MONTEREY BAY UNIFIED AIR POLLUTION CONTROL DISTRICT
TITLE V OPERATING PERMIT TV 49-03

24580 Silver Cloud Court
Monterey, CA 93940
Telephone: (831) 647-9411

ISSUED TO:

City of Santa Cruz Public Works Department
dba City of Santa Cruz Resource Recovery Facility
809 Center Street, Room 201
Santa Cruz, CA 95060

PLANT SITE LOCATION:

605 Dimeo Lane
Santa Cruz, California

ISSUED BY:

Richard Stedman, Air Pollution Control Officer

SEP 20 2010
Effective Date

Nature of Business: Municipal Solid Waste Landfill

SIC Code: 4953 - Refuse Systems

RESPONSIBLE OFFICIAL:

Name: Mr. Mark R. Dettle
Title: Director of Public Works
Phone: (831) 420-5160

ALTERNATIVE RESPONSIBLE OFFICIAL:

Name: Ms. Chris Chang
Title: Associate Civil Engineer
Phone: (831) 420-5427

FACILITY CONTACT PERSON:

Name: Ms. Chris Chang
Title: Associate Civil Engineer
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FACILITY DESCRIPTION

The City of Santa Cruz Resource Recovery Facility is a Municipal Solid Waste (MSW) Landfill permitted by CalRecycle to receive a maximum of 535 tons per day of MSW. This landfill has been accepting waste since the mid-1920's.

The landfill is subject to the federal New Source Performance Standard (NSPS) for Municipal Solid Waste Landfills based upon the design capacity of the landfill being greater than 2.5 million cubic meters. Landfills subject to the MSW Landfill NSPS are also subject to Title V permitting requirements.

Located at the landfill and operated by a third-party is a landfill gas collection, treatment, and destruction system which is not subject to the NSPS requirements as the facilities' non-methane organic compounds (NMOC) emission rate is below the 50 Mg per year threshold. The collected landfill gas is treated and combusted in an internal combustion engine which drives a generator to produce electricity. The electricity generated is sold to the local utility company.

EQUIPMENT DESCRIPTION

MUNICIPAL SOLID WASTE LANDFILL CONSISTING OF:

1. 100 Acre Landfill Site Of Which 67 Acres Are Permitted For Waste Disposal.

2. NSPS Exempt Landfill Gas Collection System, Vertical Wells, Lateral Collector Pipes, And Header Pipes To Collect And Route Landfill Gas To The Landfill Gas Treatment System.

3. NSPS Exempt Landfill Gas Treatment System, System To Filter, De-water, And Compress Landfill Gas. Treated Gas Routed To Gas Destruction System

4. NSPS Exempt Treated Gas Destruction System, Caterpillar Model 3520 Internal Combustion Engine, Rated 2,233 BHP At 1,200 RPM.

5. Gas Extraction Trench And Treatment Facility.

6. Ancillary Equipment:

   500 Gallon Aboveground Gasoline Storage Tank With Phase I And Phase II Vapor Recovery.

   Emergency Generator Set, 743 BHp, 500 Kw Output.

   Emergency Generator Set, 166 BHp, 100 Kw Output.

FEDERALLY ENFORCEABLE EMISSION LIMITS AND STANDARDS

1. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three (3) minutes in any one (1) hour which is as dark or darker than Ringelmann 1 or equivalent 20% opacity. [District Rule 400]

2. Sulfur compounds calculated as sulfur dioxide (SO_2) shall not exceed 0.2 percent by volume in the exhaust stream of the diesel engines. [District Rule 404]

3. The sulfur content on any No. 2 fuel oil used as fuel in the diesel engines shall not exceed 0.5 percent by weight. [District Rule 412]

4. The City of Santa Cruz's gasoline storage tank shall be equipped with a permanent submerged fill pipe and a Phase I vapor recovery system which has been certified by the California Air Resources Board. [District Rule 418]

5. The City of Santa Cruz shall operate a Phase II vapor recovery system on the Gasoline Storage Tank which has been certified by the California Air Resources Board. [District Rule 1002]

