Bay Area Air Quality Management District

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

Statement of Basis
for
MAJOR FACILITY REVIEW PERMIT ADMINISTRATIVE AMENDMENT AND MINOR REVISION

Waste Management of Alameda County
Facility #A2066

Facility Address:
10840 Altamont Pass Road
Livermore, CA 94550

Mailing Address:
10840 Altamont Pass Road
Livermore, CA 94550

Application Engineer: Carol Allen
Site Engineer: Carol Allen

Application: 14713

TABLE OF CONTENTS

STATEMENT OF BASIS

for

MFR Permit: Administrative Amendment and Minor Revision

Waste Management of Alameda, Inc.; PLANT # 2066

APPLICATION # 14713

A. BACKGROUND

Site Description

Waste Management of Alameda, Inc. (Waste Management or WM) operates the Altamont Landfill and Resource Recovery Facility in Livermore, CA. This facility includes the Bay Area's largest active landfill (S-2 with more than 30 million tons of refuse in place), two 3 MW Gas Turbines (S-6 and S-7, landfill gas fired) equipped with Fogging Systems (A-6 and A-7), two 1877 bhp IC Engines (S-23 and S-24, landfill gas fired), one 71 MM BTU/hour Landfill Gas Flare (A-15).

This facility also has wastewater treatment operations (permitted: S-19, S-140, and S-141; exempt: S-12, S-20, S-28, S-130, A-130, and S-180), a non-retail gasoline dispensing facility (S-99), and diesel engines that provide portable or standby power. Until December 1, 2005, this facility had nine permitted diesel engines: S-190, S-191, S-192, S-193, S-194, S-195, S-196, S-197, and S-198. As of December 1, 2005, S-191 and S-192 were permanently shut down and replaced with electric motors. This facility now has seven permitted diesel engines.

Current Project

Application # 14713 includes an Administrative Amendment that will remove the two diesel engines that were recently shut down and a Minor Revisions that will modify permit condition for the wastewater treatment operations.

For the wastewater treatment operations, the District is proposing to modify Condition # 20922 for the S-140 and S-141 Aerated Biological Reactors. The proposed changes would allow Waste Management to demonstrate compliance with daily and annual precursor organic compound (POC) emission limits in lieu of complying with wastewater throughput limits and VOC concentration limits. The District is proposing corrections to the current daily wastewater throughput limit and the VOC concentration limit. The District is proposing to add a calculation procedure to Condition # 20922 that would be used to demonstrate compliance with the new POC emission limits. The proposed alternative POC emission limits, the proposed emission calculations procedures, and the revised throughput and VOC concentration limits are discussed in detail in the Engineering Evaluation for Application # 14712 (see Appendix A).

B. EMISSIONS

The removal of two diesel fired water pump engines (S-191 and S-192) from the MFR Permit for Site # A2066 will not result in any emission increases. These engines were replaced with electric motors.

As discussed in the Engineering Evaluation for Application # 14712, the proposed POC emission limits for S-140 and S-141 are equal to the current maximum permitted emission rates for these sources. Therefore, this application will not result in any emission increases. The maximum permitted emission rates for S-140 and S-141 are: 10.0 pounds/day of POC and 0.615 tons/year of POC.

C. PROPOSED MFR PERMIT MODIFICATIONS

This facility is subject to the Operating Permit requirements of Title V of the federal Clean Air Act (40 CFR, Part 70) and BAAQMD Regulation 2, Rule 6, Major Facility Review (MFR), because it is a major facility for NO_x and CO emissions and also because it is a designated facility (since it is subject to the control requirements of the Emission Guidelines for MSW Landfills). Therefore, this facility is required to have an MFR Permit pursuant to Regulations 2-6-301 and 2-6-304.

The initial MFR Permit for this facility was issued on December 1, 2003 and was revised on February 5, 2004, December 21, 2004, April 5, 2005, October 4, 2005, and December 15, 2005. The removal of equipment from the MFR Permit requires an Administrative Amendment. The proposed permit condition revisions discussed in this report will not result in any emission increases and will not reduce the frequency of any monitoring requirements. Therefore, these revisions are not significant and will require a Minor Revision of the MFR Permit.

The proposed MFR permit revisions related to this application are described below.

Section I

No changes are proposed for this section.

Section II

The two diesel engines that were shut down and removed from this facility will be removed from Table II-A as shown below.

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-190	Diesel Engine (for emergency standby generator at WWTP)	Cummins	LTA-10-G1	380 bhp, <1500 in^3 displacement, 17.1 gallons/hour diesel oil
~~S-191~~	~~Diesel Engine (for primary water pump)~~	~~Duetz~~	~~F4L912~~	~~63 bhp, <1500 in^3 displacement, 3.3 gallons/hour diesel oil~~
~~S-192~~	~~Diesel Engine (for booster water pump)~~	~~Duetz~~	~~F4L912~~	~~63 bhp, <1500 in^3 displacement, 3.3 gallons/hour diesel oil~~
S-193	Diesel Engine (for fire pump at gas plant)	Caterpillar	3208	159 bhp, <1500 in^3 displacement, 7.1 gallons/hour diesel oil
S-194	Diesel Engine (for emergency standby generator at flare station)	Cummins	6CT-8.3G	207 bhp, <1500 in^3 displacement, 10.0 gallons/hour diesel oil
S-195	Diesel Engine (for emergency standby generator at maintenance facility)	Cummins	6CT-8.3G	207 bhp, <1500 in^3 displacement, 10.0 gallons/hour diesel oil
S-196	Diesel Engine (for emergency standby generator at scale-house)	Isuzu	DCA-60SSA-1	78 bhp, <1500 in^3 displacement, 4.0 gallons/hour diesel oil
S-197	Diesel Engine (for portable generator at break trailer)	Cummins	4BT-3.9-G1	78 bhp, <1500 in^3 displacement, 3.96 gallons/hour diesel oil
S-198	Diesel Engine (for vacuum truck pump)	Cummins	6BTA-5.9	177 bhp, <1500 in^3 displacement, 8.6 gallons/hour diesel oil

No changes are proposed for Table II-B.

Section III

No changes are proposed for this section.

Section IV

The District is proposing several editorial corrections for this section. In Table IV-F for S-140 and S-141, the District is proposing to modify the description of Parts 1, 2, and 5 to more correctly identify the requirements in these parts. In Table IV-H, the District is proposing to remove the S-191 and S-192 diesel engines from the title of this table.

