# SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

#### RULE 1150 EXCAVATION OF LANDFILL SITES PERMIT APPLICATION INSTRUCTIONS

#### **GENERAL INFORMATION:**

This document contains instructions for providing information necessary for the AQMD to process permit applications for Rule 1150 Excavation Permits.

One Application for Permit to Construct and Operate Form 400-A (Indicate in Application Type: Compliance Plan) and one Form 400-CEQA (California Environmental Quality Act Applicability) is generally required for each excavation project. If the project consists of treatment or processing of the excavated materials using equipment which requires a permit to construct/operate, a separate application (Form 400-A) should be filed for each equipment. Examples of these equipment include crushers, screens, mixers, conveyers, vapor extraction systems, incinerators, internal combustion engines (>50 HP), etc.

# APPLICABILITY:

Except otherwise exempt by Rule 1150(c), a Rule 1150 Excavation Permit is required for all excavation activities involving a landfill. A landfill by definition of the Rule is a place, location, tract of land, area, or premises in use, or which has been used for the disposal of waste. In addition to excavations at a typical landfill being subject to this Rule, excavations of contaminated soil at any location will be subject to this Rule if the contamination occurred from the disposal of unwanted material at the site.

# **APPLICABLE RULES & REGULATIONS:**

Reg III

Rule 306 Plan Fees, including filing fee per Rule 306(c) and initial payment of evaluation fees per Rule 306(h)(1).

Reg. IV

Rule 402NuisanceRule 403Fugitive Dust

Reg. XI

- Rule 1150 Excavation of Landfill Sites
- Rule 1166 VOC Emissions from Decontamination of Soil

(Copies of Rules & Regulations of AQMD can be obtained through our Public Information Center at (909) 396-3600, or at the AQMD internet home page, www.aqmd.gov.)

# EMISSIONS:

ROG and particulate emissions are expected from the excavation activities. These emissions shall be mitigated using the measures identified in Item 10 under <u>Requirements</u>.

#### **REQUIREMENTS:**

An Excavation Management Plan must be submitted to and approved by the AQMD. The Plan shall include the following information:

- 1. Identification (including company name, address, contact person and phone number) of project owner, excavation contractor, on-site safety coordinator, and the firm or individuals preparing the excavation management plan.
- 2. A description of the background of the project site and the purpose of the excavation.
- 3. A contour map showing the location of the excavation site, the proposed excavation area, and the surrounding area up to 2,500 feet away form the perimeter of the proposed excavation area. The map should identify all land uses in the area and highlight areas of high population such as schools, hospitals, residential areas, restaurants, and shopping centers.
- 4. A list of materials buried or suspected materials buried in the site based on all available records.
- 5. Results of any boring tests done to characterize the disposal site including the identification of any EPA priority pollutants.
- 6. Results of landfill gas analyses or soil vapor phase analyses including the concentrations of methane, sulfur compounds, and any speciated non-methane hydrocarbons such as benzene and vinyl chloride, etc.
- 7. The total amount of material to be excavated and the landfill to which the excavated material will be hauled.
- 8. Scheduled excavation starting and completion dates, and number of working days required for the excavation.
- 9. A detailed description of how the excavation will be conducted including:
  - excavation equipment
  - surface area of excavation workface
  - surface area of refuse or contaminated soil to be exposed to the atmosphere at any one time
  - excavated material handling method
  - vehicles hauling the excavated material
  - a site layout showing the excavation area, vehicle route, equipment/vehicle cleaning area, etc.