6. The City of Santa Cruz shall limit emissions of volatile organic compounds by the use of architectural coatings which comply with the requirements of District Rule 426. [District Rule 426]

7. No later than 1 year after the first report required by Condition 22 in which the Non-Methane Organic Compound (NMOC) emission rate equals or exceeds 50 megagrams per year, the City of Santa Cruz shall submit to the District a collection and control system design plan prepared by a professional engineer. This plan shall meet the design requirements specified in §60.752(b)(2)(ii) [restated in Condition 8] and must include the information required by §60.752(b)(2)(i). [District Rule 437 Adopted 10/16/96]

8. No later than 30 months after the first report required by Condition 22 in which the NMOC emission rate equals or exceeds 50 megagrams per year, the City of Santa Cruz shall cause to be operated a landfill gas collection system that effectively captures the gas generated such that [District Rule 437 Adopted 10/16/96]:

   A) the system is designed to handle the maximum expected gas flow rate from the entire area of the landfill that warrants control over the intended use period of the gas collection system; and

   B) landfill gas is collected from each area, cell or group of cells in which non-asbestos degradable solid waste has been placed for a period of 5 years or more for active areas or 2 years or more for closed areas; and

   C) offsite migration of subsurface gas is minimized; and

D) each wellhead is under negative pressure except under the following conditions:

i) a fire or increased well temperature. The City of Santa Cruz shall record instances when positive pressure occurs in efforts to avoid a fire. These records shall be submitted with the report required by Condition 30; or

ii) use of a geomembrane or synthetic cover. Acceptable pressure limits shall be submitted by the City of Santa Cruz in their design plan; or

iii) a decommissioned well.

E) the collected landfill gas temperature is less than 55°C at each well with a nitrogen level less than or equal to 20 percent or an oxygen level less than or equal to 5 percent; and

F) the surface methane concentration over the landfill shall not exceed 500 ppm above background.

9. The City of Santa Cruz shall comply with the requirements of 40 CFR Part 68 - Risk Management Plans. The City of Santa Cruz shall submit a Risk Management Plan (RMP) if the facility becomes subject to the requirements of Part 68. [40 CFR Part 68]

10. The City of Santa Cruz shall comply with the requirements of 40 CFR Part 82 - Protection of Stratospheric Ozone. [40 CFR Part 82]

TESTING REQUIREMENTS AND PROCEDURES

11. No testing is specified for the generic (Rule 400) opacity requirement from Condition 1. The engine is assumed to be in compliance with the opacity requirement due to its being fired on gaseous fuel. If testing is conducted for Condition 1, the City of Santa Cruz should conduct testing in accordance with the methodology contained in EPA Method 9 and the averaging/aggregating period contained in District Rule 400. [District Rule 218]

12. No testing is specified for the generic (Rule 412) sulfur concentration limit in Condition 2. The engine is assumed to be in compliance with the sulfur concentration limit based upon the calculations contained in the engineering evaluation. If testing is conducted for Condition 2, the City of Santa Cruz should conduct testing in accordance with the methodology contained in EPA Method 20. [District Rule 218]

13. Testing of all diesel fuel oil delivered to the facility shall be conducted prior to or upon receipt of the diesel fuel oil, or in lieu of testing a manufactures certification of the sulfur content of the diesel fuel oil shall be supplied at the time of delivery. The City of Santa Cruz shall conduct testing in accordance with ASTM D1552-83 or ASTM D1552-83 or equivalent method or shall receive certification as to the sulfur content of the fuel oil from the manufacturer to verify compliance with Condition 3. The City of Santa Cruz shall furnish the District the certification or written results of the test prior to firing the fuel oil, but in no case later than thirty (30) days of completion. [District Rule 218]

RECORD KEEPING REQUIREMENTS

14. As applicable the City of Santa Cruz shall maintain the following general records of required monitoring information [District Rule 218]:

    A) the date and time of sampling or measurements;

    B) the date(s) analyses were performed;

    C) the company or entity that performed the analyses;

    D) the analytical techniques or methods used;

    E) the results of such analyses;

    F) the operating conditions existing at the time of sampling or measurement; and

    G) the records of quality assurance for continuous monitoring systems (including, but not limited to quality control activities, audits, and calibration drift checks) and source testing methods.