Table IV – F
Source-Specific Applicable Requirements
S-140 SBR 1, AERATED BIOLOGICAL REACTOR
S-141 SBR 2, AERATED BIOLOGICAL REACTOR

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 8, Rule 2	**Organic Compounds-Miscellaneous Operation (3/22/95)**	Y	
8-2-301	Miscellaneous Operations	Y	
BAAQMD Condition # 20922			
Part 1	Daily ~~Wastewater Throughput and Organic Content~~ Throughput, Concentration, and Emission Limits (Regulation 2-1-403: Keep Emissions Below BACT Trigger)	Y	
Part 2	Annual ~~Wastewater Throughput and Organic Content~~ Throughput, Concentration, and Emission Limits (Offsets)	Y	
Part 3	Permit Requirements If Wastewater Contains Specified Compounds above the Indicated Concentration Limits (Toxic Risk Management Policy)	N	
Part 4	Wastewater Testing Requirements (Offsets and Toxic Risk Management Policy)	Y	
Part 5	Record Keeping Requirements and Emission Calculation Procedures (Offsets and Toxic Risk Management Policy)	Y	
Part 6	Permit Condition Effective Date (Regulation 2-1-403)	Y	

Table IV – H
Source-Specific Applicable Requirements
~~S-191 DIESEL ENGINE (FOR PRIMARY WATER PUMP)~~
~~S-192 DIESEL ENGINE (FOR BOOSTER WATER PUMP)~~
S-193 DIESEL ENGINE (FOR FIRE PUMP AT GAS PLANT)
S-197 DIESEL ENGINE (FOR PORTABLE GENERATOR AT BREAK TRAILER)
S-198 DIESEL ENGINE (FOR VACUUM TRUCK PUMP)

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	Y	
6-303.1	Internal combustion engines below 1500 cubic inches displacement or standby engines	Y	
6-305	Visible Particles	Y	
6-310	Particle Weight Limitation	Y	
6-401	Appearance of Emissions	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	Liquid and Solid Fuels	Y	
BAAQMD Condition # 20801			
Part 1	Fuel Usage Limits (Regulation 2-1-301)	Y	
Part 2	Record Keeping Requirements (Regulations 2-1-301 and 9-1-304)	Y	

Section V

No changes are proposed for this section.

Section VI

The District is proposing to modify Condition # 20801 by deleting references to the S-191 and S-192 water pump engines and by deleting the obsolete throughput limits for these engines.

The District is proposing to modify Condition # 20922 for S-140 and S-141, in order to allow Waste Management to demonstrate compliance with daily and annual POC emission limits in lieu of complying with wastewater throughput and VOC concentration limits. The District is proposing minor corrections to the throughput and VOC concentration limits in Parts 1a and 2a, and is adding the equivalent POC emission limits to Parts 1b and 2b. The POC emission limits

require the establishment of an appropriate emission calculation procedure, which is being added as Parts 5h and 5i. Editorial corrections are being made to Parts 4 and 5, and an effective date for the record keeping requirements is being added to Part 6.

Proposed permit condition revisions are shown below in strikeout and underline format.

Condition # 20801
~~**FOR: S-191 DIESEL ENGINE (FOR PIMARY WATER PUMP)**~~
~~**FOR: S-192 DIESEL ENGINE (FOR BOOSTER WATER PUMP)**~~
FOR: S-193 DIESEL ENGINE (FOR FIRE PUMP AT GAS PLANT)
FOR: S-197 DIESEL ENGINE (FOR PORTABLE GENERATOR AT BREAK TRAILER)
FOR: S-198 DIESEL ENGINE (FOR VACUUM TRUCK PUMP)

1. Diesel fuel usage at each engine shall not exceed the rate listed below during any consecutive 12-month period. (Basis: Regulation 2-1-301)
   ~~S-191 28,908 gallons/year~~
   ~~S-192 28,908 gallons/year~~
   S-193 62,196 gallons/year
   S-197 34,690 gallons/year
   S-198 75,336 gallons/year

2. In order to demonstrate compliance with Part 1 above, the Permit Holder shall maintain the following records in a District approved log:
   a. Monthly records of the operating hours for each engine.
   b. Monthly records of the amount of diesel fuel used at engine.
   c. All monthly records shall be summarized on a rolling 12-month basis.
   d. Vendor certifications of the fuel oil sulfur content for any fuels burned in these engines.

   All records shall be made available to District staff upon request and shall be kept on site for a minimum of five years from the date of entry.
   (Basis: Regulations 2-1-301 and 9-1-304)

Condition # 20922
For: S-140 SBR 1 AND S-141 SBR 2 (AERATED BIOLOGICAL REACTORS)

1. In order to avoid triggering BACT requirements for S-140 and S-141, the Permit Holder shall ensure that S-140 and S-141 are each complying with one of the following requirements (either subpart a or subpart b below). (Basis: Regulation 2-1-403: Keep Emissions Below BACT Trigger)

a. ~~t~~The wastewater throughput to each reactor (S-140 and S-141) shall not exceed ~~52,140~~ 52,400 gallons during any one day (as determined by Part 5f)~~,~~ and the total volatile organic compound (VOC) concentration in the wastewater shall not exceed ~~54~~ 52 ppm by weight (as determined by Part~~s 4 and~~ 5b)~~.~~; or

b. The emissions from each reactor (S-140 and S-141) shall not exceed 10.0 pounds of precursor organic compounds (POC) during any day (as determined by Part 5h).

~~(Basis: Regulation 2-1-403: Keep Emissions Below BACT Trigger)~~

2. The Permit Holder shall ensure that S-140 and S-141 are complying with one of the following requirements (either subpart a or subpart b below). (Basis: Offsets)

a. The total combined wastewater throughput to S-140 and S-141 shall not exceed 6,460,000 gallons during any consecutive 12-month period (as determined by Part 5g)~~,~~ and the total ~~volatile organic compound~~ VOC concentration in the wastewater shall not exceed ~~54~~ 52 ppm by weight (as determined by Part~~s 4 and~~ 5b)~~.~~; or

b. The emissions from S-140 and S-141 combined shall not exceed 1230 pounds of POC during any consecutive 12-month period (as determined by Part 5i).

