation (6/15/94)**		
8-2-301	Miscellaneous Operations Standards	Y	
BAAQMD Regulation 9, Rule 1	**Inorganic Gaseous Pollutants, Sulfur Dioxide (3/15/95)**		
9-1-301	Limitations on Ground Level Concentrations	Y	
9-1-304	Fuel Burning (Liquid and Solid Fuels)	Y	
BAAQMD Condition #17392		N	
Part 1	Diesel Throughput Limitation (Basis: Cumulative Increase)	Y	
Part 2	Diesel Sulfur Specification (Basis: Cumulative Increase, Reg 9-1-304)	Y	
Part 3	Hours of Operation (Basis: Cumulative Increase)	Y	
Part 4	Recordkeeping (Basis: Reg 1-441)	Y	
Part 5	Visible Emissions Limitations (Basis: Reg 6-301)	Y	

Table IV-F
Source-specific Applicable Requirements
S-33 STANDBY ENGINE/GENERATOR #5, DIESEL FIRED
S-34 STANDBY ENGINE/GENERATOR #6, DIESEL FIRED

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	
6-401	Appearance of Emissions	Y	
BAAQMD Regulation 8, Rule 2	**Organic Compounds-Miscellaneous Operation (6/15/94)**		
8-2-301	Miscellaneous Operations Standards	Y	

IV. Source-Specific Applicable Requirements

Table IV-F
Source-specific Applicable Requirements
S-33 STANDBY ENGINE/GENERATOR #5, DIESEL FIRED
S-34 STANDBY ENGINE/GENERATOR #6, DIESEL FIRED

BAAQMD Regulation 9, Rule 1	**Inorganic Gaseous Pollutants, Sulfur Dioxide (3/15/95)**		
9-1-301	Limitations on Ground Level Concentrations	Y	
9-1-304	Fuel Burning (Liquid and Solid Fuels)	Y	
BAAQMD Regulation 9, Rule 8	**Inorganic Gaseous Pollutants - Nitrogen Oxides and Carbon Monoxide from Stationary Internal Combustion Engines (8/1/01)**		
9-8-110.4	Exemption from 9-8 Standards, Emergency Standby Engines	N	
9-8-331	Hours of Operation, Essential Public Service Standby Engines	N	
BAAQMD Condition #18856			
part 1	Hours of Operation (Basis: Regulation 9-8-331, CA CCR δ93115)	Y	
part 2	Definition: Emergency Operation (basis: Regulation 9-8-231)	Y	
part 3	Definition: Reliability-Related Operation (basis: Regulation 9-8-232)	Y	
part 4	Monitoring Equipment (basis: Regulation 9-8-530)	Y	
Part 5	Recordkeeping (basis: Regulation 9-8-530, 1-441)	Y	

Table IV - G
Source-specific Applicable Requirements
S-35 INTERNAL COMBUSTION ENGINE, 1160 HP.

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 6			
6-301	Ringelmann No. 1 Limitation	Y	
6-305	Visible Particulates	Y	
6-310	Particulate Weight Limitation	Y	
6-310.3	Particulate concentration corrected to 6% oxygen, dry basis	Y	
6-401	Appearance of Emissions	Y	

IV. Source-Specific Applicable Requirements

Table IV - G
Source-specific Applicable Requirements
S-35 INTERNAL COMBUSTION ENGINE, 1160 HP.

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)**		
8-2-301	Miscellaneous Operations Standards	Y	
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	
9-1-304	Fuel Burning (Liquid and Solid Fuels)	Y	
BAAQMD Regulation 9 Rule 8	**NOx and CO requirements for Stationary Internal Combustion Engines (1/20/93)**		
9-8-301	Emission Limits - Fossil Derived Fuel Gas	Y	
9-8-301.2	NOx Emission Limit for Lean Burn Engines	Y	
9-8-301.3	CO Emission Limit for Lean Burn Engines	Y	
9-8-302	Emission Limits - Waste Derived Fuel Gas	Y	
9-8-302.1	NOx Emission Limit for Lean Burn Engines	Y	
9-8-302.3	CO Emission Limit for Lean Burn Engines	Y	
BAAQMD Condition 19750			
Part 1	Allowable Fuel: Digester Gas and/or Natural Gas with Diesel Pilot (Cumulative Increase)	Y	
Part 2	Thermal Capacity Limitation (Cumulative Increase)	Y	
Part 3	NOx Limits (BACT)	Y	
Part 4	CO Limits (BACT)	Y	
Part 5	Records (basis: Reg 2-6-501)	Y	
Part 6	Flowmeters Required (basis: Reg 1-441, Cumulative Increase)	Y	
Part 7	Initial Performance Test (basis: Reg 2-6-409.2)	Y	
Part 8	Annual Performance Test Requirement (basis: Reg 1-441)	Y	
Part 9	Recordkeeping (basis: Reg 2-6-409.2)	Y	