15. The City of Santa Cruz shall maintain records on the occurrence and duration of any start-up, shutdown, or malfunction in the operation of the equipment under this permit. [District Rule 218]

16. The City of Santa Cruz shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of the monitoring, sample collection, measurement, report, and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. [District Rule 218]

REPORTING REQUIREMENTS

17. The City of Santa Cruz shall report all breakdowns which result in the inability to comply with any emission standard or requirement contained on this permit to the Air Pollution Control Officer (APCO) within 1 hour of the occurrence; this one hour period may be extended up to six hours for good cause by the APCO. The APCO may elect to take no enforcement action if the City of Santa Cruz demonstrates to the APCO's satisfaction that a breakdown condition exists.

    The estimated time for repair of the breakdown shall be supplied to the APCO within 24 hours of the occurrence and a written report shall be supplied to the APCO within 5 days after the occurrence has been corrected. This report shall include at a minimum [District Rule 214]:

    a) a statement that the condition or failure has been corrected and the date of correction; and

    b) a description of the reasons for the occurrence; and

c) a description of the corrective measures undertaken and/or to be undertaken to avoid such an occurrence in the future; and

d) an estimate of the emissions caused by the condition or failure.

18. The City of Santa Cruz shall report any violation of any requirement contained in this permit to the District within 96 hours after such occurrence. The violation report shall include the time intervals, date and magnitude of excess emissions; nature and cause of the excess (if known), corrective actions and preventive measures adopted. [District Rule 218]

19. For protection from enforcement action based upon an emergency, as defined in District Rule 218, the responsible official for the City of Santa Cruz shall submit to the District relevant evidence which demonstrates [District Rule 218]:

A) an emergency occurred; and

B) that the City of Santa Cruz can identify the cause(s) of the emergency; and

C) that the facility was being properly operated at the time of the emergency; and

D) that all steps were taken to minimize the emissions resulting from the emergency; and

E) within two working days of the emergency event, the City of Santa Cruz provided the District with a description of the emergency and any mitigating or corrective actions taken.

20. The City of Santa Cruz shall submit semiannual monitoring reports to the District, in a District approved format, no later than August 15 for the period of January 1 through June 30 and no later than February 15 for the period of July 1 through December 31. [District Rule 218]

These monitoring reports shall include at a minimum:

A) the time intervals, date and magnitude of excess emissions, nature and cause of the excess (if known), corrective actions and preventative measures adopted; and

B) the averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard for the pollutant in question; and

C) all information pertaining to any monitoring as required by the permit; and

D) a negative declaration specifying when no excess emissions occurred.

21. The City of Santa Cruz shall submit an annual compliance certification report to the District and U.S. EPA, in a District approved format, no later than February 15 for the period of January 1 through December 31 of the preceding year. [District Rule 218]

This report shall include a written statement from the responsible official which certifies the truth, accuracy, and completeness of the report and shall include at a minimum:

A) identification of each term or condition of the permit that is the basis of the certification; and

B) the compliance status; and

C) whether compliance was continuous or intermittent; and

D) the method(s) used for determining the compliance status of the source, currently and over the reporting period.

22. Every five years, the City of Santa Cruz shall submit a NMOC emission rate report to the District as specified in §60.757(b)(1)(ii) until such time as the calculated NMOC emission rate is equal to or greater than 50 megagrams per year, or the landfill is closed. [District Rule 437 Adopted 10/16/98]

23. The City of Santa Cruz shall submit a closure report to the District within 30 days of waste acceptance cessation. If a closure report has been submitted to the District, no additional wastes may be placed into the landfill without filing a notification of modification as described in 40 CFR §60.7(a)(4). [District Rule 437 Adopted 10/16/96]

GENERAL CONDITIONS

24. The City of Santa Cruz shall comply with all conditions of this federal operating permit. