### October 4, 2021

The potential to emit calculation in this evaluation report demonstrates that the potential to emit for Waste Management of Alameda County, or the TriCities Recycling and Recovery Facility (TCRRF), does not exceed the major source thresholds for Title V applicability. Furthermore, TCRRF is no longer a designated facility per 40 CFR 60, Subpart Cf. Therefore, the Title V operating permit for TCRRF is cancelled. A synthetic minor operating permit is not required because the potential to emit is below major source thresholds.

### **BACKGROUND**

## Waste Management of Alameda County, Site #A2246

Waste Management of Alameda County (TCRRF), Site #A2246, is subject to the Operating Permit requirements of Title V of the federal Clean Air Act, Part 70 of Volume 40 of the Code of Federal Regulations (CFR). According to the Emission Guidelines for Municipal Solid Waste Landfills (40 CFR Part 60, Subpart Cc), Site #A2246 is a designated facility because it has a design capacity greater than or equal to 2.5 million megagrams (Mg). The landfill has a maximum design capacity of 12.25 million Mg. Therefore, the facility is required to obtain an operating permit under Part 70.

Site #A2246 also previously triggered the Emission Guideline requirements to install and operate a landfill gas collection system (GCCS) because the non-methane organic compounds (NMOC) emissions were previously calculated to be over 50 Mg. A GCCS was installed at the facility in 1987. These emission guidelines are found at 40 CFR 60, Subpart Cc. Subpart Cf was promulgated on August 29, 2016, and is in effect as of this writing in 2021.

According to 40 CFR 60.33f(f) the GCCS at closed landfills may be capped or removed provided all of the conditions of paragraphs 60.33f(f) (1), (2), and (4) are met. 40 CFR 60.752(b)(2)(v) states the following:

- (A) The landfill shall be a closed landfill as defined in 60.41f of this subpart. A closure report shall be submitted to the Administrator as provided in 60.38f(f);
- (B) The collection and control system shall have been in operation a minimum of 15 years; and
- (D) For a closed landfill, following the procedures specified in 60.35f(b) of this subpart, the calculated NMOC gas produced by the landfill shall be less than 50 megagrams per year on three successive test dates. The test dates shall be no less than 90 days apart and no more than 180 days apart.

TCRRF is not proposing to cap, remove, or decommission the GCCS. The GCCS is still required by BAAQMD Regulation 8, Rule 34, and the California Landfill Methane Rule. However, meeting the conditions in 40 CFR 60.33f(f)(1), (2), and (4) allows the facility to cancel its Title V permit per Section 60.31f(d)(2).

Site #A2246 currently meets all of the above conditions stated in 60.33f(f) (1), (2), and (4). The site is a closed landfill as defined in 40 CFR 60.41f. The site officially ceased waste acceptance and disposal operations in November 2013 and achieved final closure status in June 2015. The facility's GCCS was installed in 1987 and, therefore, has been in operation for at least 15 years. Tier 2 NMOC sampling was conducted on September 14, 2016, December 14, 2016, and March 29, 2017.

As required by the Regulation, the test dates were no less than 90 days apart and no more than 180 days apart. The NMOC emissions were 18.62~Mg/yr, 20.13~Mg/yr, and 15.90~Mg/yr demonstrating that the NMOC gas produced is less than 50~Mg/yr on three successive test dates. The calculations are based on the equation outlined in 40~CFR~60.35f(b):

$$M_{NMOC}=1.89\times10^{-3}Q_{LFG}C_{NMOC}$$
 (Equation 1)

Where:

 $M_{NMOC}$  = Mass emission rate of NMOC, megagrams per year;

Q<sub>LFG</sub> = Flow rate of landfill gas, cubic meters per minute;

 $C_{NMOC}$  = NMOC concentration, parts per million by volume as hexane

The flow rate was determined in accordance with the requirements of 40 CFR 60.35f(b)(1). The concentration was determined in accordance with the requirements of 40 CFR 60.35f(b)(2). The landfill gas was sampled from the common header pipe before the gas moving or condensate removal equipment.

The landfill gas generation rate,  $37.89 \text{ m}^3/\text{min}$ , and the NMOC concentration, 260 ppm, determined from the 9-14-16 sampling event are used to calculate  $M_{NMOC}$  (Mg/year) as follows:

$$M_{NMOC}$$
 (Mg/year) = 1.89E-03 x (37.89 m<sup>3</sup>/min) x 260 ppm  
 $M_{NMOC}$  = 18.62 Mg/yr

The landfill gas generation rate,  $36.93~\text{m}^3/\text{min}$ , and the NMOC concentration, 288~ppm, determined from the 12-14-16 sampling event are used to calculate  $M_{NMOC}$  (Mg/year) as follows:

$$M_{NMOC}$$
 (Mg/year) = 1.89E-03 x (36.93 m<sup>3</sup>/min) x 288 ppm  $M_{NMOC}$  = 20.13 Mg/yr

The landfill gas generation rate,  $37.67 \text{ m}^3/\text{min}$ , and the NMOC concentration, 223 ppm, determined from the 3-29-17 sampling event are used to calculate  $M_{NMOC}$  (Mg/year) as follows:

$$M_{NMOC}$$
 (Mg/year) = 1.89E-03 x (37.67 m<sup>3</sup>/min) x 223 ppm

 $M_{NMOC} = 15.90 \text{ Mg/yr}$ 

According to Part d of the definition for a designated facility, a landfill is no longer subject to Title V requirements if the landfill is closed and meets the conditions for control system removal.

This evaluation also sets out to demonstrate that the TCRRF does not trigger the requirements for a Major Facility Review permit due to the magnitude of its emissions.

## Regulation 2, Rule 6 applicability based on major source thresholds

District Regulation 2, Rule 6, Section 212 defines a major facility as a facility that has the potential to emit 100 tons per year or more of any regulated air pollutant or the potential to emit 10 tons per year or more of a single hazardous air pollutant or 25 tons per year or more of a combination of hazardous air pollutants.

Site #A2246 has a Major Facility Review permit that was issued on November 28, 2001, revised on June 5, 2003, September 30, 2004, October 19, 2004, August 16, 2006, and March 8, 2017, and renewed on November 2, 2007, May 5, 2014, and October 29, 2019. However, the facility was not determined to be a major facility as defined by Regulation 2-6-212. Instead, Site #A2246 was subject to Major Facility Review because it was a "designated facility" per Section 60.32c(c) of the original emission guideline, Section 70.3(a)(5) of the Federal Title V regulations, and Sections 2-6-204 and 2-6-304 in the District Major Facility Review rule..