IV. Source-Specific Applicable Requirements

Table IV-H
Source-specific Applicable Requirements
S-36 DIESEL ENGINE COMPRESSOR, PORTABLE, JOHN DEERE, 70 HP
S-37 DIESEL ENGINE PUMP, PORTABLE, DEUTZ, 51 HP
S-38 DIESEL ENGINE PUMP, DEUTZ, 51 HP

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 2	**Permits – General Requirements (8/1/2001)**		
1-220.1	Portable Equipment; Single Site Time Limit	Y	
BAAQMD Regulation 6	**Particulate Matter and Visible Emissions (12/19/90)**		
6-303	Ringelmann No. 2 Limitation	Y	
6-305	Visible Particulates	Y	
6-310	Particulate Weight Limitation	Y	
6-401	Appearance of Emissions	Y	
BAAQMD Regulation 8, Rule 2	**Organic Compounds-Miscellaneous Operation (6/15/94)**		
8-2-301	Miscellaneous Operations Standards	Y	
BAAQMD Regulation 9, Rule 1	**Inorganic Gaseous Pollutants, Sulfur Dioxide (3/15/95)**		
9-1-301	Limitations on Ground Level Concentrations	Y	
9-1-304	Fuel Burning (Liquid and Solid Fuels)	Y	
BAAQMD Regulation 9, Rule 8	**Inorganic Gaseous Pollutants - Nitrogen Oxides and Carbon Monoxide from Stationary Internal Combustion Engines (8/1/01)**		
9-8-110.4	Exemption from 9-8-301, 302, 502 Standards, Emergency Standby Engines	N	
9-8-330	Hours of Operation, Emergency Standby Engines	N	
9-8-331	Hours of Operation, Essential Public Service Standby Engines	N	
9-8-530	Monitoring and Recordkeeping, Emergency Standby Engines	N	
BAAQMD Condition #19192			
Part 1	Eligibility Requirements (2-1-220)	Y	
Part 2	Single Site Operating Hours - Limitation (2-1-220)	Y	
Part 3	Noncompliance Reporting (2-1-403)	Y	

IV. Source-Specific Applicable Requirements

Table IV-H
Source-specific Applicable Requirements
S-36 DIESEL ENGINE COMPRESSOR, PORTABLE, JOHN DEERE, 70 HP
S-37 DIESEL ENGINE PUMP, PORTABLE, DEUTZ, 51 HP
S-38 DIESEL ENGINE PUMP, DEUTZ, 51 HP

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Part 4	Limitations on Diesel Fuel Sulfur Content (9-1-304)	Y	
Part 5	Opacity Limitation (6-301, 302)	Y	
Part 6	Public Nuisance (1-301)	Y	
Part 7	Limitation in Operation Near School (2-1-412)	Y	
Part 8	Recordkeeping (1-441, 9-8-530)	Y	

Table IV-I
Source-specific Applicable Requirements
S-100 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 Condition #947	Odor Abatement (basis: Reg. 7-1-102)	N	
Part 1	Wastewater Throughput (Cumulative Increase)	Y	
Part 2	Consequences of odor complaints (1-301; Public Nuisance)	Y	
Part 3	Recordkeeping (2-6-409.2)	Y	

IV. Source-Specific Applicable Requirements

Table IV-J
Source-specific Applicable Requirements
S-110 PRE- TREATMENT, S-120 PRIMARY TREATMENT, S-130 FLOW EQUALIZATION, S-140 SECONDARY TREATMENT, S-150 SECONDARY CLARIFIERS, S-160 TERTIARY TREATMENT S-170 DISINFECTION, S-180 SLUDGE HANDLING PROCESSES

