SCAQMD Permitting Requirements

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Air Quality Engineer II



Equipment of Interest

- Forced aeration and emission control systems require AQMD permits
- Stationary and portable Equipment Internal Combustion engines (ICE's),
 Grinders, Screening Hoppers, Mixers, Transfer Conveyors require AQMD permits
- Portable Equipment Registration Program (PERP) For Construction/Maintenance and other activities not related to primary business
- Front-end loaders or in-plant vehicles associated with composting operations: no AQMD permit if DMV registered

Permit To Construct

Required prior to construction for;

- Equipment that causes or controls air contaminants
- Upon issuance, valid for one year
- Upon construction completion, notify SCAQMD of intent to use equipment
- Upon notification, permit to construct serves as a temporary permit to operate until final permit to operate is granted (or denied or the application is cancelled)

Application Submittal

- Basic Application(s) Forms
- Additional Information Required :
 - General Process Information
 - Equipment Drawings and Specifications
 - Plot Plan, Flow Diagram
 - Emission Rates, Calculations
 - BACT, Offsets, Health Risk Assessment
- Submit before purchasing equipment and approximately six months in advance of planned start of construction to allow evaluation and processing; Longer time if subject to California Environmental Quality Act (CEQA) or public notice
- Associated Fee Refer to Rule 301 for application processing fees, annual operating fees, and other applicable fees

Permit Applications Forms

- Form 400-A Application Form for Permit or Plan approval
- Form 400-CEQA California Environmental Quality Act (CEQA) Applicability
- Form 400-PS Plot Plan and Stack Information
- Form 400-XPP Expedited Permit Processing Request (optional)
- Form 400-E-GI General Information Summary
- Form 400-CO Change of Operator, if applies

Information Required With Applications

- Plot plan showing equipment location and surrounding area
 residences, business or commercial properties
- Composting process description with flow diagram, equipment and controls
- Feedstock Blend Composition greenwaste with foodwaste, bulk density, and % moisture
- Throughput rate (tons per year and tons/day, excluding recycled material) and operating schedule

Information Required With Applications (continued)

- Aerated Static Piles (ASP) zones Active or Curing phase piles
- Size (L x W x H), cubic yards or tons for each active and curing phase pile
- Composting process duration (number of days) and process parameters monitoring
- Aeration system piping arrangement, blower capacity (cfm), manufacturer, make, model and associated automatic controls and monitoring
- Biofilter size (L. x W x H), type of media, quantity, residence time, humidification and irrigation system

Application Processing Fees - Rule 301

(Effective 7/1/11 – 6/30/12)

- Basic Equipment Rule 301, Table 1B
 - IC Engine 51-500 HP \$2,123.92
 - IC Engine > 500 HP \$3,359.43
 - Screening, Greenwaste \$1,332.65
 - Composting, in-vessel, or Aerated Static Piles (ASP) \$ 3,359.43
- Air Pollution Control (APC) equipment Rule 301, Table 1A
 - Biofilter ≤ 100 cfm \$2,123.92
 - Biofilter ≥ 100 cfm \$3,359.43
- 50% discount for Small Business (up to 10 employees and total gross annual receipts \$500,000 - See Rule 102) OR Multiple Identical Equipment (applications filed at the same time)
- Higher fee for failing to obtain a permit 150% of the regular fee

Emissions

- Estimate uncontrolled emissions using baseline emission factors (EF),
 - Co-Composting Operations (Rule 1133.2)
 - VOC EF = 1.78 lbs VOC/Ton of Throughput
 - Ammonia EF = 2.93 lbs NH3/Ton of Throughput
 - Greenwaste Composting Operations (Rule 1133.3)
 - VOC EF = 4.25 lbs VOC/Ton of Throughput
 - Ammonia EF = 0.46 lbs NH3/Ton of Throughput
- Alternative EF may be approved based on source tests results. Refer to Attachment A of Rules 1133.2 and 1133.3 for information regarding source test protocols, methods, operating conditions, sampling, control efficiency and other requirements

Emissions (continued)

- Estimated controlled emissions (lbs/hr and lbs/day) for VOC and NH₃ emission using at least 80% (by wt) control efficiency
- Odor Comply with Rule 402 Nuisance
- Particulate Matter (PM) Material Receiving,
 Handling and Mixing, Conveying, Product loading
 Operations, etc.

New Source Review: Criteria Pollutants and Air Toxics

- Rule 1303: Best Available Technology (BACT) required for > 1 lb/day of uncontrolled emission of criteria pollutant (VOC, NH3, etc.)
- Rule 1303: Offsets If facility emission > 4 TPY (22 lbs/day), offsets required for that pollutant
- For Offset Exemptions Refer to Rule 1304 (c)
- Comply with Rule 1401

 New Source Review of Toxic Air Contaminants
 (TAC). Provide Health Risk assessment (HRA) analysis and meet limits for
 Maximum Individual Cancer Risk (MICR), Acute Health Index (HIA) and
 Chronic Health Index (HIC), as applicable

Filing Application(s)

- Submit the completed Forms (separate set of forms) for <u>each</u> basic and control equipment, with correct fee, to AQMD lobby or:
- By Mail:

South Coast Air Quality Management District (AQMD) P. O. Box 4944 Diamond Bar, CA 91765-0944

- For Permitting Related Additional Information, please call;
- Gaurang Rawal, AQ Engineer II, (909) 396-2543, grawal@aqmd.gov Amir Dejbakhsh, Senior AQ Engineer, (909) 396 – 2618, adejbakhsh@aqmd.gov Charles Tupac, AQ Engineering Supervisor, (909) 396-2684, ctupac@aqmd.gov

Sample Permits to Construct and Operate

- Handout Includes Sample Permit To Construct And Operate
 - Co-Composting Operations Rule 1133.2
 - Greenwaste Composting Operations Rule 1133.3
- Typical Equipment Description And Permit Conditions may change based on equipment, feedstock type and throughput, process operations and operating parameters

General Rules that Apply to Greenwaste/Compost Facilities

- AQMD Rule 403 Fugitive Dust
 - Prohibits dust visibly crossing a property line
 - Prohibits dust > 20% opacity
 - Prohibits trackout > 25 feet; clean at the end of the day



General Rules that Apply to Greenwaste/Compost Facilities

- Rule 461 Gasoline Transfer and Dispensing
 - Storage Tank and Transfer Phase I
 - Dispensing Phase II
 - CARB Certification
 - Testing, Reporting and Recordkeeping



Where to Access AQMD Rules and Regulations

AQMD's web page

http://www.aqmd.gov/rules/index.html

Summary

 All portable engines over 50 bhp that DO NOT power equipment to move require a CARB registration or an AQMD Permit to Operate

 All equipment units that can emit particulate matter require a CARB registration or an AQMD Permit to Operate

 Inspection requirements: placard, registration certificate, and records