A potential to emit determination for this facility is discussed in the sections below. It shows that the facility is not major as defined by District Regulation 2-6-212.

## **SOURCES COVERED**

## Waste Management of Alameda County, Site #A2246

The permitted equipment at this facility is listed below.

S-1	Tri-Cities Landfill -	Inactive Class II and III Solid
	Waste Decomposition Process	Waste Disposal Site
S-5	Woodwaste Stockpiles	
S-8	Wood Grinder	208,000 tons/year
S-24	Concrete and Asphalt Stockpile Storage Area	150,000 tons/year

A-3 Enclosed Landfill Gas Flare 75 MM BTU/hour

A-5 Water Truck 3,500 gallons

### **EMISSION CALCULATIONS**

Waste Management of Alameda County, Site #A2246

All emissions from this closed landfill are:

- Fugitive landfill gas from S-1
- Emissions derived from collected landfill gas and its abatement device
- A-3 Enclosed Landfill Gas Flare
- Particulate matter from the Woodwaste Stockpiles, S-5, the Wood Grinder, S-8, or the Concrete and Asphalt Stockpile Storage Area, S-24.

Landfills are not one of the 28 source categories for which fugitive emissions of regulated air pollutants must be included in Title V potential to emit (PTE) determinations, per BAAQMD Regulation 2-6-212.1 (and 40 CFR 70.1). Since the uncollected landfill gas emissions from S-1 are fugitive in nature, the regulated air pollutants (NMOC) in fugitive landfill gas are not included in the site-wide PTE determination.

However, the fugitive hazardous air pollutants are included in the potential to emit determination per BAAQMD Regulation 2-6-212.1 (and 40 CFR 70.1).

The Enclosed Landfill Gas Flare, A-3, abates landfill gas collected from S-1. The maximum heat input rate for A-3 is 75 MM BTU/hour. The PTE determination for this site is based on A-3 operating at 75 MM BTU/hour for 24 hours/day and 365 days/year (8,760 hours/year). The maximum annual heat input rate is 657,000 MM BTU/year. Maximum potential emissions were determined based on the emission limits and maximum emission factors specified in the original engineering evaluation for A-3 (NSR Application #9790). These factors and the associated permit condition limits are discussed in more detail below.

TCRRF processes wood-waste for recycling operations at the Woodwaste Stockpiles, S-5, and the Wood Grinder, S-8. The throughput rate for S-5 and S-8 is 100 tons/hour of wood-waste for 2,080 hours/year. The PTE determinations for S-5 and S-8 are based on S-5 and S-8 operating at 208,000 tons/year. Maximum potential emissions for S-5 were determined based on AP-42, Fifth Edition, Chapter 13.2.4 and AP-42, Fourth Edition, Chapter 8.19. Maximum potential emissions for S-8 were determined based on the emission calculations and maximum emission factors specified in the engineering evaluation for S-8 (NSR Application #30777). These factors are discussed in more detail below.

The wood grinder is powered by a Tier 4 755-hp diesel non-road engine. The engine is not included in the PTE, because non-road engines are exempt from Major Facility Review per BAAQMD Regulation 2-6-114.

TCRRF processes concrete and asphalt for recycling operations at the Concrete and Asphalt Stockpile Storage Area, S-24. The maximum daily throughput rate for S-24 is 2,500 tons/day. The PTE determination for S-24 is based on S-24 operating at 150,000 tons/year, because the maximum annual throughput rate is limited to 150,000 tons/year. Maximum potential emissions were determined based on the emission limits and maximum emission factors specified in the original engineering evaluation for S-24 (NSR Application #24095). These factors and the associated permit condition limits are discussed in more detail below.

The total site-wide potential to emit (PTE) and current emissions, excluding fugitive emissions, are summarized in Table 1 and compared to the Title V permit limits. As shown in Table 1, the site-wide PTE is less than the Regulation 2-6-212 major facility limits.

Total Site-Wide Emissions from Site # A2246

	Title V Limit	Potential to Emit
	tons/year	tons/year
CO	100.0	98.550
$NO_x$	100.0	19.710
$SO_2$	100.0	10.479
$PM_{10}$	100.0	6.671
PM <sub>2.5</sub>	100.0	6.379
POC	100.0	6.570
HAPs (1)	25.0 / 10.0	2.107/ 0.500
$H_2S$	100.0	1.316

(1) The total HAP PTE is less than both the total HAP limit of 25.0 tons/year and the single HAP limit of 10.0 tons/year. The largest expected single HAP is xylene at 0.500 tons/year.

### NO<sub>x</sub> and CO Emissions:

In accordance with the Engineering Evaluation for Application #9790, A-3 was subject to the following RACT limits: 0.06 pounds of NO<sub>x</sub> per MM BTU and 0.30 pounds of CO per MM BTU.

```
CO (657,000 MM BTU/year)*(0.30 lbs/MM BTU)/(2000 lbs/ton) = 98.550 tons/year
NO<sub>x</sub> (657,000 MM BTU/year)*(0.06 lbs/MM BTU)/(2000 lbs/ton) = 19.710 tons/year
```

Estimates of current CO and NO<sub>x</sub> emissions are based on Source Test #OS-6733 conducted on February 23, 2017 and approved by the Air District on May 19, 2017. This source test measured average emissions of:

0.0381 pounds of  $NO_x$  per MM BTU and 0.0021 pounds of CO per MM BTU

Given the actual emission factors and the throughput limit,  $NO_x$  emissions from A-3 are 12.514 tons/year and the CO emissions from A-3 would be 0.695 tons/year.

## SO<sub>2</sub> Emissions:

Landfill gas contains a variety of sulfur compounds such as hydrogen sulfide, carbon disulfide, carbonyl sulfide, dimethyl sulfide, and ethyl and methyl mercaptans. The total concentration of sulfur compounds in landfill gas, or total reduced sulfur (TRS) content, is typically expressed as an equivalent concentration to hydrogen sulfide (H<sub>2</sub>S). When landfill gas is burned in A-3, the sulfur in these compounds is oxidized and forms sulfur dioxide (SO<sub>2</sub>). For SO<sub>2</sub> emission calculations, the District assumes that 100% of the inlet TRS will be converted to sulfur dioxide at a ratio of 1 mole of SO<sub>2</sub> formed per 1 mole of TRS (expressed as H<sub>2</sub>S) in landfill gas.