~~(Basis: Offsets)~~

*3. The Permit Holder shall submit a permit application for a Change of Permit Conditions, if the annual average concentration of a compound in untreated wastewater (as determined by Parts 4 and 5c) is greater than the concentration limit listed below. The Permit Application shall be submitted to the Engineering Division, within 45 days of determining that an annual average concentration is above a limit listed below. (Basis: Toxic Risk Management Policy)

Compound	Concentration Limit (ppbw)
Benzene	80
Chloroform	470
1,4 Dichlorobenzene	1020
Methylene Chloride	2530
Naphthalene	3590
Perchloroethylene	430
Trichloroethylene	1290
Vinyl Chloride	30

4. In order to demonstrate compliance with Parts 1-3, the Permit Holder shall analyze the primary sources of untreated wastewater (wastewater that is delivered to the S-130 Equalization Tank from the lift station and wastewater from the leachate storage tanks) on a quarterly basis. Wastewater samples shall be collected and analyzed in accordance with EPA Method 8260B and shall be tested for the following~~:~~ compounds. (Basis: Offsets and Toxic Risk Management Policy)
   a. Each of the compounds listed in Part 3 (benzene, chloroform, 1,4-dichlorobenzene, methylene chloride, naphthalene, perchloroethylene, trichloroethylene, and vinyl chloride),
   b. Any compounds that have been detected in wastewater during the last three years including: bromodichloromethane, 2-butanone (methyl ethyl ketone), butyl benzene (n- and sec-), 1,2 dichlorobenzene, dichlorodifluoromethane, ethyl benzene, 4-isopropyl toluene, 4-methyl 2-pentanone (methyl isobutyl ketone), methyl-tert-butyl ether (MTBE), propyl benzene (iso- and n-), styrene, toluene, 1,2,4-trichlorobenzene, 1,1,1 trichloroethane, trimethyl benzenes, and xylenes (o-, m-, p-),
   c. Any other organic compounds required to be measured pursuant to EPA Method 8260B, and
   d. Organic compound has the same meaning as the definition in Regulation 8-1-201. Total organic compounds shall include all volatile and semi-volatile organic compounds that have been detected in the wastewater. Any compounds that have not been detected may be assumed to have zero contribution toward the total organic compound concentration.

   ~~(Basis: Offsets and Toxic Risk Management Policy)~~

5. In order to demonstrate compliance with Parts 1-3, the Permit Holder shall maintain the following records in a District approved logbook~~:~~. All records shall be maintained on site or shall be made readily available to District staff upon request for a period of at least 5 years from the date of entry. These record keeping requirements do not replace the record keeping requirements contained in any applicable rules or regulations. (Basis: Offsets and Toxic Risk Management Policy)
   a. Maintain records that identify the source of each wastewater sample collected, sample collection dates, sample collection procedures, analytical procedures, analysis dates, and analytical results for each wastewater analysis required by Part 4,

b. On a quarterly basis, calculate and record the total volatile organic compound (VOC) concentration and the concentration for each compound listed in Part 3, in accordance with Part 4d. If more than one wastewater sample has been collected and analyzed for a quarter, calculate and record the weighted average concentrations (for each compound in Part 3 and total organic compounds) based on the relative wastewater throughput contribution from each source of wastewater during the past quarter. Compare the ~~total organic compound~~ VOC concentration determined for this subpart to the limit in Parts 1a and 2a.

c. On a quarterly basis, calculate and record the annual average concentration (average of four consecutive quarters) for each compound listed in Part 3. Compare the annual average concentrations determined for this subpart to the limits in Part 3.

d. Record the operating dates, times, and rates for S-140 and S-141 on a daily basis.

e. Record the total wastewater throughput to S-140 and S-141 on a monthly basis and identify the source(s) of the untreated wastewater that was delivered to the S-130 Equalization Tank during the last month. If the wastewater delivered to S-130 comes from more than one source, estimate the relative throughput contributions for each source of the wastewater.

f. On a monthly basis, calculate and record the maximum daily wastewater throughput to each reactor (S-140 and S-141) using the operating data and throughput rates recorded per Parts 5d-e. Compare the maximum daily wastewater throughput rate determined by this subpart to the limit in Part 1a.

g. On a monthly basis, calculate and record the total wastewater throughput to S-140 and S-141 combined for each consecutive 12-month period. Compare the total wastewater throughput rate determined by this subpart to the limit in Part 2a.

h. If the maximum daily wastewater throughput rate to a reactor (determined by Part 5f) exceeds the throughput limit in Part 1a or a quarterly VOC concentration (determined by Part 5b) exceeds the VOC concentration limit in Parts 1a and 2a, the Permit Holder shall demonstrate compliance with the POC emission limit in Part 1b for each month or quarter, as applicable. Daily POC emissions (E) shall be calculated using the following equation:

$E = 3.67E\text{-}6 * Q * C$

where E is pounds of POC emissions per day, Q is maximum daily wastewater influent rate for a month (as determined by Part 5f), and C is the concentration of VOC in the influent wastewater (ppm by weight) for a quarter (as determined by Part 5b).

i. If the rolling annual wastewater throughput rate to the two reactors (as determined by Part 5g) exceeds the throughput limit in Part 2a or a quarterly VOC concentration (as determined by Part 5b) exceeds the VOC concentration limit in Parts 1a and 2a, the Permit Holder shall demonstrate compliance with the POC emission limit in Part 2b for each month or quarter, as applicable. Rolling annual POC emissions (E) shall be calculated using the following equation:

E = 3.67E-6 * Q * C

where E is pounds of POC emissions per 12-month period, Q is total wastewater influent rate for a 12-month period (as determined by Part 5g), and C is the concentration of VOC in the influent wastewater (ppm by weight) for a quarter (as determined by Part 5b).

~~All records shall be maintained on site or shall be made readily available to District staff upon request for a period of at least 5 years from the date of entry. These record keeping requirements do not replace the record keeping requirements contained in any applicable rules or regulations. (Basis: Offsets and Toxic Risk Management Policy)~~

6. The Permit Holder shall begin complying with the testing and record keeping requirements described in Parts 4 and 5a-g above by no later than December 23, 2003. The Permit Holder shall begin complying with the POC emission calculation procedures described in Parts 5h-i above by no later than September 3, 2006. (Basis: Regulation 2-1-403)

Section VII

The District is proposing changes to Tables VII-F and VII-H. The proposed wastewater throughput and VOC concentration limit changes discussed above will be reflected in Table VII-F. The District is also adding the new alternative POC emission limits. For Table VII-H, S-191 and S-192 are being deleted from the title and the fuel usage limit citation.

