

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT ENGINEERING AND COMPLIANCE DIVISION PERMIT APPLICATION EVALUATION AND CALCULATIONS	PAGES 9	PAGE 1
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Permit to Construct (Alteration/Modification)

Applicant's Name Inland Empire Regional Composting Authority

Mailing Address 6075 Kimball Avenue
Chino, CA 91710

Equipment Location 12645 Sixth Street
Rancho Cucamonga, CA 91739

FACILITY ID 139808, APPLICATION 505862

Equipment Description

AIR POLLUTION CONTROL SYSTEM, TREATING FOUL AIR FROM CO-COMPOSTING PROCESS AREAS, CONSISTING OF:

1. BAGHOUSE, INSIDE CO-COMPOSTING BUILDING, CARTRIDGE TYPE, 102,600 CFM.
2. HUMIDIFICATION SYSTEM, UNDERGROUND, 12' DIA. X 25' L. DUCT, REINFORCED CONCRETE, WITH HIGH PRESSURE WATER SPRAY NOZZLES AND ASSOCIATED PUMPS.
3. BIOFILTER, CUSTOM MADE, CONTAINING 12 CELLS, EACH CELL 85' - 10" W. X 130' - 6" L., WITH APPROXIMATELY 6' TO 8' DEEP BIOFILTER MEDIA LAYER, RESTING ON BAC TEE PLENUM PLATES AND TRENCH COVER, WITH AIR DISTRIBUTION AND INCOMING FOUL AIR DUCTS, AND SURFACE IRRIGATION SYSTEM WITH ROTORY SPRINKLERS.
4. EXHAUST SYSTEM WITH A MAXIMUM OF 813,200 CUBIC FEET PER MINUTE AIR FLOW RATE, SERVING THE ENCLOSED CO-COMPOSTING PROCESS AREAS (A/N 426688).

Background

On January 26, 2010, Inland Empire Regional Composting Authority (IERCA) submitted this application for a Proposed Alteration/Modification to Permitted Equipment for the biofilter (A/N 482529, Permit to Construct) used to capture and control emissions generated by the co-composting operations (A/N 482530, Permit to Construct). The Inland Empire Regional Compost Facility (IERCF) is located in Rancho Cucamonga, adjacent to IEUA Regional Plant No. 4 (RP-4). The project is jointly owned and funded by a Joint Powers Authority (JPA) comprised of the Inland Empire Utilities Agency (IEUA) and Los Angeles County Sanitation District (LACSD). The project site is 24.4 acres, including a 410,000 square feet warehouse building, which is used to enclose the composting, screening, and curing portions of the facility. All of the emissions generated from various co-composting operations areas (Receiving/Mixing area, composting, screening, curing and product storage and load out), that are performed within the enclosed buildings, are treated by the this biofilter.

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The biofilter located at Inland Empire Regional Composting Authority (IERCA) was initially permitted under a Permit to Construct A/N 426690. Construction of the facility was completed in April 2007. The biofilter under A/N 426690 had unforeseen shutdowns in August 2007 due to operation problems resulting in a maximum operating capacity of 40%. Consequentially, the source test required to be conducted by October 15, 2007 under the Permit to Construct was delayed. November 15, 2007 the Hearing Board granted a Regular Variance Case No. 5657-1 to allow IERCA time to a) perform major repairs to the amendment loading hoppers, b) bring the facility up to 80% of greater throughput, and c) conduct the first, formal source test for the biofilter. Applications to update information for the biofilter and co-composting facility were submitted May 14, 2008. The facility redesigned the amendment hopper system and was able to attain 80% capacity to comply with the permit conditions as required by the Regular Variance by January 2009.

The official source test was conducted February 18-25, 2009. The source test was conducted with the Facility operating at 80% throughput or higher, but also demonstrated the facility was in violation of their permit conditions by exceeding the monthly emission limit for VOC by 3584 lbs/month or 119 lbs/day. March 26, 2009 the Hearing Board granted an Interim Variance Case No. 5657-2 for Rule 203(b) and Permit Conditions 1 and 10. May 12, 2009 pursuant to public notice and hearing, the Hearing Board granted IERCA a Regular Variance, which expired June 24, 2009 according to Rule 504(e). The Regular Variance indicated mitigation measures to reduce excess emissions by a) reducing monthly average air flow to the biofilter (~10%) from the February 2009 source test flow rate without jeopardizing maintaining a hospitable working environment, b) maintaining a level air flow to the biofilter through optimization and fan timing and automation to avoid erratic biofilter effluent emissions, and c) conducting a second source test to determine the final emissions of the biofilter.