- 10. A detailed description of the mitigation measures to be implemented during excavation and transportation to minimize potential emissions. The mitigation measures in general includes, but not be limited to:
  - limited excavation workface
  - minimized soil disturbance/transfer
  - minimized refuse/contaminated soil exposure
  - limited working hours

- use of long duration foams, plastic sheeting, and/or clean dirt to cover refuse/contaminated soil during non-working hours and/or when excessive emissions are detected

- water spraying
- cleaning and covering of the trucks
- good housekeeping
- 11. A detailed description of monitoring to be conducted during the excavation. This includes:

- continuous monitoring for organic vapors with OVA's (FID, PID, etc.) at the work face and property line (or other downwind locations within the property line)

- ambient air sampling for particulates, heavy metals, asbestos, and/or specific organic air toxics

- monitoring for odors at and beyond the property line
- monitoring for wind speed and direction
- 12. A contingency plan for actions to be taken when odors or elevated concentrations (specify the concentrations) of air emissions are detected, or when complaints are received from any public member.
- 13. A provision that the excavation activities will cease immediately when the operator is notified by a District staff that a public nuisance has occurred as required by Rule 1150 (b)(3).

# **RULE 1150 STANDARD CONDITIONS:**

The following is a list of standard conditions that are used for Rule 1150 Permits. Conditions for an actual Permit may be a combination of the following conditions and specific restrictions applicable to the excavation under evaluation. However, all of the following conditions may not be appropriate for every excavation. The conditions for each Permit should be tailored to fit the needs of the individual excavation under review.

- 1. THIS EXCAVATION SHALL BE CONDUCTED IN COMPLIANCE WITH ALL PLANS AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
- 2. THE EXCAVATION SHALL BE COMPLETED BY \_\_\_\_\_, OR WITHIN \_\_\_\_\_, CALENDAR DAYS AFTER THE EXCAVATION COMMENCES, WHICHEVER OCCURS FIRST, UNLESS AN EXTENSION IS OTHERWISE APPROVED IN WRITING BY THE SCAQMD. ANY EXTENSION REQUEST SHALL BE SUBMITTED IN WRITING TO THE SCAQMD AND SHALL INCLUDE THE REASONS THE EXTENSION IS REQUIRED, THE LENGTH OF THE EXTENSION, AND THE STATUS OF THE EXCAVATION TO DATE.
- 3. THE SCAQMD SHALL BE NOTIFIED IN WRITING AT LEAST TWO (2) DAYS PRIOR TO THE EXCAVATION COMMENCES AND WITHIN FIVE (5) DAYS AFTER IT IS COMPLETED.
- 4. THIS EXCAVATION PERMIT IS VALID ONLY FOR THE REMOVAL OF APPROXIMATELY \_\_\_\_\_ CUBIC YARDS OF (EXCAVATED MATERIAL AND REFUSE) (SOIL CONTAMINATED WITH \_\_\_\_\_\_).

- 5. EXCAVATION SHALL NOT BE CONDUCTED BETWEEN THE HOURS OF AND OR ON SATURDAYS, SUNDAYS AND LEGAL HOLIDAYS.
- EXCAVATION SHALL NOT BE CONDUCTED ON DAYS WHEN THE SCAQMD FORECASTS 6. FIRST, SECOND OR THIRD STAGE EPISODES FOR AREA NUMBER , OR WHEN THE SCAQMD REQUIRES COMPANIES IN AREA NUMBER TO IMPLEMENT THEIR FIRST. SECOND OR THIRD STAGE EPISODE PLANS. EPISODE FORECASTS FOR THE FOLLOWING DAY CAN BE OBTAINED BY CALLING (800) 445-3826 OR (800) 242-4666.
- 7. EXCAVATION SHALL NOT BE CONDUCTED WHEN THE WIND SPEED IS GREATER THAN 15 M.P.H. (AVERAGED OVER 15 MINUTES) OR THE WIND SPEED INSTANTANEOUSLY EXCEEDS 25 M.P.H.

or

EXCAVATION SHALL NOT BE CONDUCTED WHEN THE WIND SPEED IS GREATER THAN M.P.H. (AVERAGED OVER 15 CONSECUTIVE MINUTES) AND THE WIND DIRECTION IS FROM THE ARC DEFINED BY \_\_\_\_\_ THROUGH \_\_\_\_\_ TO \_\_\_\_\_.