From the Engineering Evaluation for Application #17350, the TRS concentration in the landfill gas was limited to 1,300 ppmv. This was done to ensure compliance with BAAQMD Regulation 9-1-302 for a limit of 300 ppmv of SO<sub>2</sub> in the stack gas. Source Test #OS-6733 conducted on February 23, 2017 and approved by the Air District on May 19, 2017 demonstrated compliance with the SO<sub>2</sub> limit. The concentration of total reduced sulfur as H<sub>2</sub>S in the landfill gas was an average of 185 ppm. The SO<sub>2</sub> concentration was sampled as 16.5 ppm at the flare outlet. The fuel heat input was measured as 37.8 MM BTU/hour, 331,128 MM BTU/year. From the Engineering Evaluation for Application #9790, the exhaust flow rate of the flare is 41,775 dscfm at 13.6% O<sub>2</sub> and the maximum flare heat input rate is 75 MM BTU per hour, or 1.25 MM BTU per minute. The calculation is as follows:

 $(41,775 \text{ dscfm} \ @ \ 13.6\% \ O_2)*((20.9-13.6)/(20.9-0))*(1 \text{ minute}/1.25 \text{ MM BTU}) = 11,673 \text{ scf/MM BTU}$ 

 $(16.5 \text{ E-6 lb-mol S} / 1.0 \text{ lb-mole flue gas}) * (1.0 \text{ lb-mole SO}_2 / 1.0 \text{ lb-mole S}) * (64.059 \text{ lbs SO}_2 / 1.0 \text{ lb-mole SO}_2) * (1.0 \text{ lb mole flue gas} / 386.765 \text{ ft}^3 \text{ flue gas}) * (11673 \text{ scf/MM BTU})$ 

= 0.032 lbs SO<sub>2</sub>/MM BTU

 $SO_2$  (331,128 MM BTU/year)\*(0.032 lbs/MM BTU)/(2000 lbs/ton) = 5.282 tons/year

## PM<sub>10</sub> and PM<sub>2.5</sub> Emissions:

For Application #9790, the maximum  $PM_{10}$  and  $PM_{2.5}$  flare emissions were calculated from the AP-42 emission factor of 17 pounds of PM per million standard cubic feet of methane. For landfill gas at 50% methane this emission factor is equivalent to a  $PM_{10}$  and  $PM_{2.5}$  emission rate of 0.017 lbs/MM BTU as shown below:

(17 lbs PM/MM scf CH<sub>4</sub>) \* (0.50 MM scf CH<sub>4</sub>/MM scf LFG) / (497 MM BTU/MM scf LFG) = 0.017 lbs PM/MM BTU

 $PM_{10}/PM_{2.5}$  (657,000 MM BTU/year)\*(0.017 lbs/MM BTU)/(2000 lbs/ton) = 5.585 tons/year

PM<sub>10</sub> and PM<sub>2.5</sub> emissions from sources at this facility result from the handling of woodwaste. This is done at the Woodwaste Stockpiles, S-5, and the Wood Grinder, S-8. For Application 30777, the particulate emissions from S-8 were analyzed at a maximum operation rate of 100 tons/hr and 2,080 hours per year. Emissions from S-5 are analyzed here at the same throughput rate and assuming that emissions from the woodwaste stockpiles will be equal to the sum of drop operations emissions described in AP-42, Fifth Edition, Volume I, Chapter 13.2.4, Aggregate Handling and Storage Piles, Equation 1, and wind erosion emissions (only PM<sub>10</sub>) described in AP-42, Fourth Edition, Chapter 8.19, Table 8.19.1-1. The particulate matter emissions calculation for S-5 is shown below:

 $PM_{10}$  (100 tons woodwaste/hr) \* (2080 hours/year) \* (5.07E-05 lb/ton)/(2000 lbs/ton) + (1.7 lb/acre/day) \* (365 days/year) \* (0.110 acres) = 0.039 tons/year

 $PM_{2.5}$  (100 tons woodwaste/hr) \* (2080 hours/year) \* (7.67E-06 lb/ton)/(2000 lbs/ton) = 0.001 tons/year

Application 30777 calculated particulate emissions from S-8 using the emissions factors for "Log Debarking" from AP-42 Fourth Edition, Chapter 10.3, Table 10.3-1 for Log Debarking. Based on the Bay Area Air Quality Management District's Permit Handbook, Chapter 11.13 for Tub Grinders, approximately 60% of the total suspended particulates (TSP) are assumed to be PM<sub>10</sub>. For a conservative estimate, 100% of the PM<sub>10</sub> emissions are assumed to be PM<sub>2.5</sub>. The grinder will be equipped with a water spray system (A-36) to reduce visible emissions during the grinding

operations. A 50% abatement factor will be applied to the grinding operations. The particulate matter emissions calculation for S-8 is shown below:

 $PM_{10}/PM_{2.5}$  (100 tons woodwaste/hr) \* (2080 hours/year) \* (0.0072 lb/ton)/(2000 lbs/ton) = 0.749 tons/year

Particulate matter emissions also result from the handling of recycled concrete and asphalt at this facility. This is done at the Concrete and Asphalt Stockpile Storage Area, S-24. Emissions from S-24 are based on the permitted throughput limit of 150,000 tons/year in permit condition 25393. Emissions from the S-24 will be equal to the sum of drop operations emissions described in AP-42, Fifth Edition, Volume I, Chapter 13.2.4, Aggregate Handling and Storage Piles, Equation 1, truck unloading-fragmented stone emissions described in AP-42, Fifth Edition, Chapter 11.19.2, Crushed Stone Processing and Pulverized Mineral Processing, Table 11.19.2-2, and wind erosion emissions (only PM<sub>10</sub>) described in AP-42, Fourth Edition, Chapter 8.19, Table 8.19.1-1. The particulate matter emissions calculation for S-24 is shown below:

 $PM_{10}~(150,\!000~tons~concrete/asphalt/year)$  \* (3.83E-03 lb/ton)/(2000 lb/ton) + (150,000 tons concrete/asphalt/year) \* (1.60E-05 lb/ton-transfer) \* (2 transfers)/(2000 lb/ton) + (1.7 lb/acre/day) \* (365 days/year) \* (0.028 acres) = 0.298 tons/year

 $PM_{2.5}$  (150,000 tons concrete/asphalt/year) \* (5.80E-04 lb/ton)/(2000 lb/ton) = 0.044 tons/year

The total particulate matter emissions from A2246 are:

 $PM_{10} 5.585 tons/year + 0.039 tons/year + 0.749 tons/year + 0.298 tons/year = 6.671 tons/year$ 