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 Condition #947	Odor Abatement (basis: Reg. 7-1-102)	N	
Part 1	Wastewater Throughput (Cumulative Increase)	Y	
Part 2	Consequences of odor complaints (1-301; Public Nuisance)	Y	
Part 3	Recordkeeping (2-6-409.2)	Y	

Table IV-K
Source-specific Applicable Requirements
S-190 ANAEROBIC DIGESTERS

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 Regulation 9, Rule 2	**Inorganic Gaseous Pollutants- Hydrogen Sulfide (10/6/99)**		
9-2-301	H2S ground-level concentration limitations	N	
BAAQMD Cond 18871			
Part 1	Primary Abatement of Digester Gas (Basis: Reg 1-301)	Y	

IV. Source-Specific Applicable Requirements

Table IV-K
Source-specific Applicable Requirements
S-190 ANAEROBIC DIGESTERS

Part 2	Secondary Abatement of Digester Gas (Basis: Cumulative Increase)	Y	
Part 3	Digester Gas Sulfide ppm Limit (Basis: Reg 9-1)	Y	
Part 4	Weekly Sulfide Content Monitoring/Recording (Basis: Reg 9-1-302)	Y	

V. SCHEDULE OF COMPLIANCE

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

VI. PERMIT CONDITIONS

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

A. Source Specific Permit Conditions

***Condition #947**
For S-100 Wastewater Treatment Plant

1. Flowrate

Total wastewater flow shall not exceed 21.3 million gallons per day on a calendar month average during dry weather periods or 42 million gallons per day on a calendar month average during wet weather periods. For the purposes of this limit, wet weather is defined as the months from October through May. [Basis: Cumulative Increase]

2. Nuisance

In the event that a public nuisance odor source is identified at this facility, the Permit Holder shall employ all measures, practices, or modifications necessary to abate the nuisance. [Basis: Regulation 1-301]

3. Records

To demonstrate compliance with Part 1, above, the Permit Holder shall maintain the following records: [Basis: Regulation 2-6-409.2]

a. Daily and monthly (calendar basis) records of the quantity of wastewater processed at this source.
b. Monthly records shall be totaled for each consecutive 12-month period.
c. All records shall be retained onsite for five years from the date of entry, and made available for inspection by District staff upon request.

VI. Permit Conditions

d. These recordkeeping requirements do not replace the recordkeeping requirements contained in any applicable District Regulations.

***Condition #1541**
For S-28 Hot Water Boilers

1. S-28 Boilers may be fired on any combination of sewage sludge digester gas or natural gas. (Basis: Cumulative Increase)

2. Throughput

   Total fuel usage at S-28 boilers shall not exceed 73.58 MM Btu/yr per boiler, gross heating basis. (Basis: Cumulative Increase)

3. The Permit Holder shall perform a regular inspection and tune-up of the combustion section of both boilers 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: Regulation 9-7-304.2)

4. Recordkeeping

   To demonstrate compliance with parts 1,2 and 3, above, the Permit Holder of hot water boilers S-28 shall document the operation and tune ups by keeping the following records:

   a. Total 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: Reg 2-6-501)

Condition #12848
For S-3 Composting Bay, S-4 Stockpiles, S-5 Screens, A-1 Biofilter

VI. Permit Conditions

1. Visible particulate emissions from this source shall not exceed Ringelmann 0.5 or result in fallout on adjacent property in such quantities to cause a public nuisance per Regulation 1-301. (Basis: BACT, Regulation 1-301)

*2. The facility shall conduct a District approved source test on A-1 Biofilter within 60 days of start-up to ensure that this facility is in compliance with Regulation 7, Section 303 for the following compounds: (Basis: Regulation 7)

   a Dimethylsulfide (CH3)2S
   b. Mercaptans, calculated as methylmercaptan CH3SH
   c. Ammonia NH3

   The samples shall be collected as prescribed in the Manual of Procedures, Volume IV and submitted to the District.

3. Throughput of sludge and yard waste mixture shall not exceed 36,500 tons in any consecutive 12-month period. (Basis: cumulative increase)

4. For the compost that is stockpiled, both in the curing pile and storage piles, water shall be added manually as needed to reduce particulates. (Basis: Regulation 6-301)

*5. The stockpile of shredded screen yard waste (i.e., green tree trimmings, green leaves, brushes) shall be processed no later than 5 days from the time they are received to prevent wood decomposition and odors. (Basis: Reg. 7)

*6. If the facility receives 2 or more Violation Notices from the District for "Public Nuisance" in any consecutive 12 month period, the owner/operator of this facility shall submit to the District within 30 days, an application to modify the Permit to Operate to include the following control measures as applicable or any other that the District deems necessary and appropriate. (Basis: Reg. 7)

   a. Reduce holding time of yard waste from 5 days to 3 days.
   b. Replace biofilter media with new material if it no longer is effective and decomposition has set it, or increase the biofilters thickness so that no odors are detected.

