## San Joaquin Valley Air Pollution Control District

PERMIT UNIT: C-3115-2-9

EXPIRATION DATE: 07/31/2006

## QUIPMENT DESCRIPTION:

2.7 MILLION CUBIC YARD CAPACITY (361 ACRES) MUNICIPAL SOLID WASTE LANDFILL WITH A LANDFILL GAS COLLECTION AND CONTROL SYSTEM, INCLUDING 66 COLLECTION WELLS, PIPING, VACUUM PUMP/BLOWER, CONDENSATE TRAPS AND A 3,150 GALLON CONDENSATE STORAGE TANK, CONTROLLED BY AN ENCLOSED BROUND FLARE USING AN LPG PILOT

## PERMIT UNIT REQUIREMENTS

- Disturbances of soil related to any construction, demolition, excavation, extraction, or water mining activities shall comply with the requirements for fugitive dust control in District Rule 8021. This requirement does not apply to the actual operation of the landfill. [District Rule 8021] Federally Enforceable Through Title V Permit
- Outdoor handling and storage of any bulk material which emits dust shall comply with the requirements of District Rule 8031. [District Rule 8031] Federally Enforceable Through Title V Permit
- All operational landfills shall comply with the requirements of District Rule 8041. This condition also applies to closure activities and closed landfill sites when activities are conducted which disturb surface soils covering an area greater than one (1) acre. [District Rule 8041] Federally Enforceable Through Title V Permit
- Any paved road over 3 miles in length, and any unpaved roads over half a mile in length, constructed after December 10, 1993 shall use the design criteria and dust control measures of, and comply with the administrative requirements of, District Rule 8061. [District Rule 8061] Federally Enforceable Through Title V Permit
- The owner or operator shall insure that all areas of one (1) acre or greater, which are used for vehicle and/or equipment parking, fueling and service, shipping, receiving and transfer, comply with the requirements of District Rule 8071. All areas used for storage of construction vehicles, equipment, and material shall comply with the provision of District Rule 8071. [District Rules 8041, 5.4 and 8071] Federally Enforceable Through Title V Permit
- All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201 and 40 CFR Part 60.752(b)(2)(iii)(B)(2) and (b)(2)(iv)] Federally Enforceable Through Title V Permit
- All equipment shall be constructed, calibrated, maintained and operated according to the specifications and plans contained in the permit application except as otherwise specified herein. [District Rule 2201, 40 CFR 60.755(d) and 756(b)] Federally Enforceable Through Title V Permit
- No air contaminant shall be discharged from the flare into the atmosphere for a period or periods aggregating more than five minutes in any two hours which is as dark as, or darker than, Ringelmann 1/4 or 5% opacity. [40 CFR 60.18(c)(1)] Federally Enforceable Through Title V Permit
- Particulate matter emissions from any combustion source shall not exceed 0.1 grains/dscf (calculated to 12% carbon dioxide). [District Rule 4301] Federally Enforceable Through Title V Permit
- 0. The landfill gas consumption rate for the enclosed flare shall not exceed 51 MMBtu per hour. [District Rule 2201] Federally Enforceable Through Title V Permit
  - The facility shall install and maintain in proper operating condition a gas flow meter with a continuous recording device which measures the amount of landfill gas consumed per day. [District Rule 2201 and 40 CFR Part 60.754(b)(1)] Federally Enforceable Through Title V Permit

- Landfill gas condensate can be injected into the enclosed flare. The landfill gas condensate injection flow rate shall be corded daily when the injector is operating, and shall not exceed 1 gallons per minute. [District Rule 2201] Federally Enforceable Through Title V Permit
- The enclosed flare shall be equipped with automatic dampers, an automatic shutdown device, and a flame arrester. [District Rule 2201] Federally Enforceable Through Title V Permit
- The enclosed flare shall be equipped with a temperature indicator and recorder which measures and records the operating temperature. The temperature indicator and recorder must operate continuously. [40 CFR 60.756(b)(1)] Federally Enforceable Through Title V Permit
- . The enclosed flare control device shall be operated within the parameter ranges established during the initial or most recent performance test. [40 CFR 60.752(b)(iii)(B)(2)] Federally Enforceable Through Title V Permit
- The enclosed flare average combustion temperature, for all 3-hour periods of operation, shall not drop more than 28 °C below the average combustion temperature, during the most recent performance test at which compliance with 60.752(b)(2)(iii)(B)(2) was determined. [40 CFR 60.758(c)(1)(i)] Federally Enforceable Through Title V Permit
- 7. In the event the collection or control system is inoperable, the gas mover system shall be shut down and all valves in the collection and control system contributing to venting of the gas to the atmosphere shall be closed within 1 hour.