 $PM_{2.5}$  5.585 tons/year + 0.001 tons/year + 0.749 tons/year + 0.044 tons/year = 6.379 tons/year

### **POC Emissions:**

BAAQMD Regulation 8-34-301.3 allows 30 ppmv of NMOC (as methane) at 3% O<sub>2</sub> in the flare exhaust or a minimum of 98% NMOC destruction efficiency by weight. The inlet NMOC at this site is low, 1741 ppm. Basing the PTE on the outlet concentration limit results in higher emissions. Therefore, POC emissions from A-3 are based on the outlet concentration limit. The outlet concentration limit is equivalent to an NMOC emission rate of 0.02 lbs/MM BTU as shown below:

 $(30 \text{ lb-mole CH}_4/1E6 \text{ lb-mole flue gas}) * (17,037 \text{ ft}^3 \text{ flue gas } @ 3\% \text{ O}_2/\text{min}) * (60 \text{ min/hr})/ (386.765 \text{ ft}^3 \text{ flue gas}/1.0 \text{ lb-mole flue gas}) * (16.04 \text{ lbs CH}_4/1.0 \text{ lb-mole CH}_4) = 1.27 \text{ lbs NMOC/hr}$ 

(1.27 lb NMOC/hr) / (75 MM BTU / hour) = 0.02 lb NMOC / MM BTU

POC (657,000 MM BTU/year)\*(0.02 lbs/MM BTU)/(2000 lbs/ton) = 6.570 tons/year

### **HAP Emissions:**

Landfill gas contains small quantities of numerous HAPs such as toluene, benzene, methylene chloride, and vinyl chloride. Landfill gas flares will have residual emissions of these HAPs. In addition, landfill gas flares emit secondary HAPs such as formaldehyde, which results from the combustion of methane, and acid gases such as hydrogen chloride and hydrogen fluoride that result from the combustion of halogenated compounds.

Facility-wide toxic emissions were recently assessed for this facility for BAAQMD Regulation 11, Rule 18. This analysis was based on landfill gas and flare sampling conducted on May 17, 2019. Where test results were not available, default values, generated as part of the Regulation 11, Rule 18 effort, from similar landfills throughout the District were used. Also, emissions of other HAPs resulting from combustion were estimated using factors from the California Air Resources Board database of "California Air Toxics Emission Factors" (CATEF) for Landfill Gas Flares. The District assumed that A-3 would destroy at least 98% of each individual organic compound. Residual HAP emissions and secondary emissions from A-3 with an LFG throughput of 1327 scfm (as used in the analysis carried out for Regulation 11, Rule 18) are shown below:

	Emission Factor	Emissions
	lbs/MM scf	Tons/year
Acetaldehyde	2.58E-01 <sup>(2)</sup>	8.99E-02
Acrolein	3.33E-02 <sup>(2)</sup>	1.16E-02
Acrylonitrile	2.71E-04	9.47E-05
Allyl chloride	8.90E-05	3.10E-05
Benzene	3.92E-03	1.37E-03
Benzyl chloride	3.60E-05	1.25E-05
1,3-Butadiene	1.40E-04	4.87E-05
Carbon disulfide	2.71E-04	9.47E-05
Carbon tetrachloride	3.58E-04	1.25E-04
Chlorobenzene	6.40E-04	2.23E-04
Chloroform	3.39E-05	1.18E-05

	Emission Factor lbs/MM scf	Emissions Tons/year
1,4-Dichlorobenzene	3.42E-03	1.19E-03
1,1-Dichloroethane	1.13E-04	3.92E-05
1,1-Dichloroethene	6.01E-05	2.10E-05
1,4-Dioxane	2.64E-04	9.21E-05
Dioxins PCDDs	1.50E-07 <sup>(2)</sup>	5.23E-08
Ethylbenzene	3.73E-02	1.30E-02
Ethyl chloride	7.50E-05	2.62E-05
Ethylene dibromide	5.34E-05	1.86E-05
Ethylene dichloride	9.21E-05	3.21E-05
Formaldehyde	1.80E-01 <sup>(2)</sup>	6.26E-02
Hexane	2.72E-03	9.47E-04
Hydrogen chloride	5.11E-01	1.78E-01
Hydrogen fluoride	8.26E-02	2.88E-02
Hydrogen sulfide <sup>(1)</sup>	2.14E-01	7.45E-02
Isopropyl Alcohol	1.86E-02	6.50E-03
Mercury	1.12E-06	3.92E-07
Methanol	2.15E-02	7.51E-03
Methyl bromide	1.10E-04	3.85E-05
Methylene chloride	9.88E-05	3.44E-05
Methyl ethyl ketone	2.46E-02	8.58E-03
Methyl tert-butyl ether	7.74E-05	2.70E-05
Naphthalene	3.56E-02 <sup>(2)</sup>	1.24E-02
PAH (as B(a)P-equiv.)	4.48E-03 <sup>(2)</sup>	1.56E-03
Perchloroethylene	1.20E-03	4.18E-04
Propene	2.17E-02	7.58E-03
Styrene	1.94E-03	6.76E-04

	Emission Factor lbs/MM scf	Emissions Tons/year
1,1,2,2-Tetrachloroethane	4.77E-05	1.66E-05
Toluene	5.71E-02	1.99E-02
Trichloroethylene	5.91E-04	2.06E-04
1,1,1-Trichloroethane	3.79E-05	1.32E-05
1,1,2-Trichloroethane	3.79E-05	1.32E-05
Vinyl acetate	1.38E-04	4.81E-05
Vinyl chloride	5.81E-04	2.03E-04
Xylene	8.12E-02	2.83E-02
Total		4.83E-01

<sup>(1)</sup> Hydrogen sulfide is not considered a HAP by the EPA. Therefore, hydrogen sulfide emissions are not included in the potential to emit for HAPs. It will be listed separately as a regulated air pollutant.

Landfills are also the source of fugitive HAP emission. The Air District database conservatively estimates HAP emission from A2246 by assuming 75% capture efficiency and using the same methods described above for non-combustion emissions.

	Emission Factor	Emissions
	lbs/MM scf	Tons/year
Acrylonitrile	4.52E-03	1.58E-03
Allyl chloride	1.48E-03	5.17E-04
Benzene	6.53E-02	2.28E-02
Benzyl chloride	6.00E-04	2.09E-04
1,3-Butadiene	2.33E-03	8.12E-04
Carbon disulfide	4.52E-03	1.58E-03
Carbon tetrachloride	5.96E-03	2.08E-03
Chlorobenzene	1.07E-02	3.72E-03
Chloroform	5.66E-04	1.97E-04
1,4-Dichlorobenzene	5.70E-02	1.99E-02

<sup>(2)</sup> Emission factors from CATEF for Landfill Gas Flares.