Table VII – F
Applicable Limits and Compliance Monitoring Requirements
S-140 SBR 1, AERATED BIOLOGICAL REACTOR
S-141 SBR 2, AERATED BIOLOGICAL REACTOR

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Total Carbon	BAAQMD 8-2-301	Y		≤ 15 Pounds/Day or ≤ 300 ppm, dry basis	BAAQMD Condition # 20922, Parts 4-5	P/D, M, Q	Daily Operating Rate Records, Monthly Wastewater Throughput Records, and Quarterly VOC Content Analyses
Waste-water Through-put	BAAQMD Condition # 20922, Parts 1a- and 2a	Y		≤ 52,400 gallons per day and ≤ 6,460,000 gallons per 12-month period	BAAQMD Condition # 20922, Part 5	P/D, M	Daily Operating Rate Records and Monthly Wastewater Throughput Records
VOC in Waste-water	BAAQMD Condition # 20922, Parts 1a – and 2a	Y		≤ ~~54~~ 52 ppmw (weighted average of quarterly wastewater samples)	BAAQMD Condition # 20922, Parts 4-5	P/Q	Quarterly VOC Content Analyses and Records

Administrative Amendment: Remove S-191 and S-192 Diesel Engines from MFR Permit
Minor Revision: Revise Conditions for S-140 and S-141 Aerated Biological Reactors

Table VII – F
Applicable Limits and Compliance Monitoring Requirements
S-140 SBR 1, AERATED BIOLOGICAL REACTOR
S-141 SBR 2, AERATED BIOLOGICAL REACTOR

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
POC Emissions	BAAQMD Condition # 20922, Parts 1b and 2b	Y		< 10.0 pounds per day and < 1230 pounds per 12-month period	BAAQMD Condition # 20922, Part 5	P/D, M, Q	Daily Operating Rate Records, Monthly Wastewater Throughput Records, Quarterly VOC Content Analyses, and Emission Calculation Procedures
Toxic Compound Concentration Limits for Wastewater	BAAQMD Condition # 20922, Part 3	N		Compound ≤ ppbw Benzene 80 Chloroform 470 1,4 Dichlorobenzene 1020 Methylene Chloride 2530 Naphthalene 3590 Perchloroethylene 430 Trichloroethylene 1290 Vinyl Chloride 30	BAAQMD Condition # 20922, Parts 4-5	P/Q	Quarterly VOC Content Analyses and Records

Table VII – H
Applicable Limits and Compliance Monitoring Requirements
~~S-191 DIESEL ENGINE (FOR PRIMARY WATER PUMP)~~
~~S-192 DIESEL ENGINE (FOR BOOSTER WATER PUMP)~~
S-193 DIESEL ENGINE (FOR FIRE PUMP AT GAS PLANT)
S-197 DIESEL ENGINE (FOR PORTABLE GENERATOR AT BREAK TRAILER)
S-198 DIESEL ENGINE (FOR VACUUM TRUCK PUMP)

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Opacity	BAAQMD 6-303	Y		Ringelmann 2.0 for 3 minutes in any hour	None	N	NA
FP	BAAQMD 6-310	Y		$\leq$ 0.15 grains/dscf	None	N	NA
SO_2	BAAQMD 9-1-301	Y		Property Line Ground Level Limits: $\leq$ 0.5 ppm for 3 minutes and $\leq$ 0.25 ppm for 60 min. and $\leq$0.05 ppm for 24 hours	None	N	NA
Liquid Fuel Sulfur Content	BAAQMD 9-1-304	Y		Fuel Sulfur Limit: 0.5%	BAAQMD Condition # 20801, Part 2d	P/E	Vendor Certification
Fuel Usage	BAAQMD Condition # 20801, Part 1	Y		~~S-191 28,908 gallons/year~~ ~~S-192 28,908 gallons/year~~ S-193 62,196 gallons/year S-197 34,690 gallons/year S-198 75,336 gallons/year	BAAQMD Condition # 20801, Part 2	P/M	Records

Section VIII

The District is proposing to add a citation to Table VIII for the POC emission calculation procedures that should be used to demonstrate compliance with the new alternate POC emission rate limit.

Table VIII
Test Methods

Applicable Requirement	Description of Requirement	Acceptable Test Methods
…		
BAAQMD Condition # 20922, Parts ~~1-3~~1a, 2a, and 3	~~Organic Compound~~ VOC Concentrations in Wastewater	EPA Method 8260B
BAAQMD Condition # 20922, Parts 1b and 2b	POC Emissions from Aerated Biological Reactors	BAAQMD Emission Calculation Procedures Identified in BAAQMD Condition # 20922, Parts 5h and 5i.
…		

Section IX

No changes are proposed for this section.

Section X

These proposed MFR permit revisions are summarized in the revision history section, as shown below.

Administrative Amendment (Application # 14713): [insert approval date]

- Remove S-191 and S-192 Diesel Engines from Tables II-A, IV-H, and VII-H and from Condition # 20801.

Minor Revision (Application # 14713): [insert approval date]

- Correct the daily wastewater throughput limit in Condition # 20922, Part 1a.
- Revise the VOC concentration limit for wastewater in Condition # 20922, Parts 1a and 2a and in Table VII-F.
- Add POC emission limits for the Aerated Biological Reactors to Condition # 20922, Parts 1b and 2b and to Table VII-F.
- Add POC emission calculation procedures to Condition # 20922, Part 5 and to Table VIII.

- Add a compliance date for maintaining POC emission records to Condition # 20922, Part 6.
- Make editorial corrections to Condition # 20922 and to Tables IV-F, VII-F, and VIII.
- Update Section X Revision History

Sections XI-XII

No changes are proposed for these sections.

D. SUMMARY OF PROPOSED ACTIONS

The District is issuing an administrative amendment to the MFR Permit for Site # A2066 that will:

- Remove the S-191 and S-192 Diesel Engines from Condition # 20801 and from Tables II-A, IV-H, and VII-H of this permit.

The District is proposing a minor revision of the MFR Permit for Site # A2066 that will:

- Add a POC emission limit and calculation procedure to Condition # 20922 for the S-140 and S-141 Aerated Biological Reactors that may be used in place of wastewater throughput and VOC concentration limits.
- Correct the daily wastewater throughput limit and revise the VOC concentration limit for S-140 and S-141 in Condition # 20922.
- Make related revisions and editorial corrections to Tables IV-F, VII-F, and VIII.