The second official source test was conducted May 20-22 and 27-29, 2009. Preliminary results of the May 2009 source test indicated the VOC emissions exceeded the biofilter VOC monthly limit as well as exceeding the February 2009 source test VOC emission results. June 10, 2009 the District and IERCA applied for a Stipulated Order of Abatement Case No. 5657-3 due to a) the second source test demonstrating an exceedance of the VOC limit and b) inability to obtain variance relief beyond June 24, 2009. The formal May 2009 source test report was submitted and received June 24, 2009. In September 2009 the May 2009 source test was evaluated. August 2009 IERCA had paid the Excess Emission Fees (\$32,777.42) associated with the exceedance of their VOC emission limit. Continuation of the Order for Abatement hearing was rescheduled for January 2010, due to the unresolved determination of the facility's applicability for Priority Reserve credits.

IERCA had been in discussion with the AQMD staff regarding eligibility of Priority Reserve credits. IERCA handles biosolids from another one of their facilities (IEUA RP-4), which provides a 13% overall contribution. Determination was made that 13% of the overall emissions from this project to Priority Reserve as POTW under Essential Public Services. The VOC ERC amount required was the remainder of the facility's emissions (87%) subtracted by the amount of ERCs provided during the issuance of the Permit to Construct. Offset calculations determined that 22 lbs/day of Priority Reserve credits were required and 118 lbs/day of ERCs were required. Also, the correct new VOC emission limit for this equipment shall be 5052 lbs/month. IERCA was required to provide the applications for alteration/modification of the facility equipment and initial Title V and associated applications by January 22, 2010. IERCA was required to obtain ERCs by April 1, 2010. The Certificate of Proof for Registered Emission reduction Credit was issued on March 30, 2010. The final compliance date for the Order of Abatement is August 1, 2010.

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Process Description

Exhaust flows:

Receiving/Mixing Area: 20,200 cfm (Process Exhaust)
Compost & Screening Area: 8,600 cfm (Amendment) + 94,500 cfm (Process Exhaust)
+ 453,900 cfm (General Exhaust)
= 557,000 cfm
Curing & Product Load out Area: 236,000 cfm (General Exhaust)
Total Exhaust to Biofilter: 813,200 cfm

Air from the all of the process areas above is collected and sent through humidification and biofiltration for treatment. In some cases, air from one section of the facility is transferred into another section to form a portion of that areas makeup air. In all cases, each area receives a minimum of 50% fresh air directly from outside the facility. All the air from the facility is collected in the ducts that run on the north and south sides of the composting and curing areas. These ducts converge at the center of the facility and the air collects in a single location in the 12' x 25' duct to the north of the facility. At this location, the air passes through a high pressure water spray. The purpose of this spray is to humidify and cool the air going to the biofilter.

For optimum performance of the biofilter the air entering the biofilter should be below 104°F and as close to saturation as possible. Biofiltration is the most commonly used method of odor treatment at composting facilities because of the expected low cost and low required daily attention.

The biofilter relies on a moisture film at the interface of the biofilter media and the air being treated. If the filter is allowed to dry out, the removal efficiency of the media is decreased. Therefore, there are two systems in place to maintain the proper moisture level in the biofilter: 1) Humidification spray system and 2) Biofilter surface irrigation system.

There are two other air treatments that apply only to air from some of the processes. The air from the screening area passes through a dust collection system. The air from the curing area passes through a low pressure water spray.

The screening operation potential could generate dust because the material is heavily agitated in the process. All of the air from the screening area passes through a cartridge type baghouse before being transferred into the composting area as makeup air. In the curing area, some drying of the material is possible and may even be desirable at the end of the process to meet a customer specification. In addition, the movement of material could cause dust from the dryer material. A water spray has been added to treat dust to the north and south of the curing area. This spray can be used as needed to reduce dust flow to the biofilter. The biofilter will also aid in removing dust from the air stream. However, dust can accumulate in the pore space of the media and the air distribution piping below the biofilter. Therefore, it is desirable to limit the dust loading to the biofilter.