7. In order to demonstrate compliance with the above conditions, the operator of sources S-3, S-4 and S-5 shall maintain the following records in a District approved log. These records shall be kept on facility and made available for

VI. Permit Conditions

District inspection for a period of five years from the date that the record was made. (Basis: Cumulative Increase, BAAQMD Regulation 2-6-501)

a. Daily throughput of sludge/yard waste material being processed, summarized on a monthly basis.
b. Cubic yards of stockpiled yard waste received in stockpiled area and removed for processing during a 5 day time period.
c. Daily hours of operation, summarized on a monthly basis.

Condition 17392
For Source S-32 Waste Recycle Grinder, Turbo Diesel Powered, 375 HP

1. The total amount of diesel fuel burned in S-32 recycle grinder diesel engine shall not exceed 2,448 gallons during any consecutive 12-month period. [Basis: Cumulative Increase]

2. S-32 recycle grinder diesel engine shall not burn diesel fuel having a sulfur content greater than 500 ppm (wt basis). [Basis: Cumulative Increase]

3. S-32 recycle grinder diesel engine operation shall not exceed 3 hours in any calendar day. [Basis: Cumulative Increase]

4. Daily records shall be maintained, in a District approved logbook, of the diesel fuel usage and engine hours of operation. The logbook shall be kept onsite and made available to District Staff upon request. [Basis: Reg 1-441]

5. Visible particulate emissions from this operation shall not exceed a Ringelmann 1.0 during any consecutive three minutes in any hour. [Basis: 6-301]

Condition # 18856
For S-33 and S-34 Emergency Standby Gensets

1. Hours of Operation

The emergency standby engine generators S-33 and S-34 shall only be operated to mitigate emergency conditions or for reliability-related activities. Operation for reliability-related activities shall not exceed 20 hours in any

VI. Permit Conditions

calendar year per engine. Operation while mitigating emergency conditions is unlimited. (Basis: Reg 9-8-331)

2. Emergency Conditions is defined as any of the following: (Basis: Reg 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: Reg 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.

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

5. The emergency standby generators S-33 and S-34 shall only be fired on diesel fuel with sulfur content not to exceed 0.5% by weight. (Basis: Reg 9-1-304)

   To demonstrate compliance with the above sulfur limit, the Permit Holder shall secure and maintain onsite, for at least 5 years, one of the following records: (Basis: Reg 2-6-409.2, 2-6-501)

   a. A written statement, as applicable, received from the diesel fuel supplier(s) certifying that the diesel fuel purchased from the supplier does not exceed 0.5% by weight or meets the sulfur limitations for CARB Vehicular Diesel Fuel as specified in 13 CCR, Section 2281, California Code of Regulations, or
   b. A vendor certification of sulfur content, or
   c. Fuel test results showing the sulfur content from a District-approved test.

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6. Records

The following monthly records shall be maintained in a District-approved log for at least 2 years and shall be made available for District inspection upon request. (Basis: Reg 9-8-530, 1-441)

a. Total hours of operation.
b. Hours of operation under emergency conditions and a description of the nature of each emergency condition.
c. Monitoring Records noted in Part 4, above.
d. Diesel sulfur records required in Part 5, above.

Condition 18867
For Sources S-29 and S-31

1. Emissions of NOx from this source shall not exceed 140 ppmv as corrected to 15% oxygen, dry basis. (Basis: BAAQMD 9-8-301.2, 302.1, cumulative increase)

2. Emissions of CO from this source shall not exceed 2000 ppmv as corrected to 15% oxygen, dry basis. (Basis: BAAQMD 9-8-301.3, 302.3)

3. District approved flowmeters shall be installed on each engine, to measure the respective digester gas and natural gas flow. These flowmeters shall be installed prior to any operation and maintained in good working order. (Basis: BAAQMD 1-441, cumulative increase)

4. City of Santa Rosa 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. City of Santa Rosa 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: BAAQMD 2-6-409.2)