  [40 CFR 60.753(e)] Federally Enforceable Through Title V Permit
- 3. VOC emissions from this landfill operation controlled with an enclosed flare shall not exceed 15.5 lb/day. [District Rule 2201]
- 9. The enclosed flare shall either reduce VOC by 98 weight percent or reduce the outlet VOC concentration to less than 20 parts per million by volume, dry basis as hexane at 3 percent oxygen. [District Rule 2201 and 40 CFR 60.752(b)(2)(iii)((B)] Federally Enforceable Through Title V Permit
- Emissions from the enclosed flare shall not exceed any of the following limits: 0.05 lb-NOx/MMBtu, 0.2 lb-UO/MMBtu, or 0.034 lb-PM10/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
- 1. Emissions from the enclosed flare shall not exceed 0.0178 lb-SOx/MMBtu (46.9 ppmv of H2S in fuel). [District Rule 2201] Federally Enforceable Through Title V Permit
- Landfill design capacity shall not exceed 2,200 ton/day average, 3,600 ton/day peak or 1,300,000 ton/yr of refuge received, and 4.6 million cubic meters, or 361 acres, of solid waste. [District Rule 2201 and 40 CFR 60.575(a)(2)(ii)] Federally Enforceable Through Title V Permit
- 3. The enclosed flare shall be equipped with an LPG fired pilot. [40 CFR 60.18(c)(2) and (f)(2)] Federally Enforceable Through Title V Permit
- 4. Source sampling to determine the compliance status of an emissions source shall be witnessed or authorized by District personnel. [District Rule 1081] Federally Enforceable Through Title V Permit
- 5. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. The results of each source test shall be submitted to the District within 60 days after testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 6. VOC destruction efficiency testing shall be conducted annually. [District Rule 1070] Federally Enforceable Through Title V Permit
- 7. The enclosed flare source testing to demonstrate compliance with the NOx and CO limits of this permit shall be conducted annually. [District Rule 2201] Federally Enforceable Through Title V Permit
- 8. Source testing for NOx shall be conducted using CARB Test Method CARB Method 7E or CARB Method 100. [District Rule 1081] Federally Enforceable Through Title V Permit
  - Tource testing for CO shall be conducted using EPA Test Method 10 or 10B, CARB Methods 1-5 with 10 or CARB Test Method 100. [District Rule 1081] Federally Enforceable Through Title V Permit

- Gas combusted in the flare shall be tested for H2S content on a quarterly basis using draeger tubes. If compliance is nown for two consecutive quarters, the testing frequency may be changed to annual. Quarterly testing shall resume if any annual test shows noncompliance. [District Rule 1081] Federally Enforceable Through Title V Permit
- VOC emissions shall be measured by USEPA Test Method 18, 25, or 25C. [District Rule 1081 and 40 CFR 60.754(d)] Federally Enforceable Through Title V Permit
- Measure the gauge pressure in the gas collection header at each individual well on a monthly basis as provided in 60.755(a)(3). If a positive pressure exists, action shall be initiated to correct the exceedance within 5 calendar days. [40 CFR 60.755(a)(3) and 60.756(a)(1)] Federally Enforceable Through Title V Permit
- The owner or operator shall monitor each well monthly for temperature and nitrogen or oxygen as provided in 60.753(c). If a well exceeds one of these operating parameters, action shall be initiated to correct the exceedance within 5 calendar days. [40 CFR 60.753(c), 60.755(a)(5) and 60.756(a)(2) and (a)(3)] Federally Enforceable Through Title V Permit
- 1. The gas collection system shall be monitored monthly and corrective action taken to insure it is operated in a manner which maximizes the amount of landfill gas extracted while preventing overdraw that can cause fires or damage the gas collection system. [40 CFR 60.753(c) and 60.755(a)(3), (a)(5)] Federally Enforceable Through Title V Permit
- 5. The operator shall record quarterly the surface emission tests including test time, weather conditions, precipitation records, areas sampled, calibration records, and test results. Corrective action shall be taken if required in accordance to 40 CFR 60.755(c). [District Rule 2201, 40 CFR 60.755(c) and 40 CFR 60.756(f)] Federally Enforceable Through Title V Permit
- 5. Permittee shall maintain continuous records of flare combustion temperature, and volumetric gas flow rate. Records of the net heating value of landfill gas being combusted shall also be tested and recorded. [District Rule 2201 and 40 CFR 60.756(b), 60.758(b)(2)(i), (c)(2) and (b)(2)(i)] Federally Enforceable Through Title V Permit
- 'ermittee shall keep, for the life of the collection system, an up-to-date, readily accessible plot map showing each existing and planned collector in the system and providing a unique identification location label for each collector. [40 CFR 60.758(d) and 60.34(c)] Federally Enforceable Through Title V Permit
- The operator shall record emission control device source tests including VOC destruction/treatment efficiency and emissions of CO, NOx, PM10, VOC, and SOx, in pounds per MMBtu heat input. [District Rule 1081] Federally Enforceable Through Title V Permit
- 9. The operator shall monitor and record the oxygen content in the flare main header, maintenance-related and other control system downtimes and individual well shutdowns. Exceedances defined under 60.758(c) shall be reported annually. [District Rule 4102 and 40 CFR 60.757(f), (g)(4) and 60.758(c) and (e)] Federally Enforceable Through Title V Permit
- 0. All records shall be retained for a minimum of 5 years, and shall be made available for District inspection upon request. [District Rule 1070 and 40 CFR 60.758(a) and (b)] Federally Enforceable Through Title V Permit