- DURING EXCAVATION, ALL WORKING AREAS, EXCAVATED MATERIAL AND UNPAVED 8. ROADWAYS SHALL BE WATERED DOWN UNTIL THE SURFACE IS MOIST AND THEN MAINTAINED IN A MOIST CONDITION TO MINIMIZE DUST AND EMISSIONS.
- WHEN LOADING IS COMPLETED AND DURING TRANSPORT, NO MATERIAL SHALL 9. EXTEND ABOVE THE SIDES OR REAR OF THE TRUCK OR TRAILER WHICH WILL HAUL THE EXCAVATED MATERIAL.
- 10. (for inactive landfills)

EXCAVATED REFUSE SHALL NOT BE STOCKPILED ON-SITE. ALL EXCAVATED REFUSE SHALL BE DEPOSITED DIRECTLY INTO THE TRUCKS OR TRAILERS WHICH WILL HAUL IT. THE TRUCK BEDS OR TRAILERS SHALL BE COMPLETELY COVERED WITH AN IMPERMEABLE COVER, WITH SUCH COVERS TIED DOWN. ALL SEAMS SHALL BE SEALED TO PREVENT ANY MATERIALS FROM ESCAPING DURING TRANSPORT.

(for active landfills)

EXCAVATED REFUSE SHALL BE TRANSPORTED TO THE ACTIVE WORKING FACE OF THE LANDFILL WITHIN ONE HOUR OF GENERATION OR AS DEEMED NECESSARY BY THE SCAQMD PERSONNEL.

- 11. THE EXTERIOR OF TRUCKS OR CARS (INCLUDING THE TIRES) SHALL BE CLEANED OFF PRIOR TO LEAVING THE EXCAVATION SITE.
- 12. THE EXCAVATION WORK FACE EXPOSED TO THE ATMOSPHERE SHALL NOT EXCEED (\_\_\_\_\_\_ SQUARE FEET)(\_\_\_\_FT X \_\_\_\_FT).

or

THE EXCAVATION WORK FACE WHICH EXPOSES REFUSE OR OTHER EMISSION GENERATING MATERIALS TO THE ATMOSPHERE SHALL NOT EXCEED \_\_\_\_\_ SQUARE FEET.

- 13. ALL EXCAVATED REFUSE SHALL BE COVERED WITH EITHER A MINIMUM OF 6 INCHES OF CLEAN SOIL, APPROVED FOAM OR HEAVY-DUTY PLASTIC SHEETING WHENEVER THE EXCAVATION IS NOT ACTIVELY IN PROGRESS, AND AT THE END OF EACH WORKING DAY. FOAM BY ITSELF SHALL NOT BE USED AS A NIGHT COVER IF IT IS RAINING OR RAIN IS PREDICTED BY THE NATIONAL WEATHER SERVICE PRIOR TO THE NEXT SCHEDULED DAY OF EXCAVATION.
- 14. VOC CONTAMINATED SOIL (AS DEFINED BY RULE 1166) SHALL NOT BE SPREAD ONSITE OR OFFSITE IF IT RESULTS IN UNCONTROLLED EVAPORATION OF VOC TO THE ATMOSPHERE.
- 15. DURING EXCAVATION, IF A CONSIDERABLE NUMBER OF COMPLAINTS ARE RECEIVED, ALL WORK SHALL CEASE AND THE APPROVED MITIGATION MEASURES SHALL BE IMPLEMENTED IMMEDIATELY. OTHER MITIGATION MEASURES WHICH ARE DEEMED APPROPRIATE BY SCAQMD PERSONNEL TO ABATE A NUISANCE CONDITION SHALL BE IMPLEMENTED UPON REQUEST.
- 16. ALL EXCAVATED MATERIAL SHALL BE TRANSPORTED IN SUCH A MANNER AS TO PREVENT ANY EMISSIONS OF HAZARDOUS MATERIALS.
- 17. ALL HAZARDOUS MATERIALS SHALL BE TRANSPORTED IN CONTAINERS CLEARLY MARKED AS TO THE TYPES OF MATERIAL CONTAINED AND WHAT PROCEDURES SHOULD BE FOLLOWED IN CASE OF ACCIDENTAL SPILLS.
- 18. EXCAVATED LIQUID HAZARDOUS MATERIALS WITH THE POTENTIAL TO CAUSE AIR EMISSIONS SHALL BE ENCAPSULATED OR ENCLOSED IN CONTAINERS WITH SEALED LIDS BEFORE LOADING INTO THE TRANSPORT VEHICLES.
- 19. ALL MATERIALS THAT ARE LISTED AS HAZARDOUS BY A FEDERAL OR STATE AGENCY SHALL BE CONSIDERED "HAZARDOUS MATERIALS" FOR THE PURPOSE OF THIS PERMIT.