	Emission Factor lbs/MM scf	Emissions Tons/year
1,1-Dichloroethane	1.88E-03	6.54E-04
1,1-Dichloroethene	1.00E-03	3.49E-04
1,4-Dioxane	4.40E-03	1.53E-03
Ethylbenzene	6.22E-01	2.17E-01
Ethyl chloride	1.25E-03	4.36E-04
Ethylene dibromide	8.90E-04	3.10E-04
Ethylene dichloride	1.53E-03	5.35E-04
Hexane	4.53E-02	1.58E-02
Hydrogen sulfide <sup>(1)</sup>	3.56E+00	1.24E+00
Isopropyl Alcohol	3.11E-01	1.08E-01
Mercury	1.87E-05	6.53E-06
Methanol	3.59E-01	1.25E-01
Methyl bromide	1.84E-03	6.42E-04
Methylene chloride	1.65E-03	5.74E-04
Methyl ethyl ketone	4.10E-01	1.43E-01
Methyl tert-butyl ether	1.29E-03	4.50E-04
Perchloroethylene	2.00E-02	6.97E-03
Propene	3.62E-01	1.26E-01
Styrene	3.23E-02	1.13E-02
1,1,2,2-Tetrachloroethane	7.95E-04	2.77E-04
Toluene	9.52E-01	3.32E-01
Trichloroethylene	9.85E-03	3.43E-03
1,1,1-Trichloroethane	6.32E-04	2.20E-04
1,1,2-Trichloroethane	6.32E-04	2.20E-04
Vinyl acetate	2.30E-03	8.02E-04
Vinyl chloride	9.69E-03	3.38E-03

	Emission Factor lbs/MM scf	Emissions Tons/year
Xylene	1.35E+00	4.72E-01
Total		1.62E+00

<sup>&</sup>lt;sup>1)</sup>Hydrogen sulfide is not considered a HAP by the EPA. Therefore, hydrogen sulfide emissions are not included in the potential to emit for HAPs. It will be listed separately as a regulated air pollutant.

Particulate matter emissions from sources where cementitious materials are handled will include emissions of HAPs that are present in cement. The Concrete and Asphalt Stockpile Storage Area, S-24, involves the handling of cementitious materials. HAP emissions summarized below were estimated as a fraction of maximum annual PM<sub>10</sub> emissions. The weight fraction of HAP in PM<sub>10</sub> was estimated by using the following equation and emissions factors of HAPs and PM<sub>10</sub> for concrete batching from AP-42, Chapter 11.12. Because all HAP speciation profiles or emission factors are available only for cement, the weight fraction of HAP in PM<sub>10</sub> emissions from concrete handling were estimated by normalizing for cement content in concrete. The cement content in concrete was also obtained from AP-42, Chapter 11.12.

% Wt of TAC in PM10 Emissions

$$= \frac{TAC \, EF \, (lb \, \frac{TAC}{ton \, cement})}{PM10 \, EF \, (\frac{lb \, PM10}{ton \, cement})} \times 100 \times Cement \, content \, in \, Concrete \, (\%)$$

AP-42, Chapter 11.12 provides emission factors for total chromium, but not hexavalent chromium. Fraction of hexavalent chromium in total chromium was estimated using the data from a San Diego APCD study<sup>1</sup>, which is also used in the revised BAAQMD Permit Handbook Chapter 11.5.

Crystalline silica is not on the EPA list of hazardous air pollutants, so it was not included in this PTE.

Fraction of mercury in PM10 was also estimated using a similar methodology. Mercury content in Portland cement<sup>2</sup> was normalized for cement content in concrete. The fraction of mercury in PM10 generated from concrete was assumed to be equal to the fraction of mercury in concrete.

	Emission Factor	Emissions
	lb/ton	Tons/year
Arsenic	2.13E-08	1.60E-06
Beryllium	4.26E-10	3.20E-08

 $<sup>^{1}\</sup> Concrete\ Batch\ Plant\ Operations,\ http://www.sdapcd.org/toxics/emissions/concrete/concrete1.pdf$ 

<sup>&</sup>lt;sup>2</sup> [Mercury Emission and Speciation from Portland Cement Kilns, page 8 http://www.ibrarian.net/navon/paper/Research Development\_Information.pdf?paperid=12267008]

	Emission Factor lb/ton	Emissions Tons/year
Cadmium	5.98E-11	4.48E-09
Hexavalent Chromium	1.79E-09	1.34E-07
Lead	6.33E-09	4.74E-07
Manganese	1.07E-07	8.02E-06
Mercury	7.58E-12	5.69E-10
Nickel	2.08E-08	1.56E-06
Selenium	4.58E-09	3.43E-07
Total		1.22E-05

The potential to emit for HAPs emitted from A2246 are:

HAPs 1.62E+00 tons/year + 4.83E-01 tons/year + 1.22E-05 ton/year = 2.11E+00 tons/year. The largest emitted HAP is xylene with 0.50 tons/year.

### POTENTIAL TO EMIT DISCUSSION

The potential to emit for A2246 is discussed above. The table below compares the total potential to emit for each pollutant and compares the values to the thresholds required for a major facility operating permit. The total potential to emit for the facility is well below the threshold limits. Therefore, a major facility review permit is not required for A2246 as defined in Regulation 2-6-212.