The media layer is the site of the actual treatment of the exhaust stream. Generally speaking, the media can consist of compost, sand, shredded bark, peat, and other materials. Although, the current media used for the biofilter is shredded citrus tree wood. As odorous or contaminated air is passed through the media,

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two basic removal mechanisms occur simultaneously: absorption/adsorption and biooxidation. The pollutants are adsorbed onto the surfaces of the biofilter media particles and/or absorbed into the moist surface layer (water film) surrounding the media particles. Microorganisms, mainly bacteria, actinomycetes and fungi, are attached to the filtering medium. The media's organic material will supplement those nutrients that may or may not be present in the air stream to be treated. These microbes oxidize the organic and inorganic compounds, which make up the odorous gases. When a biofilter system performs properly, carbon dioxide, water, and mineral salts are formed.

Biofilters function best with a minimum of 40 to 45 seconds of retention time. The proposed biofilters will have a retention time close to 60 seconds. However, depending on the load conditions, the retention time could be reduced to 45 seconds. The expected service life of the biofilter media is three to five years. Although, media replacement will be determined based on biofilter performance. The air distribution layer of the plenum will be designed with dividers so that a section of the biofilter can be taken out of service for maintenance.

Emission Calculations

Total throughput (Total throughput, excluding recycled amendment, e.g. tire chips)
= 150,000 wtpy biosolids + 59,625 wtpy amendment (40% of 149,063 wtpy initial amendment/yr)
= 209,625 wet tons/yr

ROG Emissions from previous permits

Assuming 95.5% control efficiency (see A/N 482530).

R1 (482529 biofilter)	= 0 lbs/hr	= 0 lbs/day (NSR)
R2 (482529 biofilter)	= 0 lbs/hr	= 0 lbs/day (NSR)

ROG Emission Factor (Rule 1133.2) = 1.78 lbs/ton of throughput

Assuming 95.5% control efficiency (see A/N 482530).

R1 (482530 co-compost)	= (209,625 TPY) (1.78 lbs/ton) (yr/365 days) (day/24hr)	
= 42.60 lbs/hr	= 1,022.28 lbs/day	= 1022.4 lbs/day (NSR)
R2 (482530 co-compost)	= 42.60 lbs/hr x (1.0-0.995)	
= 1.92 lbs/hr	= 46.08 lbs/day	= 46.72 lbs/day (NSR)

ROG Emissions based on May 2009 Source Test

ROG emission from Source Test: 166.19 lbs/day (not including biofilter cells 52 & 56)

R1 = 3,181.84 lbs/day x 1 day/24hr	= 132.58 lbs/hr	= 3,226.11 lbs/day (NSR)
R2 = 166.19 lbs/day x 1 day/24hr	= 6.92 lbs/hr	= 168.39 lbs/day (NSR)

Calculated ROG emission factor based on May 2009 Source Test (for comparison only)
3,181.84 lbs ROG/day x 365 days/year / 209,625 wet tons/year = 5.54 lbs ROG/wet ton

Maximum monthly emission limit, per Rule 1313(g), is imposed for biofilter permit

R2	= 6.92 lbs/hr x 24 hrs/day x 365 days/yr x yr/12 months
	= 5051.60 lbs/month ~ 5052 lbs/month
	= 60619.20 lbs/year = 30.3 tons/year > 10 tons/year Title V threshold

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Emissions for the biofilter will be determined by the facility emission total subtracted by the co-composting facility (A/N 482530) emissions. The emissions from the facility were originally permitted in association with the basic equipment (co-composting facility). Since the emission limit is applied to the biofilter permit conditions, the applicant had submitted an alteration/modification application for the biofilter (based on AQMD staff recommendation). To account for the emission increase at the facility all emissions that are greater than the co-composting emissions will be applied to the biofilter. Therefore, the facility total will be accurate as well as addressing the emission increase for the biofilter application.

Emission calculations for A/N 505862 biofilter emission determination

$$\begin{aligned}
 R1 &= 3,181.84 \text{ lbs/day (facility)} - 1,022.4 \text{ lbs/day (A/N 482530 co-compost)} \\
 &= 2,159.44 \text{ lbs/day (A/N 505862 biofilter)} \qquad \qquad \qquad = 89.98 \text{ lbs/hr}
 \end{aligned}$$

$$\begin{aligned}
 R2 &= 166.19 \text{ lbs/day (facility)} - 46.72 \text{ lbs/day (A/N 482560 co-compost)} \\
 &= 119.47 \text{ lbs/day (A/N 505862 biofilter)} \qquad \qquad \qquad = 4.98 \text{ lbs/hr}
 \end{aligned}$$

$$119.47 \text{ lbs/day} \times 30 \text{ days/moth} = 3,584.10 \text{ lbs/month}$$

Priority Reserve Credit/ERC Calculation

Total Effluent Emissions	= 166.19 lbs/day
13% of Eff Emissions (POTW)	= 21.60 lbs/day (at 1:1, 22 lbs from Priority Reserve)
87% of Eff Emissions	= 144.59 lbs/day
ERCs need = (144.59 x 1.2)	= 174 lbs/day
ERCs provided at PTC	= 56 lbs/day
Remaining ERCs required	= 118 lbs/day

Ammonia emission

Ammonia emission calculations are replicated from A/Ns 426688 and 482530, the previous co-composting facility applications (Policy decision has been made by the Management, 5/28/2004 e-mail, that ammonia emission shall NOT be considered as precursor to PM₁₀).