APPENDIX A

ENGINEERING EVALUATION

APPLICATION # 14712

ENGINEERING EVALUATION

Waste Management of Alameda, Inc.; PLANT # 2066

APPLICATION # 14712

A. BACKGROUND

Site Description:

Waste Management of Alameda, Inc. (Waste Management or WM) operates the Altamont Landfill and Resource Recovery Facility in Livermore, CA. This facility includes the Bay Area's largest active landfill (S-2 with more than 30 million tons of refuse in place), two 3 MW Gas Turbines (S-6 and S-7, landfill gas fired) equipped with Fogging Systems (A-6 and A-7), two 1877 bhp IC Engines (S-23 and S-24, landfill gas fired), one 71 MM BTU/hour Landfill Gas Flare (A-15), waste water treatment operations (permitted: S-19, S-140, and S-141; exempt: S-12, S-20, S-28, S-130, A-130, and S-180), a non-retail gasoline dispensing facility (S-99), and nine diesel engines providing portable or standby power (S-190, S-191, S-192, S-193, S-194, and S-195, S-196, S-197, and S-198).

Process Description for Wastewater Treatment Plant:

Waste Management collects and treats wastewater from this facility in an on-site wastewater treatment plant. The wastewater is collected from numerous locations around the site and includes surface water run-off, landfill leachate, landfill gas condensate, non-hazardous truck wash water, and supernate from the wastewater treatment sludge thickening tank. Landfill leachate may be collected and stored in two 500,000 gallon capacity tanks. Due to the low volatile organic compound (VOC) content of this leachate, these storage tanks are exempt from permitting requirements.

Leachate and other wastewater is transferred from two lift stations into an 87,800 gallon capacity agitated Equalization Tank (S-130). This tank is also exempt from permit requirements due to low VOC content. At the equalization tank, the pH of the wastewater is adjusted (if necessary), biological nutrients are added, and the wastewater and nutrients are mixed by agitation.

The nutrient enriched wastewater is transferred from S-130 into two aerated biological reactors (S-140 and S-141), which each have 144,300 gallons of storage capacity and can each treat up to 52,400 gallons per day of wastewater. At these reactors, organic compounds are removed from the wastewater by a combination of biological degradation and volatilization into the atmosphere.

Treated wastewater is stored in an exempt 298,000 gallon capacity tank (S-20). Some of the treated wastewater is used on site for dust control or irrigation. The remaining wastewater is discharged in accordance with an NPDES permit. Sludge from the biological reactors is transferred to a 15,700 gallon capacity tank (S-180), where polymers are added to enhance coagulation of the solids and gravity is used to separate a thick sludge from the remaining liquid (or supernate). The thickened sludge is disposed of in the Altamont Landfill (S-2). The supernate is recycled back to the beginning of the wastewater treatment plant.

A process diagram for the wastewater treatment plant was submitted for a previous application (see Application # 10515).

Project Description:

Waste Management submitted this application to request an alternative VOC emission limit to the wastewater throughput and VOC concentration limits that are currently listed in the MFR Permit and Condition # 20922 for the two aerated biological reactors (S-140 and S-141). Specifically, Waste

Management has requested to have the ability to demonstrate that emissions from S-140 and S-141 have not exceeded the current maximum permitted emission rates of 10 pounds POC/day and 0.615 tons POC/year, if the wastewater throughput rate exceeds the current limits (52,400 gallons/day or 6.46 MM gallon/year), or if the VOC concentration exceeds the current limit (54 ppmw of VOC).

This request will require modifications of Condition # 20922. This application will also require a minor revision of the MFR Permit for Site # A2066 to modify Condition # 20922 and to make other related revisions.

B. EMISSIONS

As discussed in Application # 10515, all emissions from the wastewater treatment operations are assumed to occur at the S-140 and S-141 aerated biological reactors. Emissions from the wastewater treatment plant were estimated using the EPA Waters9 program based on site-specific wastewater concentration data and maximum wastewater throughput rates. The Waters9 program determined source-specific volatilization rates for numerous individual compounds. This volatilization rate data and maximum permitted concentration levels for total VOC, NPOC, and individual toxic air contaminants (TAC) were used to calculate maximum permitted POC, NPOC, and TAC emissions. The current maximum permitted emissions from S-140 and S-141 are summarized in the following tables.

Maximum Permitted Daily Emissions From S-140 and S-141 each

Wastewater Throughput, gallons/day per reactor	52,400
Wastewater Density, pounds/gallon	8.321
Maximum VOC/POC Concentration, ppmw	54
Maximum NPOC Concentration, ppmw	3
Total VOC/POC Volatilization Rate, weight%	42.38%
Total NPOC Volatilization Rate, weight%	65.98%
Maximum POC Emissions, pounds/day per reactor	9.98
Maximum NPOC Emissions, pounds/day per reactor	0.86

Maximum Permitted Annual Emissions From S-140 and S-141 Combined

Wastewater Throughput, gallons/year		6,460,000	
Wastewater Density, pounds/gallon		8.321	
Pollutant	Concentration Limit (ppbw)	Volatilization Rate (wt%)	Emissions (pounds/year)
POC (same as total VOC)	54000	42.38%	1230
NPOC (mainly acetone, methylene chloride, perchloroethylene, and 1,1,1 trichloroethane)	3000	65.98%	106
benzene	80	46.57%	2.0
chloroform	470	58.44%	14.8
1,4 dichlorobenzene	1020	25.11%	13.8
methylene chloride	2530	63.42%	86.3
naphthalene	3590	25.83%	49.8
perchloroethylene	430	79.67%	18.4
trichloroethylene	1290	70.15%	48.6
vinyl chloride	30	96.56%	1.6

Waste Management has requested that S-140 and S-141 be limited to the emission rates identified above rather than to the current throughput and concentration limits. Waste Management expects to be able to comply with these emission limits at all times, because the VOC concentration levels typically decline as the influent flow rate increases and flow rates decline when VOC concentration levels increase. Since the

maximum daily NPOC emission rate is far below the BACT trigger level and there are no offset requirements for NPOC emissions, the District will establish limits for POC emissions only. Total VOC concentrations are assumed to be 100% POC, unless the applicant demonstrates otherwise. Therefore the proposed emission limits are 10.0 pounds/day of POC and 1230 pounds/year (0.615 tons/year) of POC.