5. A District approved engine log shall be maintained to record the hours of operation, amount of digester gas and natural gas combusted to produce the power. This log shall be maintained for a period of at least five years and shall be made available to District personnel upon request. (Basis: BAAQMD 2-6-

VI. Permit Conditions

501, cumulative increase)

Condition # 18871
For S-190 Anaerobic Digesters

1. Emissions from S-190 shall be abated by combustion at any or all of the following sources: S-28, S-29, S-30, and S-31 except as specified in Part 2. (Basis: BAAQMD 1-301)

2. Emissions from S-190 shall be abated by A-35 only when equipment failure or other emergencies require the flaring of digester gas. (Basis: Cumulative Increase)

3. Digester gas total sulfur content shall not exceed 1500 ppm. (Basis: BAAQMD 9-1)

4. To demonstrate compliance with this standard the permit holder shall monitor and record the sulfur content of the digester gas at a frequency of at least once every calendar week. If the permit holder can demonstrate 3 months of digester gas sulfur results lower than 1000 ppm the monitoring frequency for sulfur analysis may be reduced to at least once every calendar month. (Basis: BAAQMD 9-1-302)

Condition 19192 for sources S-36, S-37, and S-38

S-36 Portable Compressor: Diesel Engine, Make: John Deere, Model: 300 Series, Rated Horsepower: 70 HP.
S-37 Portable Pump: Diesel Engine, Make: Deutz, Model: F4L 912 1441-32, Rated Horsepower: 51 HP.
S-38 Portable Pump: Diesel Engine, Make: Deutz, Model: F4L912, Rated Horsepower: 51 HP.

Portable Equipment Requirements

1. This mobile equipment shall operate at all times in conformance with the eligibility requirements set forth in BAAQMD Regulation 2-1-220 for portable equipment. [Basis: BAAQMD 2-1-220]

VI. Permit Conditions

2. If this portable equipment remains at any fixed location in the Bay Area Air Basin for more than 12 months, the portable permit will automatically revert to a conventional permanent location BAAQMD permit and will lose its portability. [Basis: BAAQMD 2-1-220.10]

3. Any loss of portability per part 2, above, shall be reported to the Director of the Compliance and Enforcement Division no later than 30 days after the loss of its portability. [Basis: BAAQMD 2-1-404]

Regulatory Compliance Requirement

4. S-36, S-37, and S-38 shall only fire diesel fuel containing less than 0.5% by weight sulfur. [Basis: BAAQMD 9-1-304]

   To demonstrate compliance with the above sulfur limit, the Permit Holder shall secure and maintain onsite, for at least 5 years, one of the following records: [Basis: Regulations 2-6-409.2, 2-6-501]

   a. A written statement, as applicable, received from the diesel fuel supplier(s) certifying that the diesel fuel purchased from the supplier does not exceed 0.5% by weight or meets the sulfur limitations for CARB Vehicular Diesel Fuel as specified in 13 CCR, Section 2281, California Code of Regulations, or
   b. A vendor certification of sulfur content, or
   c. Fuel test results showing the sulfur content from a District-approved test.

5. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than 3 minutes in any one hour that is as dark or darker than Ringelmann #1 or equivalent to 20% opacity. [Basis: BAAQMD 6-301, 302]

6. Operation of S-36, S-37, and S-38 shall not create emissions in sufficient quantities as to cause a public nuisance under Regulation 1-301. [Basis: BAAQMD 1-301]

7. S-36, S-37, and S-38 shall not be operated for longer than 72 consecutive hours within 1,000 feet of a school. To operate for longer than 72 consecutive hours within 1,000 feet of a school, the Permit Holder must submit an application to the District so that proper notification of the intended operation can be made known to the affected public in advance of any usage of the equipment. [Basis: BAAQMD 2-1-412]

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Recordkeeping Requirements

8. The following records shall be kept in a District-approved logbook and retained for a period of at least five years following the date of entry. The log shall be kept with the equipment and made available to District staff upon request. [Basis: BAAQMD 1-441]

    a. Weekly hours of operation or fuel usage for S-36, S-37, and S-38.
    b. Hours of operation or fuel usage shall be totaled on a monthly basis