Ammonia Emission Factor (Rule 1133.2) = 2.93 lbs/ton of throughput
Assuming 96.9% control efficiency (see A/N 482530).

$$\begin{aligned}
 R1 &= (209,625 \text{ TPY}) (2.93 \text{ lb/Ton}) (\text{yr}/365 \text{ days}) (\text{day}/24 \text{ hr}) \\
 &= 70.11 \text{ lbs/hr} \qquad \qquad \qquad = 1682.64 \text{ lbs/day}
 \end{aligned}$$

$$\begin{aligned}
 R2 &= 70.11 \text{ lbs/hr} \times (1.0 - 0.969) \\
 &= 2.17 \text{ lbs/hr} \qquad \qquad \qquad = 52.08 \text{ lbs/day}
 \end{aligned}$$

Concentration of Ammonia is:

$$\begin{aligned}
 R1 &= 70.11 \text{ lbs/hr} \times 1\text{E}6/1 / 813,200\text{cfm} / 60\text{min/hr} \times 379\text{cf}/\text{lbmole} / 17.03 \text{ lbsH}_2\text{S}/\text{lbmole} \\
 &= 31.98 \text{ ppmv}
 \end{aligned}$$

$$\begin{aligned}
 R2 &= 2.17 \text{ lbs/hr} \times 1\text{E}6/1 / 813,200\text{cfm} / 60\text{min/hr} \times 379\text{cf}/\text{lbmole} / 17.03 \text{ lbsH}_2\text{S}/\text{lbmole} \\
 &= 0.99 \text{ ppmv}
 \end{aligned}$$

Maximum monthly emission limit, per Rule 1313(g), is imposed for biofilter (Condition No. 14)

$$\begin{aligned}
 R2 &= 2.17 \text{ lbs/hr} \times 24 \text{ hrs/day} \times 365 \text{ days/yr} \times \text{yr}/12 \text{ months} \\
 &= 1584.10 \text{ lbs/month} \sim 1584 \text{ lbs/month}
 \end{aligned}$$

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H2S nuisance calculations

CAAQS H2S concentration threshold

Outlet concentration is based on the maximum concentration to be in compliance. 30 ppb is the California Ambient Air Quality Standard at the facility property boundary. This standard was adopted to protect against nuisance odor for the general public. 30ppb is the H2S concentration limit at the facility boundary.

OEHHA H2S concentration threshold

Outlet concentration is based on the maximum concentration to be in compliance. 8ppb is inhalation reference exposure level and odor threshold according to Office of Environmental Health Hazard Assessment (OEHHA). 8ppb is the H2S concentration limit at the nearest receptor.

February 2009 Source Test Report measured H2S concentration at the fenceline with a portable analyzer on the southwest and northeast side of the facility. The southwest and northeast side of the facility had an average of 0.0056 ppm H2S at each location and a maximum concentration of 0.006 ppmv H2S and 0.007 ppm H2S respectively. The measured H2S concentration is less than both CAAQS's 30 ppb and OEHHA's 8 ppb limits.

Toxic Risk Analysis

Permitted flow rate: 813,200 cfm
 Nearest Residential Receptor Distance: 5069 ft. (1545 m)
 Nearest Commercial Receptor Distance: 900 ft. (274 m)
 Nearest Property Boundary: 66.5 ft (20.3 m)
 Stack height: 6 ft. (1.83 m)
 Overall Dimension: 1130 ft x 131 ft (344.5 m x 39.9 m)
 Area: 148,030 sq. ft. (13759 m)

Compound	Inlet Emission (lbs/hr)	MW (lb/mole)	Control Efficiency	Outlet Emission (lbs/hr)
Ammonia (NH3)	70.11	17.03	96.9%	2.17

Tier III analysis was used since the emission source is an area source and therefore requires SCREEN3 modeling. SCREEN3 modeling for an area source assumed 1.0 lbs/hr (1.0 lbs/hr / 148,030 sq.ft. x 453.6g/1lb x 1hr/3600seconds x 10.76 sq.ft./sq.m = 9.16E-6 g/s-m²). Tier III risk analysis was based on the outlet emission listed in the above table. NH3 is not currently considered carcinogens. Maximum HIA and HIC were 0.191 and 0.244 respectively and therefore less than 1. Cancer burden was less than 0.5.