To verify compliance with these emission limits, the District must establish an emission calculation procedure that will use monitored flow rate data (Q), quarterly VOC concentration measurements (C), and a conversion factor (F) to determine the actual daily and actual annual POC emissions (E). The conversion factor will include assumptions about wastewater density (ρ) and volatilization rate (ν). The proposed equations are:

E (pounds POC/day) = Q (gallons/day of wastewater) * C (ppmw of VOC in wastewater) * F
E (pounds POC/year) = Q (gallons/year of wastewater) * C (ppmw of VOC in wastewater) * F

F = (ρ pounds ww/gallon ww) * (1E-6 pounds VOC in ww/pound ww/ppmw of VOC) * (ν pounds VOC emitted/pound VOC in ww) * (1 pound POC emitted/1 pound VOC emitted)
F = (ρ * 1E-6 * ν * 1) = 1E-6 * ρ * ν pounds POC emitted/gallon wastewater/ppmw of VOC

As required by Condition # 20922, Waste Management has been conducting quarterly analyses on the influent wastewater since March 2004. The total VOC concentrations ranged from 1.23 ppmw to 47.42 ppmw with an average of 20.01 ppmw. For each quarterly analysis, the District calculated a volatilization rate (ν) using the volatilization rates for individual compounds that were determined using the Waters9 program (see Application # 10515 for a complete list of all individual compound volatilization rates). The volatilization rates for these quarterly analyses ranged from 31.2% to 43.8% with an average of 39.6%. These emission calculations will be based on the maximum calculated volatilization rate of 44% by weight (ν = 0.44 pounds VOC emitted / pound of VOC in wastewater). The maximum expected density for the wastewater is: ρ = 8.34 pounds/gallon. The conversion factor (F) is calculated below:

F = (1E-6 * 8.34 * 0.44) = 3.67E-6 pounds POC emitted/gallon wastewater/ppmw of VOC

Therefore, the proposed emission calculation equation is: E = 3.67E-6 * Q * C,
where E is the POC emission rate (in either pounds/day or pounds/year depending on the time period for the flow rate), Q is the wastewater flow rate (in either gallons/day or gallons/year), and C is the concentration of VOC in the wastewater (expressed as ppm by weight).

Using this proposed emission calculation equation and the default flow rates, the maximum VOC concentration that will ensure compliance with the current POC emission limits is 52 ppmw of VOC:
(10.00 lbs POC/day)/(52,400 gals ww/day)/(3.67E-6 lbs POC/gal ww/ppmw VOC) = 52.0 ppmw of VOC
(1230 lbs POC/yr)/(6,460,000 gals ww/yr)/(3.67E-6 lbs POC/gal ww/ppmw VOC) = 51.9 ppmw of VOC
The default concentration limit will be changed to 52 ppmw of VOC to ensure that the proposed permit condition revisions will not allow any emission increases.

The average concentrations of individual toxic air contaminants in the Altamont Landfill wastewater have been far below the concentration limits listed in Condition # 20922, Part 3. Since concentration levels are expected to decline as flow rate increases, allowing a higher flow rate to S-140 and S-141 is not expected to result in any TAC emission increases. The individual TAC concentration limits will remain in Part 3.

C. STATEMENT OF COMPLIANCE

Regulation 2, Rule 1:

This application is for a change of permit conditions at the S-140 and S-141 aerated biological reactors. This application does not involve any physical modifications and does result in any emission increases.

This application has no potential for causing any significant adverse environmental impacts. Therefore, this application is categorically exempt from CEQA review pursuant to Regulation 2-1-312.1.

The project is over 1000 feet from the nearest school and is therefore not subject to the public notification requirements of Regulation 2-1-412.

Regulation 2, Rules 2 and Rule 5:

The S-140 and S-141 aerated biological reactors are not subject to new source review (NSR) for this application, because the proposed permit condition revisions will not result in any emission increases above current permitted levels. Therefore, Regulations 2-2 and 2-5 do not apply.

Regulation 2, Rule 6:

This facility is subject to the Operating Permit requirements of Title V of the federal Clean Air Act (40 CFR, Part 70) and BAAQMD Regulation 2, Rule 6, Major Facility Review (MFR), because it is a major facility for NO_x and CO emissions and also because it is a designated facility (since it is subject to the control requirements of the Emission Guidelines for MSW Landfills). Therefore, this facility is required to have an MFR Permit pursuant to Regulations 2-6-301 and 2-6-304.

The initial MFR Permit for this facility was issued on December 1, 2003 and was revised on February 5, 2004, December 21, 2004, April 5, 2005, October 4, 2005, and December 15, 2005. The permit condition revisions discussed in this report will require a minor revision of the MFR Permit. This minor revision will be discussed in the Statement of Basis for Application # 14713.

Regulation 8:

The S-140 and S-141 Aerated Biological Reactors are an industrial wastewater treatment operation. The wastewater includes collected leachate and stormwater runoff from the landfill, condensate from the gas collection system well field, condensate generated during compression of landfill gas, and various wash water and recycle streams, which comprise “industrial wastewater” by a common sense definition. The purpose of processing this industrial wastewater at S-140 and S-141 is to remove dissolved organic compounds from the wastewater in order to meet Regional Water Quality Control Board standards for disposal or for on-site reuse of this treated wastewater. The reactors remove dissolved organic compounds through both biological oxidation and volatilization. The volatilization occurs due to air sparging, which is necessary to sustain the biological activity in the reactors.

There are no specific Regulation 8 rules that apply to wastewater treatment operations. However, the reactors behave in a similar manner to air strippers. Therefore, Regulation 8, Rule 47, Air Stripping and Soil Vapor Extraction Operations is potentially applicable to S-140 and S-141. These reactors have an oil-water separator upstream. Therefore, Regulation 8, Rule 8, Wastewater Collection and Separation Systems is also potentially applicable. As discussed in more detail below, the District has determined that neither Rule 47 nor Rule 8 apply to this industrial wastewater treatment operation. Therefore, S-140 and S-141 are subject to Regulation 8, Rule 2, Miscellaneous Operations.

Rule 47: Regulation 8-47-111 states: “The requirements of this Rule shall not apply to industrial wastewater treatment facilities. Therefore, Rule 47 does not apply to S-140 or S-141.