Total Site-Wide Emissions from Site #A2246 Considering Full Capacity of the Flare

	Title V Limit	Potential to Emit
	tons/year	tons/year
СО	100.0	98.550
$NO_x$	100.0	19.710
$SO_2$	100.0	10.479
$PM_{10}$	100.0	6.671
PM <sub>2.5</sub>	100.0	6.379
POC	100.0	6.570
HAPs (1)	25.0 / 10.0	2.107/ 0.500
$H_2S$	100.0	1.316

(1) HAPs and H<sub>2</sub>S emissions are analyzed considering 1327 scfm, as used in the analysis carried out for Regulation 11, Rule 18

The PTE for CO for the facility does approach 100 tons/year. This is considering that the flare has the capacity to burn 2,500 cfm of landfill gas (eq. to 1,314 million cf/yr.) However, because the landfill was closed in 2013, the actual amount of landfill gas collected is dropping and no other fuels can be sent to the flare. The actual amounts of landfill gas collected for recent years are shown below:

2020: 569 MMcf2019: 603 MMcf2018: 697 MMcf2017: 836 MMcf

The flow measured at the most recent source test was 1,310 cfm. Based on the current landfill generation rates, and because the amount of gas generated in a closed landfill can only decrease, the PTE will be re-calculated assuming a lower flow at the flare of 1,500 cfm. The resulting PTE is shown below:

Total Site-Wide Emissions from Site #A2246 Considering 1,500 cfm LFG to the Flare

	Title V Limit	Potential to Emit
	tons/year	tons/year
CO	100.0	56.830
$NO_x$	100.0	11.366
$SO_2$	100.0	6.043
$PM_{10}$	100.0	4.306
PM <sub>2.5</sub>	100.0	4.014
POC	100.0	3.789
HAPs (1)	25.0 / 10.0	2.107/ 0.500
$H_2S$	100.0	1.316

(1) HAPs and H<sub>2</sub>S emissions are analyzed considering 1327 scfm, as used in the analysis carried out for Regulation 11, Rule 18

The total potential to emit for the facility is below the threshold limits as defined in Regulation 2-6-212. Therefore, the major facility review permit can be cancelled and a synthetic minor permit is not required for A2246.

The total emissions of HAPs from all facilities are well below the 10 tons per year threshold for the greatest emitted HAP. The single greatest HAP from all the facility is xylene at 0.500 tons per year.

## **PERMIT CONDITION #8366**

The current permit condition, permit condition # 8366, for S-1, Tri-Cities Landfill – Waste Decomposition Process, includes references to BAAQMD Regulation 2, Rule 6 and federal requirements associated with facilities subject to Title V permitting. Because TCRRF is no longer subject to Major Facility Review, as determined in this evaluation, these references are removed from the permit condition. The updated permit condition is shown below:

#### Condition #8366

For S-1: Tri-Cities Landfill — Waste Decomposition Process; Equipped with Gas Collection System; and abated by A-3: Landfill Gas Flare

1. The Tri-Cities Landfill S-1 is permitted for a total refuse capacity of 19,271,000 cubic yards (approximately 13,489,700 tons). Effective August 1, 2012, no waste shall be disposed of in the S-1 Landfill. (Basis: Cumulative Increase, Offsets, and Toxic Risk Management Policy)

- 2. The owner/operator shall apply for and receive a Change of Conditions from the District before altering the landfill gas collection system described in Parts 2a-b below. Increasing or decreasing the number of wells or collectors are alterations subject to this requirement. The authorized number of landfill gas collection and leachate collection system components is the baseline count listed below, plus any components added and minus any components decommissioned pursuant to Part 2b, as evidenced by start-up/shutdown notification letters submitted to the District.
  - a. The owner/operator has been issued a Permit to Operate for the landfill gas collection system components listed below. Well and collector locations, depths, and lengths are as described in detail in Permit Applications # 3515, 10998, 15345, and 17332. In addition, the owner/operator has been issued a Change of Conditions for modifications to the gas collection system, the details of which are included in Permit Application #22571.

	Required Components
(i) Main Gas Collection System	
Total Number of Vertical Wells:	31
Total Number of Horizontal Landfill Gas	
Trench Collectors:	0
(ii) Intermittent Gas Collection System	
Total Number of Leachate Collection We	lls: 0

b. The owner/operator is authorized to make the landfill gas collection system and leachate collection system component alterations listed below. Specific details regarding well alterations are described in Permit Application #22571.

	Minimum	Maximum
Install new Vertical Gas Extraction Wells:	0	30
Decommission Vertical Gas Extraction Wells:	0	15
Install new Horizontal Trench Collectors:	0	15
Decommission Horizontal Trench Collectors:	0	15
Install new Leachate Cleanout Risers:	0	5
Decommission Leachate Cleanout Risers:	0	5

Wells installed, relocated, replaced, or shutdown pursuant to Part 2b shall be added to or removed from Part 21 in accordance with the procedures identified in Regulations 2-6-414 or 2-6-4158-34-408. The owner/operator shall maintain records of the decommissioning date for each well that is shutdown and the initial operation date for each new or relocated well and trench. An unlimited number of vertical gas extraction well and horizontal trench collector replacements may be performed as long as the replacement

is connected to the gas collection system within 24 hours of shutdown of the replaced well/trench collector.

(Basis: Regulations 2-1-301, 8-34-301.1, 8-34-303, 8-34-304, and 8-34-305, and 8-34-408)

- 3. In order to demonstrate compliance with the above requirements, the owner/operator shall maintain the following records:
  - a. Deleted.
  - b. For areas of the landfill not controlled by a landfill gas collection system, the owner/operator shall maintain a record of the date that waste was initially placed in the area or cell.
  - c. The cumulative amount of waste placed in each uncontrolled area or cell.
  - d. If the owner/operator plans to exclude an uncontrolled area or cell from the collection system requirement, the types and amounts of all non-decomposable waste placed in the area or cell shall be recorded. If non-decomposable waste makes up less than 100% of the contents of a given cell, that percentage shall be noted.
  - e. The initial operation date for each new landfill gas well and collector.
  - f. An accurate map of the landfill that indicates the locations of all refuse boundaries and the locations of all wells and collectors as identified in the Collection and Control System Design Plan. Any areas containing only non-decomposable waste shall be clearly identified. This map shall be updated at least every six months to indicate changes in refuse boundaries and to include any newly installed wells and collectors.

These records shall be kept on-site and be made available for inspection to District personnel upon request for a period of five years from the date on which a record was made. (Basis: Cumulative Increase and Regulations 2-6-5018-34-501 and 8-34-304)

4. The landfill gas collection system described in Part 2a.(i) above shall be operated continuously. Wells shall not be disconnected or removed from operation nor shall isolation or adjustment valves be closed without written authorization from the District, unless the owner/operator complies with all applicable requirements of Regulation 8, Rule 34, Sections 113, 116, 117, and 118. The leachate collection system described in Part 2a.(ii) is not required to be operated continuously and is subject to the alternative wellhead standards described in Part 21, as allowed under Regulation 8-34-305. The CCR, Title 17, Section 95464(c) Wellhead Gauge Pressure Requirement continues to apply to these components.