Evaluation

Rule 212: Rule 212 (c)(1)- There is no school within 1000 feet of the facility.
 Rule 212 (c)(2)- Not exceeding the following:

Nitrogen Oxides	40 lbs/day
PM10	30 lbs/day
Sulfur Dioxide	60 lbs/day
Carbon Monoxide	220 lbs/day
Lead	3 lbs/day

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Exceeding the following:

Volatile Organic Compounds 30 lbs/day

Rule 212 (c)(3)(A)(i)- MICR is below 1 in a million.

Public Notice is required per Rule 212(g).

Rule 401: Visible Emissions

No violations are expected; limits are listed under Rule 401(b)(1).

Rule 402: Nuisance

Nuisance is not expected with proper operation, monitoring and maintenance. No complaints have been received in the last five years for this facility. Based on previous operation of the facility for the last two years, compliance is expected.

Rule 404: Particulate Matter – Concentration

No violations are expected; limits are listed under Table 404(a). No emission expected.

Rule 1133.2 Co-Composting Operations

Rule 1133.2 (d)(1)(A)(i)- February 2009 Source Test (pages A-2,3 & 5-8) demonstrate inward face velocity of air through each opening where active co-composting occurs ≥ 100 feet per minute.

Rule 1133.2 (d)(1)(A)(ii)- February 2009 Source Test (pages 5-9 & A-8) indicates the area of all openings in the enclosure through which air can enter the enclosure is 0.1%, which is < 2% of the surface area of the enclosure's four walls, floor and ceiling.

Rule 1133.2 (d)(1)(A)(iii)- The enclosure may be opened for brief time periods, not to exceed a total of 30 minutes per day for access or maintenance. Compliance is expected.

Rule 1133.2 (d)(1)(A)(iv)- February 2009 Source Test (page A-10 & A-11) indicate no measureable increase over background levels of ammonia & ROG outside the enclosure at its openings. The portable ammonia analyzer was operated per manufacturer's instruction and calibrated with certified zero and 10 ppm ammonia standards. The portable hydrocarbon analyzer (FID) was operated per manufacturer's instructions and calibrated with certified zero and 10 ppm methane standards.

Rule 1133.2 (d)(1)(B)- Conduct all curing using an aeration system that operates under negative pressure for no less than 90 percent of its blower(s) operating cycle.

Rule 1133.2 (d)(1)(C)- February & May 2009 Source Tests demonstration control efficiency equal to or greater than 80 percent, by weight, for VOC emissions and 80 percent, by weight, for VOC and ammonia emissions.

Rule 1133.2 (d)(4)- The baseline emission factors were used (1.78 lbs VOC/ton throughput and 2.93 lbs NH3/ton throughput) in previous permit. The VOC emission was revised based on source test results.

Rule 1133.2 (d)(6)- February & May 2009 Source Tests demonstrate required control efficiency and shall demonstrate control efficiency with source tests conducted every two years thereafter.

Compliance is expected.

Part 64, Title 40 of Code of Federal Regulations-Compliance Assurance Monitoring (CAM)

64.2-Applicability: applicable: applies to pollutant-specific emissions unit at a major source that is required to obtain a part 70 or 71 permit if:

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- 1) The unit is subject to an emission limitation or standard for the applicable regulated air pollutant (or a surrogate thereof).
- 2) The unit uses a control device to achieve compliance with any such emission limitation or standard.
- 3) The unit has potential pre-control device emissions of the applicable regulated air pollutant that are equal to or greater than 100% of the amount in tons per year, required for a source to be a major source.