- DURING EXCAVATION. MONITORING FOR THE FOLLOWING HAZARDOUS MATERIALS 20. SHALL BE CONDUCTED IN A MANNER APPROVED BY THE SCAQMD. SAMPLES MUST BE ANALYZED AND RESULTS REPORTED TO THE SCAQMD WITHIN DAYS OF TAKING THE SAMPLE. OTHER HAZARDOUS MATERIALS MAY BE ADDED TO THIS LIST IF THEIR PRESENCE BECOMES KNOWN IN THE EXCAVATED MATERIALS:
  - Α. VINYL CHLORIDE Ε. HEAVY METALS-Pb,Cr,Hg F.
  - HYDROGEN CYANIDE В.

BENZENE ETC. G.

- C. DDT ASBESTOS D.
- 21. DURING EXCAVATION, CONTINUOUS MONITORING AND RECORDING OF THE WIND SPEED AND DIRECTION SHALL BE CONDUCTED AT A SITE APPROVED BY THE SCAQMD.
- 22. DURING EXCAVATION, MONITORING FOR ORGANICS AS METHANE USING AN ORGANIC VAPOR ANALYZER (OVA) OR OTHER MONITOR APPROVED BY THE SCAQMD SHALL BE CONDUCTED CONTINUOUSLY AT THE WORKING FACE AND AT THE PROPERTY LINE (OR OTHER APPROVED LOCATIONS) DIRECTLY DOWNWIND OF THE EXCAVATION. THE MAXIMUM SUSTAINED READINGS SHALL BE RECORDED EVERY 15 MINUTES.
- IF THE OVA OR OTHER APPROVED ORGANIC MONITOR SHOWS A SUSTAINED 23. (GREATER THAN 15 SECONDS) READING OF 2,000 PPM OR GREATER AT THE WORKING FACE. THE EXCAVATION SHALL CEASE AND THE APPROVED MITIGATION MEASURES IMPLEMENTED IMMEDIATELY. EXCAVATION SHALL NOT RESUME UNTIL THE READINGS RETURN TO THE BACKGROUND LEVEL.
- IF THE OVA OR OTHER APPROVED ORGANIC MONITOR SHOWS A SUSTAINED 24. (GREATER THAN 15 SECONDS) READING OF 200 PPM OR GREATER DOWNWIND FROM THE SITE AT THE PROPERTY LINE (OR OTHER APPROVED LOCATIONS), THE SHALL CEASE AND EXCAVATION THE APPROVED MITIGATION MEASURES IMPLEMENTED IMMEDIATELY. EXCAVATION SHALL NOT RESUME UNTIL THE READINGS RETURN TO THE BACKGROUND LEVEL.
- DURING EXCAVATION, HIGH VOLUME SAMPLING FOR SUSPENDED PARTICULATES 25. SHALL BE CONDUCTED UPWIND AND DOWNWIND OF THE EXCAVATION SITE AT LOCATIONS APPROVED BY THE SCAQMD. SAMPLES SHALL BE TAKEN DURING THE FOLLOWING PERIODS:

ACTIVE WORK PERIOD - FROM START OF EXCAVATION (time) UNTIL ACTIVITY IS Α. CEASED FOR THE DAY, BUT NOT LESS THAN 5 HOURS OF SAMPLING TIME.