Rule 8: From Regulation 8-8-101, the purpose of Rule 8 is to limit the emissions of organic compounds from wastewater collection and separation systems. However, Regulation 8-8-113 contains a rather confusing exemption for secondary wastewater treatment processes and storm water sewer systems. Section 113 states that secondary wastewater treatment operations, which by definition include biological wastewater treatment processes such as S-140 and S-141, are exempt from Sections 301, 302, 306, and 308. This exemption does not exempt secondary wastewater treatment operations from Sections 303, 304, 305, 313, or 314. All sections except 303 clearly do not apply to aerated biological reactors. Section 303 is so general that it could apply to any secondary wastewater treatment operations. Therefore, the Section 113 seems to indicate that S-140 and S-141 are still subject Section 303 even though control of secondary wastewater treatment operations is not identified in the purpose of Rule 8 as stated in Section 101.

To resolve this apparent conflict about whether or not Rule 8 applies to S-140 and S-141, District staff turned to the staff report for the September 2004 amendments of Rule 8. This staff report makes a clear distinction between collection and separation systems versus treatment systems. Treatment systems are located downstream of collection and separation systems and deal with the removal of dissolved or entrained organic compounds. Bioreactors are specifically described as treatment processes. The staff report discusses emissions and controls for collection and transport systems only. In the Conclusion Section, the staff report states that controls for wastewater treatment operations were deferred pending further study of the emissions from wastewater treatment operations. Since Rule 8 as amended in September 2004 was specifically intended to apply to collection, transport, and separation systems and not to wastewater treatment operations, District staff concludes that Rule 8 does not apply to S-140 and S-141.

Rule 2: Since Regulation 8, Rules 8 and 47 do not apply to S-140 and S-141 and no other rules are potentially applicable, the S-140 and S-141 Aerated Biological Reactors are subject to Regulation 8, Rule 2, Miscellaneous Operations.

Regulation 8-2-301 limits total carbon emissions from a source to either 15 pounds per day or no more 300 ppmv of total carbon in an emission point. The maximum daily emissions from either S-140 or S-141 are 10.0 pounds/day of organic compounds. These organic compounds consist of approximately 81% MEK, 6% isopropyl toluene, 3% dichlorobenzene, 3% trimethylbenzene, 2% naphthalene, and 5% C7 or larger compounds. If the organic compounds were all naphthalene, total carbon emissions would be:
(10.0 pounds/day)/(128.2 lbs/lbmol)*(10 lbmol C/lbmol)*(12.011 lbs C/lbmol C) = 9.4 pounds/day of TC
If the organic compound emissions were all dichlorobenzene, total carbon emissions would be:
(10.0 pounds/day)/(147.0 lbs/lbmol)*(6 lbmol C/lbmol)*(12.011 lbs C/lbmol C) = 4.9 pounds/day of TC
For the mixture of compounds expected in the emissions from S-140 and S-141, total carbon emissions will fall between these rates (4.9-9.4 lbs/day). Therefore, the S-140 and S-141 aerated biological reactors will comply with 8-2-301 by emitting less than 15 pounds per day of total carbon.

Federal Requirements:

The S-140 and S-141 aerated biological reactors are not subject to any federal requirements.

D. PERMIT CONDITIONS

The District's proposed permit condition revisions are identified below in strikeout and underline format. The main purpose of these permit condition changes is to allow Waste Management to comply with a POC emission rate limit as an alternative to the default concentration and flow rate limits in Parts 1 and 2. The proposed POC emission limits are listed in Parts 1b and 2b. The District is proposing to add specific emission calculation procedures in Parts 5h and 5i that will be used to demonstrate compliance with the alternative POC emission limits in Parts 1b and 2b. These calculation equations are based on a worst case POC emission factor that is slightly higher than the average POC emission factor that was used to establish the current default wastewater flow rate and VOC concentration limits. The District is revising the default VOC concentration limit in Parts 1a and 2a for consistency with this new POC emission factor. The daily flow rate limit currently listed in Part 1 is not consistent with the daily flow rate limit listed in Tables II-A and VII-F of the MFR Permit. The current limit (52,140 gallons/day) was determined to be a typographical error. The District is proposing to replace this erroneous limit with the correct limit (52,400 gallons/day) from Tables II-A and VII-F. The District is also making editorial revisions to Parts 4 and 5 and is adding a specific compliance date to Part 6 for the record keeping requirements that are necessary to demonstrate compliance with the new POC emission limits.

Condition # 20922
For: S-140 SBR 1 AND S-141 SBR 2 (AERATED BIOLOGICAL REACTORS)

1. In order to avoid triggering BACT requirements for S-140 and S-141, the Permit Holder shall ensure that S-140 and S-141 are each complying with

one of the following requirements (either subpart a or subpart b below). (Basis: Regulation 2-1-403: Keep Emissions Below BACT Trigger)

a. ~~t~~The wastewater throughput to each reactor (S-140 and S-141) shall not exceed ~~52,140~~52,400 gallons during any one day (as determined by Part 5f)~~,~~ and the total volatile organic compound (VOC) concentration in the wastewater shall not exceed ~~54~~52 ppm by weight (as determined by Part~~s 4 and~~ 5b)~~.~~; or

b. The emissions from each reactor (S-140 and S-141) shall not exceed 10.0 pounds of precursor organic compounds (POC) during any day (as determined by Part 5h).

~~(Basis: Regulation 2-1-403: Keep Emissions Below BACT Trigger)~~

2. The Permit Holder shall ensure that S-140 and S-141 are complying with one of the following requirements (either subpart a or subpart b below). (Basis: Offsets)

a. The total combined wastewater throughput to S-140 and S-141 shall not exceed 6,460,000 gallons during any consecutive 12-month period (as determined by Part 5g)~~,~~ and the total ~~volatile organic compound~~ VOC concentration in the wastewater shall not exceed ~~54~~52 ppm by weight (as determined by Part~~s 4 and~~ 5b)~~.~~; or

b. The emissions from S-140 and S-141 combined shall not exceed 1230 pounds of POC during any consecutive 12-month period (as determined by Part 5i).