Condition 19750
For source S-35, Cogen Engine #4, 1160 BHP, 800 KW

1. This engine shall be fired on digester gas and/or natural gas only. [Basis: Cumulative Increase]

2. Thermal Capacity Limitation: Total thermal input shall not exceed 56,772 MM Btu in any 12-month period. [Basis: Cumulative Increase]

3. NOx emissions, calculated an NO2, shall not exceed 95 ppm at 15 percent oxygen, or 0.35 lb/MM Btu fuel input [Basis: BACT, Cumulative Increase)

4. CO emissions shall not exceed 410 ppm at 15 percent oxygen, or 0.94 lb/MM Btu fuel input. [Basis: BACT, Cumulative Increase]

5. NMHC emissions, calculated as methane, shall not exceed 270 ppm at 15 percent oxygen, or 0.35 lb/MM Btu duel input. [Basis: BACT, Cumulative Increase]

6. District approved flowmeters shall be installed on this engine to measure the respective digester gas and natural gas flow. These flowmeters shall be installed prior to any operation and maintained in good working order. [Basis: Cumulative Increase]

7. To demonstrate compliance with the limits specified in Parts 3, 4, and 5, above, the permit holder shall conduct a District-approved performance test within 60 days of startup. [Basis: BAAQMD 2-6-409.2]

8. City of Santa Rosa shall ensure that an annual performance test is conducted

VI. Permit Conditions

on this engine in accordance with District-approved test procedures to demonstrate ongoing compliance with the NOx, CO and NMHC limits specified in Parts 3, 4, and 5, above.
[Basis: BAAQMD 1-441]

9. To determine compliance with the above Parts, the Permit Holder shall maintain the following records and provide all of the data necessary to evaluate compliance with the above conditions, including the following information:
[Basis: Regulation 2-6-409.2]

   a. Monthly records of the quantity of digester gas and natural gas burned at this source.
   b. Monthly records of the total thermal input in BTU.
   c. All records shall be retained onsite for five years from the date of entry, and made available for inspection by District staff upon request.
   d. These recordkeeping requirements do not replace the recordkeeping requirements contained in any applicable District Regulation.

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-3 COMPOST BAY, S-4 STOCKPILES, S-5 SCREENS

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
TSP	BAAQMD 6-301	N		Ringelmann No. 1		N	
	BAAQMD Cond #12848, Part 1	Y		Ringelmann No. 1		N	

Table VII-B
Applicable Limits and Compliance Monitoring Requirements
S-17, S-18 Reclaimed Water Ponds

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Organic Compounds	BAAQMD 8-2-301	Y		>15 lb/day or >300 ppm total carbon concentration	N	N	

VII. Applicable Emission Limits & Compliance Monitoring Requirements

Table VII-C
Applicable Limits and Compliance Monitoring Requirements
S-28 Hot Water Boilers

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
SO2	BAAQMD Regulation 9-1-301	Y		GLC of 0.5 ppm for 3 min or 0.25 ppm for 60 min or 0.05 ppm for 24 hours	None	N	
	BAAQMD Regulation 9-1-302	Y		300 ppm (dry)	None	N	
Opacity	BAAQMD 6-301	Y		> Ringelmann 1.0 for no more than 3 min in any hour	N	N	
PM	BAAQMD 6-310	Y		0.15 gr/dscf at 6% Oxygen	N	N	
Organic Compounds	BAAQMD 8-2-301	Y		>15 lb/day or >300 ppm total carbon concentration	N	N	

Table VII-D
Applicable Limits and Compliance Monitoring Requirements
S-29 & S-31 I.C. ENGINES

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
NOx	BAAQMD 9-8-301.2	N		NOx<140 ppmv corrected to 15% oxygen, dry basis	Condition 18867 part 1	P/A[2]	Source test or alternate monitoring plan
NOx	BAAQMD 9-8-302.1	N		NOx<140 ppmv corrected to 15% oxygen, dry basis	Condition #, 18867 part 1	P/A[2]	Source test or alternate monitoring plan

VII. Applicable Emission Limits & Compliance Monitoring Requirements

Table VII-D
Applicable Limits and Compliance Monitoring Requirements
S-29 & S-31 I.C. ENGINES