(Basis: Regulations 8-34-301 and 8-34-305, CA H&S Code, Title 17, Division 3, Chapter 10, Article 4, Subarticle 6, 40 CFR Part 60.753)

- 5. All landfill gas collected by the gas collection system for S-1 shall be abated at all times by the Landfill Gas Flare A-3. Under no circumstances shall raw landfill gas be vented to the atmosphere. This limitation does not apply to unavoidable landfill gas emissions that occur during collection system installation, maintenance, or repair performed in compliance with Regulation 8, Rule 34, Sections 113, 116, 117, or 118 or to inadvertent component or surface leaks that do not exceed the limits specified in 8-34-301.2 or 8-34-303. (Basis: Regulation 8-34-301)
- 6. The combustion zone temperature of the flare shall be maintained at a minimum temperature of 1450 degrees F, averaged over any 3-hour period. If a source test demonstrates compliance with all applicable requirements at a different temperature, the APCO may revise this minimum temperature limit in accordance with the procedures identified in Regulation 2-6-4142-1-301 orand 2-6-4152-1-302, based on the following criteria. The minimum combustion zone temperature for the flare shall be equal to the average combustion zone temperature determined during the most recent complying source test minus 50 degrees F, provided that the minimum combustion zone temperature is not less than 1400 degrees F. (Basis: Regulation 8-34-301, Toxic Risk Management Policy, CCR, Title 17, Section 95470(a)(1)(K)(1), and RACT, and 40 CFR 60.758(c)(1)(i)
- 7. The Landfill Gas Flare A-3 shall be equipped with a combustion temperature readout monitor and continuous recorder to measure and record the temperature in the combustion zone. (Basis: Regulation 8-34-507)
- 8. Emissions of Nitrogen Oxides (NOx) from the Flare A-3 shall not exceed 0.06 pounds per million BTU (calculated as NO<sub>2</sub>). (basis: RACT and Offsets)
- 9. Emissions of Carbon Monoxide (CO) from the Flare A-3 shall not exceed 0.3 pounds per million BTU. (basis: RACT and Offsets).
- 10. In order to demonstrate compliance with Regulation 8, Rule 34, Section 301.3, Regulation 9, Rule 1, Section 302, 40 CFR 60.752(b)(2)(iii)(B), and the above requirements, the owner/operator shall ensure that a District approved source test is conducted annually on the Landfill Gas Flare (A-3). The annual source test shall determine the following:
  - a. Landfill gas flow rate to the flare (dry basis)
  - b. Concentrations (dry basis) of methane (CH<sub>4</sub>) and total non-methane organic compounds (NMOC) in the landfill gas;
  - c. Stack gas flow rate from the flare (dry basis)
  - d. Concentrations (dry basis) of nitrogen oxides (NOx), carbon monoxide (CO), CH<sub>4</sub>, NMOC, and O<sub>2</sub> in the flare stack gas

- e. The NMOC destruction efficiency achieved by the flare
- f. The average combustion temperature in the flare during the test period.

Annual source tests shall be conducted no sooner than 9 months and no later than 12 months after the previous source test. The Source Test Section of the District shall be contacted to obtain its approval of the source test procedures at least 14 days in advance of each source test. The Source Test Section shall be notified of the scheduled test date at least 7 days in advance of each source test. The source test report shall be submitted to the Compliance and Enforcement Division within 45 days after the test date. (Basis: Regulations 8-34-301.3 and 8-34-412-and 40 CFR 60.752(b)(2)(iii)(B))

- 11. The heat input to the A-3 Flare shall not exceed 1,800 million BTU per day or 657,000 million BTU per year. In order to demonstrate compliance with this part, the owner/operator shall calculate and record on a monthly basis the maximum daily and total monthly heat input to the flare based on the landfill gas flow rate recorded pursuant to Part 10, the average methane concentration in the landfill gas based on the most recent source test, and a high heating value for methane of 1013 BTU/scf. The records shall be retained for five years and shall be made available to the District staff upon request. (Basis: Regulation 2-1-301)
- 12. Total reduced sulfur compounds in the collected landfill gas shall be monitored as a surrogate for monitoring sulfur dioxide in control systems exhaust. The concentration of total reduced sulfur compounds in the collected landfill gas shall not exceed 1300 ppmv (dry). In order to demonstrate compliance with this part, the owner/operator shall measure the total sulfur content in collected landfill gas on an annual basis using a draeger tube. The landfill gas sample shall be taken from the main landfill gas header. The owner/operator shall follow the manufacturer's recommended procedures for using the draeger tube and interpreting the results. (Basis: Regulations 9-1-302 and 2-1-4032-6-5031-501)
- 13. Deleted.
- 14. Deleted.
- 15. Deleted.
- 16. Deleted.
- 17. Deleted.

- 18. Deleted.
- 19. The owner/operator shall submit the annual report required by BAAQMD Regulation 8-34-411 shall be submitted in two semi-annual increments. reporting periods and report submittal due dates for the semi-annual increments of the Regulation 8-34-411 report and the MSW Landfill NESHAP report, which is required pursuant to 40 CFR Part 63.1980(a), shall be synchronized with the reporting periods and report submittal due dates for the semi-annual MFR Permit monitoring reports that are required by Section I.F of the MFR Permit for this site. A single report may be submitted to satisfy the requirements of Section I.F, Regulation 8-34-411, and 40 CFR Part 63.1980(a), provided that all items required by each applicable reporting requirement are included in the single report.

(Basis: Regulation 8-34-411 and 40 CFR Part 63.1980(a))

- 20. The gas collection system operating requirements listed below shall replace the well head requirements identified in Regulation 8-34-305.2 through 8-34-305.4 for the specified wells. All wells remain subject to the Regulation 8-34-305.1 requirement to maintain vacuum at each well head.
  - The Regulation 8-34-305.2 temperature limit shall not apply to the Wells 103 a. and 114 provided that the landfill gas temperature at each well does not exceed 145 degrees F (63 degrees C).
  - The owner/operator shall demonstrate compliance with the alternative b. wellhead landfill gas temperature specified in Part 20(a) above by monitoring the temperature of each wellhead on a monthly basis, in accordance with Regulation 8-347-505.
  - All records to demonstrate compliance with Part 20(a) and all applicable c. sections of Regulation 8, Rule 34 shall be recorded in a District-approved log and made available to District staff upon request in accordance with Regulation 8-34-501.4, 501.9, and 414.
  - If the temperatures measured at any of the wells listed in Part 20(a) exceed d. 145 degrees F, the owner/operator shall take all measures necessary to investigate the possibility of subsurface fires, including landfill gas testing for carbon monoxide (CO) on the affected wells. If a fire is suspected, the owner/operator shall employ all means as appropriate to extinguish the fire, repair the well(s), and bring the well(s) back into service.

