

## FACILITY PERMIT TO OPERATE LA CNTY SANITATION DISTRICT-PUENTE HILLS

### SECTION I: PLANS AND SCHEDULES

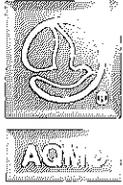
This section lists all plans approved by AQMD for the purposes of meeting the requirements of applicable AQMD rules specified below. The operator shall comply with all conditions specified in the approval of these plans.

Documents pertaining to the plan applications listed below are available for public review at AQMD Headquarters. Any changes to plan applications will require permit modification in accordance with Title V permit revision procedures.

#### List of approved plans:

Application	Rule
343039	1150.1
519253	431.1

NOTE: This section does not list compliance schedules pursuant to the requirements of Regulation XXX - Title V Permits; Rule 3004(a)(10)(C). For equipment subject to a variance, order for abatement, or alternative operating condition granted pursuant to Rule 518.2, equipment specific conditions are added to the equipment in Section D or H of the permit.



**TARE**  
**South Coast  
Air Quality Management District**

21865 Copley Drive, Diamond Bar, CA 91765-4178  
(909) 396-2000 • www.aqmd.gov

**DRAFT**

August 17, 2011

Mr. Frank R. Caponi  
Supervising Engineer  
Los Angeles County Sanitation Districts  
P.O. Box 4998, Whittier, CA 90607

RE: Rule 431.1 Optional Facility Compliance Plan for the Puente Hills Landfill  
Facility ID: 25070 Application No. 519253

Dear Mr. Caponi,

LACSD submitted an Optional Facility Compliance Plan (OFCP) to demonstrate compliance with South Coast Air Quality Management District (SCAQMD) Rule 431.1 at the Puente Hill Landfill (PHLF). Proposed plan documents were evaluated and the OFCP has been approved by SCAQMD provided the following conditions are met:

1. Operation of this equipment shall be conducted with all data and specification submitted with the application under which this plan is issued unless otherwise noted below.
2. This facility shall comply with all the applicable requirements of Rule 431.1, including the requirement for continuous fuel gas monitoring systems.
3. Sulfur content of the landfill gas as H<sub>2</sub>S shall be measured continuously (at least one reading every 15 minutes) at following two locations:
  - a. Sampling Location 1: Upstream of the ICE's in Western Blower Station (WBS) and upstream of the tie-in point of overflow line from WBS to PERG.
  - b. Sampling Location 2: Upstream of (Puente Hills Energy Recovery Facility) PERG and upstream of the tie-in point of overflow line from WBS to PERG before the gas enters the Gas turbine, flares or any of the two boilers(at the PHLF flare station) in this facility.
4. Landfill gas flow shall be measured continuously (at least one reading every 15 minutes) as following at two locations:
  - a. Sampling Location 1: Upstream of the ICE's in WBS and upstream of the tie-in point of overflow line from WBS to PERG.
  - b. Sampling Location 2: Upstream of PERG and upstream of the tie-in point of overflow line from WBS to PERG before the gas enters the Gas turbine, flares or any of the two boilers (at the PHLF flare station) in this facility.
5. Applicant shall configure the instrumentation and control system to display and record the instantaneous calculated average sulfur reading as H<sub>2</sub>S PPMV (one reading at least every 15 minutes) number by using the instantaneous sulfur readings from PERG-FS (flow/sulfur

measurement station) and WBS sulfur analyzers and the landfill flow readings for both PERG-FS (Flow/Sulfur measurement station ) and WBS. Instantaneous sulfur as H<sub>2</sub>S (site average value) shall be calculated using the following equation:

$$\text{Site-Wide Average Sulfur (ppm)} = \frac{C_{\text{PERG-SF}} * Q_{\text{PERG-SF}} + C_{\text{WBS}} * Q_{\text{WBS}}}{Q_{\text{PERG-SF}} + Q_{\text{WBS}}}$$

where:

- C<sub>PERG-SF</sub> - Sulfur concentration at PERG-FS (ppm)
- C<sub>WBS</sub> - Sulfur concentration at WBS (ppm)
- Q<sub>PERG-SF</sub> - Landfill gas flow meter (FT-100) reading at PERG-SF (scfm)
- Q<sub>WBS</sub> - Landfill gas flow meter reading (FI-2401) at WBS (scfm)

6. At the end of each day (24 hours, 12 AM to 12 AM), daily average sulfur reading as H<sub>2</sub>S value shall be calculated from all valid Instantaneous H<sub>2</sub>S readings (obtained as per condition no. 5 above, one reading at least every 15 minutes) stored in the system for whole day.
7. Applicant shall keep records of Daily site average Sulfur reading as H<sub>2</sub>S PPMV value, continuous flow and Sulfur readings collected as per conditions no. 3 and 4 for both PERG and WBS and any other data measured by the analysis in a manner approved by the District for at least five years and made available to District Personnel upon request.
8. If any of the sulfur analyzer or the flow meter mentioned in conditions no. 3 and 4 above is out of service, sulfur or flow daily averages shall be calculated using all valid sulfur or flow data collected for the day, or substitute missing sulfur or flow data with the average of the previous valid 30-day daily averages whichever is greater. Applicant shall keep records of the average H<sub>2</sub>S or landfill gas flow values calculated using the following missing data procedures.  
  
If the sulfur analyzer is offline for more than 1 day (no valid data from 12 AM to 12 AM), landfill gas shall be analyzed for Total Sulfur using colorimetric tubes at least once a day and the results shall be used to calculate the daily average. If the flow meter is offline for more than 1 day, substitute the missing flow data with the average of the previous valid 30-day daily averages.
9. Landfill gas flow meters for PERG-FS and WBS shall be calibrated at least once every 18 months as per manufacturer specifications.
10. Both of the sulfur analyzers shall be maintained as per the QA/QC plans (SCAQMD approved QA/QC plan for WBS Sulfur analyzer and QAP plan submitted with the application for PERG-FS analyzer). Records of procedures followed as per QAP plan and records of preventive maintenance completed shall be kept for last two years.
11. Once every year and in same quarter of the year Total Sulfur in both landfill gas headers (PERG-FS and WBS) shall be measured using SCAQMD Method 307-91 and the results shall be compared with the instantaneous reading (time when sample for Method 307-91 was collected) from corresponding analyzers. If the analyzers readings are not within 20 percent of SCAQMD Method 307-91 results, analyzers shall be recalibrated and/or repaired, as necessary. After the calibration/repair is completed on the analyzers, Sulfur readings from the analyzer shall be compared with a fresh sample of landfill gas analyzed by SCAQMD method 307-91.

If you have any questions concerning your OFCP or if you determine any administrative error, please contact Atul Kandhari (909) 396-2477, within 30 days of the receipt of your plan.

Sincerely,

Jay Chen, P.E.  
Senior AQ Engineering Manager  
Refinery and Waste Management Permitting

JC: CDT: AK  
cc: Compliance (David Jones)