~~(Basis: Offsets)~~

*3. The Permit Holder shall submit a permit application for a Change of Permit Conditions, if the annual average concentration of a compound in untreated wastewater (as determined by Parts 4 and 5c) is greater than the concentration limit listed below. The Permit Application shall be submitted to the Engineering Division, within 45 days of determining that an annual average concentration is above a limit listed below. (Basis: Toxic Risk Management Policy)

Compound	Concentration Limit (ppbw)
Benzene	80
Chloroform	470
1,4 Dichlorobenzene	1020
Methylene Chloride	2530
Naphthalene	3590
Perchloroethylene	430
Trichloroethylene	1290
Vinyl Chloride	30

4. In order to demonstrate compliance with Parts 1-3, the Permit Holder shall analyze the primary sources of untreated wastewater (wastewater that is delivered to the S-130 Equalization Tank from the lift station and wastewater from the leachate storage tanks) on a quarterly basis. Wastewater samples shall be collected and analyzed in accordance with

EPA Method 8260B and shall be tested for the following compounds~~:~~. (Basis: Offsets and Toxic Risk Management Policy)

a. Each of the compounds listed in Part 3 (benzene, chloroform, 1,4-dichlorobenzene, methylene chloride, naphthalene, perchloroethylene, trichloroethylene, and vinyl chloride),

b. Any compounds that have been detected in wastewater during the last three years including: bromodichloromethane, 2-butanone (methyl ethyl ketone), butyl benzene (n- and sec-), 1,2 dichlorobenzene, dichlorodifluoromethane, ethyl benzene, 4-isopropyl toluene, 4-methyl 2-pentanone (methyl isobutyl ketone), methyl-tert-butyl ether (MTBE), propyl benzene (iso- and n-), styrene, toluene, 1,2,4-trichlorobenzene, 1,1,1 trichloroethane, trimethyl benzenes, and xylenes (o-, m-, p-),

c. Any other organic compounds required to be measured pursuant to EPA Method 8260B, and

d. Organic compound has the same meaning as the definition in Regulation 8-1-201. Total organic compounds shall include all volatile and semi-volatile organic compounds that have been detected in the wastewater. Any compounds that have not been detected may be assumed to have zero contribution toward the total organic compound concentration.

~~(Basis: Offsets and Toxic Risk Management Policy)~~

5. In order to demonstrate compliance with Parts 1-3, the Permit Holder shall maintain the following records in a District approved logbook~~:~~. All records shall be maintained on site or shall be made readily available to District staff upon request for a period of at least 5 years from the date of entry. These record keeping requirements do not replace the record keeping requirements contained in any applicable rules or regulations. (Basis: Offsets and Toxic Risk Management Policy)

a. Maintain records that identify the source of each wastewater sample collected, sample collection dates, sample collection procedures, analytical procedures, analysis dates, and analytical results for each wastewater analysis required by Part 4,

b. On a quarterly basis, calculate and record the total volatile organic compound (VOC) concentration and the concentration for each compound listed in Part 3, in accordance with Part 4d. If more than one wastewater sample has been collected and analyzed for a quarter, calculate and record the weighted average concentrations (for each compound in Part 3 and total organic compounds) based on the relative wastewater throughput contribution from each source of wastewater during the past quarter. Compare the ~~total organic compound~~ VOC concentration determined for this subpart to the limit in Parts 1a and 2a.

c. On a quarterly basis, calculate and record the annual average concentration (average of four consecutive quarters) for each

compound listed in Part 3. Compare the annual average concentrations determined for this subpart to the limits in Part 3.

d. Record the operating dates, times, and rates for S-140 and S-141 on a daily basis.

e. Record the total wastewater throughput to S-140 and S-141 on a monthly basis and identify the source(s) of the untreated wastewater that was delivered to the S-130 Equalization Tank during the last month. If the wastewater delivered to S-130 comes from more than one source, estimate the relative throughput contributions for each source of the wastewater.

f. On a monthly basis, calculate and record the maximum daily wastewater throughput to each reactor (S-140 and S-141) using the operating data and throughput rates recorded per Parts 5d-e. Compare the maximum daily wastewater throughput rate determined by this subpart to the limit in Part 1a.

g. On a monthly basis, calculate and record the total wastewater throughput to S-140 and S-141 combined for each consecutive 12-month period. Compare the total wastewater throughput rate determined by this subpart to the limit in Part 2a.

h. If the maximum daily wastewater throughput rate to a reactor (determined by Part 5f) exceeds the throughput limit in Part 1a or a quarterly VOC concentration (determined by Part 5b) exceeds the VOC concentration limit in Parts 1a and 2a, the Permit Holder shall demonstrate compliance with the POC emission limit in Part 1b for each month or quarter, as applicable. Daily POC emissions (E) shall be calculated using the following equation:

E = 3.67E-6 * Q * C

where E is pounds of POC emissions per day, Q is maximum daily wastewater influent rate for a month (as determined by Part 5f), and C is the concentration of VOC in the influent wastewater (ppm by weight) for a quarter (as determined by Part 5b).

i. If the rolling annual wastewater throughput rate to the two reactors (as determined by Part 5g) exceeds the throughput limit in Part 2a or a quarterly VOC concentration (as determined by Part 5b) exceeds the VOC concentration limit in Parts 1a and 2a, the Permit Holder shall demonstrate compliance with the POC emission limit in Part 2b for each month or quarter, as applicable. Rolling annual POC emissions (E) shall be calculated using the following equation:

E = 3.67E-6 * Q * C

where E is pounds of POC emissions per 12-month period, Q is total wastewater influent rate for a 12-month period (as determined by Part 5g), and C is the concentration of VOC in the influent wastewater (ppm by weight) for a quarter (as determined by Part 5b).

~~All records shall be maintained on site or shall be made readily available to District staff upon request for a period of at least 5 years from the date~~

~~of entry. These record keeping requirements do not replace the record keeping requirements contained in any applicable rules or regulations. (Basis: Offsets and Toxic Risk Management Policy)~~

6. The Permit Holder shall begin complying with the testing and record keeping requirements described in Parts 4 and 5a-g above by no later than December 23, 2003. The Permit Holder shall begin complying with the POC emission calculation procedures described in Parts 5h-i above by no later than [insert date that is 30 days after BAAQMD approval of the Change of Conditions]. (Basis: Regulation 2-1-403)

E. RECOMMENDATION

Issue a Change of Permit Conditions for the following equipment:

S-140 SBR 1 (aerated biological reactor)
S-141 SBR 2 (aerated biological reactor)

By: Carol S. Allen, Senior Air Quality Engineer _____ Date _____