INACTIVE WORK PERIOD - IMMEDIATELY FOLLOWING THE ACTIVE WORK Β. PERIOD AND ENDING AT 6 A.M., AND A 24 HOUR SAMPLE FOR EACH NON-WORKING DAY.

- 26. ALL HIGH VOLUME SAMPLES TAKEN DURING ACTIVE WORK PERIODS SHALL BE ANALYZED FOR TOTAL SUSPENDED PARTICULATES AND (other contaminants). RESULTS OF THESE ANALYSES SHALL BE SUBMITTED TO THE SCAQMD WITHIN 5 DAYS OF SAMPLING. ADDITIONAL SAMPLING AND ANALYSES SHALL BE CONDUCTED UPON REQUEST BY THE SCAQMD.
- 27. IF ANY ANALYTICAL RESULTS SHOW THE UPWIND AND DOWNWIND DIFFERENTIAL CONCENTRATIONS OF CONTAMINANTS EXCEEDING THE FOLLOWING LIMITS, EXCAVATION ACTIVITIES SHALL CEASE UNTIL ADDITIONAL MITIGATION MEASURES ARE SUBMITTED TO AND APPROVED BY THE SCAQMD. THESE ADDITIONAL MITIGATION MEASURES SHALL BE IMPLEMENTED WHEN THE ACTIVITIES RESUME.

<u>CONTAMINANT</u>	<b>CONDITION</b>
PM10	50 ug/m <sup>3</sup>
contaminants	ug/m <sup>3</sup>

- 28. ALL SAMPLES TAKEN BY THE HIGH VOLUME SAMPLERS SHALL BE PROPERLY STORED FOR AT LEAST 10 DAYS AFTER THE EXCAVATION IS COMPLETED.
- 29.. ALL MONITORS SHALL BE CALIBRATED DAILY USING A METHOD APPROVED BY THE SCAQMD.
- 30. IF A DISTINCT ODOR (LEVEL III OR GREATER) RESULTING FROM THE EXCAVATION IS DETECTED AT OR BEYOND THE PROPERTY LINE, THE EXCAVATION SHALL CEASE AND THE APPROVED MITIGATION MEASURES IMPLEMENTED IMMEDIATELY. ODOR LEVELS WILL BE DETERMINED BY SCAQMD PERSONNEL OR ON-SITE SAFETY COORDINATOR IN THE ABSENCE OF SCAQMD PERSONNEL.
- 31. ALL RECORDS OF EXCAVATION WORKING HOURS, ANALYTICAL RESULTS, DAILY AMOUNTS OF MATERIALS EXCAVATED AND HAULED OFFSITE, AND OTHER RECORDS REQUIRED BY THIS PERMIT SHALL BE KEPT ON FILE FOR AT LEAST TWO YEARS AND MADE AVAILABLE TO THE SCAQMD UPON REQUEST.
- 32. MITIGATION MEASURES, OTHER THAN THOSE INDICATED IN THESE CONDITIONS, WHICH ARE DEEMED APPROPRIATE BY SCAQMD PERSONNEL AS NECESSARY TO PROTECT THE COMFORT, REPOSE, HEALTH OR SAFETY OF THE PUBLIC, SHALL BE IMPLEMENTED UPON REQUEST.
- 33. THIS PERMIT OR A COPY OF THIS PERMIT SHALL BE PRESENT AT THE EXCAVATION SITE.

Other governmental agencies may require approval before any excavation begins. It shall be the responsibility of the applicant to obtain that approval. The South Coast Air Quality Management District shall not be responsible or liable for any losses because of measures required or taken pursuant to the requirements of this approved Excavation Management Plan.