64.3-Monitoring design criteria

- 64.3(a)(1)- Owner or operator shall design the monitoring to obtain data for one or more indicators of emission control performance for the control device and if necessary, processes at the pollutant-specific emission unit. See Section I of Table 1, A/N 505863.
- 64.3(a)(2)-Owner or operator shall establish appropriate ranges or designated conditions for the indicators such that operation within the ranges provides a reasonable assurance of ongoing compliance with emission limitations or standards for the anticipated range of operating conditions. See Section III of Table 1, A/N 505863.
- 64.3(b)(1)- Specifications for obtaining data. See Section IV(A) of Table 1, A/N 505863.
- 64.3(b)(2)- Verification procedures to confirm operational status. See Section IV(B) of Table 1, A/N 505863.
- 64.3(b)(3)- QA/QC practices. See Section IV(C) of Table 1, A/N 505863.
- 64.3(b)(4)- Specifications for the frequency of conducting the monitoring, data collection procedures that will be used and if applicable, the period over data is averaged. See Section IV(D-F) of Table 1, A/N 505863.
- 64.3(b)(iii)-Monitoring shall include some data collection at least once per 24-hr period.
- 64.3(c)- Evaluation Factors. Owner or operator shall take into account factors, such as existing monitoring equipment and procedures.

64.4 Submittal requirements

- 64.4(a)-Meets requirements of 64.3.
 - 64.4(b)- Justification for the proposed elements of monitoring. See A/N 505863.
 - 64.4(c)- Control device operating parameter data from source test (see source test reports from February & May 2009).
- Compliance with this Regulation is expected.

Reg. XIII: Rule1303(a)(2)- The proposed equipment is expected to comply with BACT. Complying with Rule 1133.2 is BACT for this facility.

Rule 1303(b)(1)- Modeling for VOC and SOx is not required (Appendix A). NOx, CO and PM10 are less than the allowable emissions in Table A-1 (Appendix A); no further analysis is required.

Rule 1303(b)(2)- There is an emission increase due to facility modification.

Offsets for VOC are required. Compliance is expected.

Applicant provided 118 lbs/day of VOC under A/N 508175, ERC Certificate No. AQ010853.

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	VOC Emissions (lbs/hr)	VOC Emissions (lbs/day)	VOC Emissions NSR (lbs/day)	Offsets Required (lbs/day)
Pre-modification	1.92	46.08	46.72	56 (ERCs, 1:1.2)
Post-modification	6.92	166.08	166.19*	
13% of Total Emissions	0.90	21.59	21.60	22 (PR, 1:1)
87% of Total Emissions	6.02	144.49	144.59	174 (ERCs, 1:1.2)
ERCs post-modification				118 (ERCs, 1:1.2)

*This value is based on source test emission rates. Shall be inputted as NSR value.

Rule 1401: Toxic Air Contaminants
 Rule 1401(d)(1)(B)- MICR less than 1.0×10^{-6} limit for BACT. Ammonia and hydrogen sulfide are currently not a carcinogen; there is no increase in MICR.
 Rule 1401(d)(1)(C)- Cancer burden is less than 0.5.
 Rule 1401(d)(2) & (d)(3)- Calculated HIC and HIA values are less than 1 respectively.
 Compliance is expected.

Reg. XXX: Alteration of co-composting biofilter is part of an Initial Title V permit, which will be subject to a 45 day EPA review under Rule 3003(j). A public notice is required under Rule 3003(n)(2) and Rule 212(g).
 Rule 3001(c)(2)- VOC: 30 tons/yr > 10 tons/yr, Title V permit required.
 Rule 3002(b)(1) & (b)(2)- Applicant submitted Title V application.
 Rule 3002(c)(2)- Compliance with Rules & Regulations is expected.
 Rule 3003(a)(3)- Facility was determined to be subject to the Title V permit program on July 30, 2009 (date Source Test Report finalized). This application was submitted (hand delivered) January 22, 2010 (within 180 days of subject date).
 Rule 3003(b)(1)- Appropriate forms and fees were submitted.
 Rule 3004(a)(4)(C)- The biofilter is used for air pollution control. Appendix A of the Periodic Monitoring Guidelines for Title V Facilities requires a VOC limit and daily monitoring of exhaust stack or bed for VOC concentration using an OVA. VOC monitoring using an OVA did not provide meaningful information (very low readings) for a biofilter of this size (3.5 acres). Therefore other equivalent daily periodic monitoring methods or procedures will be incorporated (see Evaluation Process of the Periodic Monitoring Guidelines for Title V Facilities).
 Please see permit conditions for daily monitoring of temperature of the influent foul air after the humidification system and of the biofilter media, and daily inspection of the surface irrigation system (for adequate moisture content) and biofilter surface (for adequate retention time).
 Compliance is expected.

Conclusions and Recommendations

The equipment is in compliance with the Rules and Regulations of the AQMD. A Permit to Construct and Initial Title V permit is recommended after EPA review and public notice. For Permit Conditions please see Sample Permit.