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
	Condition 18867, part 1	Y		NOx<140 ppmv corrected to 15% oxygen, dry basis	Condition #, 18867 part 1	P/A	Source test or alternate monitoring plan
CO	BAAQMD 9-8-301.3	N		CO<2000 ppmv corrected to 15% oxygen, dry basis	Condition # 18867, part 2	P/A[2]	Source test or alternate monitoring plan
CO	BAAQMD 9-8-302.3	N		CO<2000 ppmv corrected to 15% oxygen, dry basis	Condition # 18867, part 2	P/A[2]	Source test or alternate monitoring plan
CO	Condition 18867, part 2	Y		CO<2000 ppmv corrected to 15% oxygen, dry basis	Condition # 18867, part 2	P/A[2]	Source test or alternate monitoring plan

Table VII-E
Applicable Limits and Compliance Monitoring Requirements
S-32 WASTE RECYCLER GRINDER

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Fuel Input	BAAQMD Cond 17392, Part 1	Y		2,448 gal in any consecutive 12 month period	BAAQMD Cond 17392, Part 4	P/D	Records
TSP	6-301	N		Ringelmann No. 1		N	
	BAAQMD 6-310	Y		0.15 grain/dscf @ 6% O2		N	
Diesel	BAAQMD	Y		500 ppm	BAAQMD	N	

VII. Applicable Emission Limits & Compliance Monitoring Requirements

Table VII-E
Applicable Limits and Compliance Monitoring Requirements
S-32 WASTE RECYCLER GRINDER

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Sulfur	Cond 17392 Part 2				Cond 17392 Part 2		

Table VII-G
Applicable Limits and Compliance Monitoring Requirements
S-33, Standby Engine/Generator #1, Diesel Fired, 2000 KW
S-34, Standby Engine/Generator #2, Diesel Fired, 2000 KW

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Hrs of Operation	CA CCR Section 93115	N	1/1/06	20 hours/calendar year	CA CCR Section 93115, BAAQMD Cond 18856, Part 5	P/E	Records
Diesel Sulfur Content	BAAQMD 9-1-304	N		0.5% by weight		N	
Diesel Sulfur Content	BAAQMD Condition 18856, part 5,	Y		0.5% by weight	BAAQMD Condition 18856, Part 5	P/E	Records
FP	BAAQMD 6-310	Y		0.15 gr/dscf		N	
Opacity	BAAQMD 6-303	Y		Ringelmann 2.0 for no more than 3 minutes in any hour		N	

VII. Applicable Emission Limits & Compliance Monitoring Requirements

Table VII-C
Applicable Limits and Compliance Monitoring Requirements
S-35 Internal Combustion Engine, 1160 HP

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
NOx	BAAQMD Regulation 9-8-302.1	Y		140 ppmv @ 15% O2, dry	BAAQMD Cond 19750, part 8	P/A	Source test
	BAAQMD Condition 19750, part 3	Y		95 ppm @ 15% O2, or 0.25 lb/MM Btu fuel	BAAQMD Cond 19750, part 8	P/A	Source test
CO	BAAQMD Regulation 9-8-302.3	Y		2000 ppmv @ 15% O2, dry	BAAQMD Cond 19750, part 8	P/A	Source test
	BAAQMD Cond 19750, part 4	Y		410 ppm @ 15 % O2 or 0.94 lb/MM btu fuel	BAAQMD Cond 19750, part 8	P/A	Source test
SO2	BAAQMD Regulation 9-1-301	Y		GLC of 0.5 ppm for 3 min or 0.25 ppm for 60 min or 0.05 ppm for 24 hours	None	N	
	BAAQMD Regulation 9-1-302	Y		300 ppm (dry)	None	N	
NMHC	BAAQMD Cond 19750, part 5	Y		270 ppm @ 15% Oxygen or 0.35 lb/MM Btu Fuel Input	BAAQMD Cond 19750, part 8	P/A	Source test
	BAAQMD 8-2-301	Y		>15 lb/day or >300 ppm total carbon concentration	None	N	
Opacity	BAAQMD 6-301	Y		> Ringelmann 1.0 for no more than 3 min in any hour	None	N	
FP	BAAQMD 6-310	Y		0.15 gr/dscf	None	N	
Thermal Throughput	BAAQMD Condition	Y		56,772 MM Btu in any 12 month	BAAQMD Cond 19750,	P/D	Records

VII. Applicable Emission Limits & Compliance Monitoring Requirements

Table VII-C
Applicable Limits and Compliance Monitoring Requirements
S-35 Internal Combustion Engine, 1160 HP

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
	19750 part 2			period	part 9		