(Basis: Regulation 8-34-301.2, 8-34-303, and 8-34-305, 40 CFR Part 60.755(a) and 60.759)

21. The leachate collection system shall be connected to the vacuum system as needed to prevent violation of applicable surface and component leak limits, and the operating requirements listed below shall replace the operating requirements identified in Regulation 8-34-301.1, 8-34-305.3, and 8-34-305.4 for the leachate

collection risers (LCRs). All LCRs remain subject to the landfill gas temperature limit in Regulation 8-34-305.2.

- a. The Regulation 8-34-305.3 and 8-34-305.4, the nitrogen and oxygen content limits, shall not apply, provided that each LCR is operated at an oxygen concentration not to exceed 15% by volume. Regulation 8-34-414 and subpart 21(b) below may be used in conjunction with this alternative wellhead limit.
- b. The component may be disconnected from the vacuum system if compliance with Part 21(a) requires turning off the vacuum to a LCR or if the temperature > 131 degrees F. The component shall be connected to vacuum if any pressure is detected.
- c. The owner/operator shall monitor and record the gauge pressure, oxygen content, methane content, and temperature at each LCR on a monthly basis regardless of whether the component is connected to vacuum or not.

All records to demonstrate compliance with Part 21 and all applicable sections of BAAQMD Regulation 8, Rule 34 shall be recorded in a District-approved log and made available to District staff upon request for at least 5 years from date of entry. (basis: Regulations 8-34-305, 8-34-404, 8-34-414, 8-34-501.4, 8-34-501.9, Regulation 2-6-501, 40 CFR Part 60.755(a) and 60.759, CCR, Title 17, Section 95468(a)(1))

- 22. If any other well has a temperature of 131 degrees F or higher, the owner/operator may elect to add this component to the list of alternative temperature limit wells in Part 20 if all of the following requirements are met:
  - a. The wellhead temperature does not exceed 145 degrees F.
  - b. The carbon monoxide (CO) concentration in the wellhead gases does not exceed 500 ppmv.
  - c. The component does not exceed any wellhead limit other than temperature and had no excesses of wellhead limits (other than temperature) during the past 120 days prior to adding this component to the list in this subpart, unless the excess is positive pressure at the well from the well vacuum being reduced to eliminate any potential over pull that could contribute to a landfill fire.
  - d. Prior to adding a component to the list in Part 20, the owner/operator shall monitor the gas in the wellhead for CO concentration at least two times, with no more than 15 days between tests. CO monitoring shall continue on a monthly basis, or more frequently if required below, until the owner/operator is allowed to discontinue CO monitoring per subpart e(ii)(3).
  - e. The owner/operator shall comply with all applicable monitoring and recordkeeping requirements below:
    - i. The owner/operator shall demonstrate compliance with the alternative wellhead temperature limit by monitoring and recording the temperature of the landfill gas in the wellhead on a monthly basis, in accordance with Regulations 8-34-501.4, 8-34-501.9, and 8-34-

505.

- ii. If the temperature of the landfill gas in the wellhead exceeds 140 degrees F, the owner/operator shall investigate the possibility of a subsurface fire at the wellhead by monitoring CO concentration in the wellhead gases and by searching for smoke, smoldering odors, combustion residues, and other fire indicators in the wellhead and in the landfill area near the wellhead. Within 5 days of triggering a fire investigation, the owner/operator shall measure the CO concentration in the landfill gas at the wellhead using a portable CO monitor, CO Draeger tube, or an EPA- approved test method. CO monitoring shall continue according to the frequency specified below:
  - 1. If the CO concentration is greater than 500 ppmv, the owner/operator shall immediately take all steps necessary to prevent or extinguish the subsurface fire, including disconnecting the well from the vacuum system if necessary. If the well is not disconnected from the vacuum system or upon reconnecting the well to the vacuum system, the owner/operator shall monitor the well for CO concentration, wellhead temperature, and other fire indicators on at least a weekly basis until CO concentration drops to 500 ppmv or less.
  - 2. If the CO concentration is less than or equal to 500 ppmv but great than 100 ppmv, the owner/operator shall monitor for CO concentration at least twice per month (not less than once every 15 days) until the CO concentration drops to 100 ppmv or less. Wellhead temperature and other fire indicators shall be evaluated at each of these semi-monthly monitoring events.
  - 3. If the CO concentration is less than or equal to 100 ppmv, the owner/operator shall monitor for CO concentration on a monthly basis. CO monitoring may be discontinued if three consecutive CO measurements are 100 ppmv or less and the wellhead temperature during each of these three monitoring events is 140 degrees F or less. If the component has three or more CO measurement of 100 ppmv or less but the wellhead temperature was greater than 140 degrees F, the owner/operator must receive written approval from the District before discontinuing the monthly CO monitoring at that component.
- iii. The owner/operator shall record the dates and results of all monitoring events required by this subpart in a District-approved log. If subpart 20e(ii) or 20e(ii)(1) applies, the owner/operator shall also record all actions taken to prevent or extinguish the fire.
- f. Within 30 days of adding a component to the list in this subpart, the owner/operator shall notify the District in writing that the operator is requesting to add the component to the list of alternative temperature limit

wells. This notification shall include the well ID number, a map of the collection system to identify the location of the well, and the dates and results of all monitoring conducted on the well to verify that the above requirements have been satisfied.

g. If the Regulation 8-34-414 repair schedule has been invoked for the wellhead temperature excess and the owner/operator has met the requirement in Sections 414.1 and 414.2, then compliance with the requirements of the subpart shall be deemed an acceptable resolution of the wellhead temperature excess in lieu of the collection system expansion specified in Section 414.3 and 414.4.

(Basis: Regulation 8-34-305)

### RECOMMENDATION

The District issued the initial Title V permit to Waste Management of Alameda County, Site #A2246, on November 28 2001. The facility was required to obtain a Title V permit since it was a "designated facility" under the provisions of 40 CFR 60.32c(c) as a landfill with a "design capacity of 2.5 million mega grams or more, or a design capacity of 2.5 million cubic meters or more". This facility is now a closed landfill and meets the all of the requirements set out for removal of a landfill from Title V permitting under 40 CFR Parts 60.31f(c) and 60.33f(f).

Waste Management of Alameda County is no longer subject to Major Facility Review. The District recommends canceling the Title V permit.

By:	<u>Ryan Atterbury</u>	Date:	10/4/2021
	Ryan Atterbury		
	Air Quality Engineer		