Table VII-F
Applicable Limits and Compliance Monitoring Requirements
S-36, Portable Compressor, Diesel Fired, 70 HP
S-37 Portable Pump, Diesel Fired, 51 HP
S-38 Portable Pump, Diesel Fired, 51 HP

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Hours of Operation within 1000 ft of School	BAAQMD Cond 19192, part 7	Y		72 consecutive hours (unless permit is granted for more time)	BAAQMD Cond 19192, parts 8a, 8b	P/W	Records
Diesel Sulfur Content	BAAQMD 9-1-304	N		0.5% by weight	BAAQMD Condition 19192, Part 4	P/E	Records
Diesel Sulfur Content	BAAQMD Condition 19192, part 4,	Y		0.5% by weight	BAAQMD Condition 19192, Part 4	P/E	Records
Opacity	BAAQMD 6-303	Y		>Ringelmann 2.0 for no more than 3 min in any hour		N	
FP	BAAQMD 6-310	Y		0.15 gr/dscf		N	

VII. Applicable Emission Limits & Compliance Monitoring Requirements

Table VII-D
Applicable Limits and Compliance Monitoring Requirements
S-100 WASTEWATER TREATMENT PLANT
S-110 PRELIMINARY TREATMENT
S-120 PRIMARY TREATMENT
S-130 FLOW EQUALIZATION
S-140 SECONDARY TREATMENT
S-150 SECONDARY CLARIFIERS
S-160 TERTIARY TREATMENT
S-170 DISINFECTION
S-180 SLUDGE HANDLING PROCESSES

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Organic Compounds	BAAQMD 8-2-301	Y		Emissions may not exceed 300 ppm total carbon, dry, and 15 lb/day/source		N	N

Table VII-D
Applicable Limits and Compliance Monitoring Requirements
S-190 ANAEROBIC DIGESTERS

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Organic Compounds	BAAQMD 8-2-301	Y		Emissions may not exceed 300 ppm total carbon, dry, and 15 lb/day/source	N	N	N
Sulfide	BAAQMD Cond 18871	N		1500 ppm	BAAQMD Cond 18871 Part 4	P/W	Testing

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
BAAQMD 6-303	Ringelmann No. 2 Limitation	Manual of Procedures, Volume I, Evaluation of Visible Emissions
BAAQMD 6-310	Particulate Weight Limitation	Manual of Procedures, Volume IV, ST-15, Particulates Sampling
BAAQMD 7-303	Limit on Odorous Compounds	Manual of Procedures, Volume IV, ST-1, ST-8, ST-11, ST-16, ST-22, Sampling of Odorous Compounds
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 9-1-302	General Emission Limitation	Manual of Procedures, Volume IV, ST-19A, Sulfur Dioxide, Continuous Sampling, or ST-19B, Total Sulfur Oxides Integrated Sample
BAAQMD 9-8-301.2	Fossil Derived Fuel Gas, NOx Limits for Lean Burn Engines	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen, Continuous Sampling Limit on Odorous Compounds and ST-14, Oxygen, Continuous Sampling
BAAQMD 9-8-301.3	Fossil Derived Fuel Gas, CO Limits	Manual of Procedures, Volume IV, ST-6, Carbon Monoxide, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
BAAQMD 9-8-302.1	Waste Derived Fuel Gas NOx Limits for Lean Burn Engines	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen, Continuous Sampling Limit on Odorous Compounds and ST-14, Oxygen, Continuous Sampling
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
BAAQMD Cond # 18867, Part 1	NOx Limit	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen, Continuous Sampling Limit on Odorous Compounds and ST-14, Oxygen, Continuous Sampling
BAAQMD Cond # 18867, part 2	CO Limits	Manual of Procedures, Volume IV, ST-6, Carbon Monoxide, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
BAAQMD Cond # 12848, Part 1	Ringelmann limit	Manual of Procedures, Volume I, Evaluation of Visible Emissions

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.

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

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

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

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

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

MOP
The District's Manual of Procedures.

NAAQS
National Ambient Air Quality Standards

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

NMHC
Non-methane Hydrocarbons (Same as NMOC)

NMOC
Non-methane Organic Compounds (Same as NMHC)

NOx
Oxides of nitrogen.

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.

VIII. Glossary (continued)

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. Applies to emissions of POC, NOx, 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

PM
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
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.

VIII. Glossary (continued)

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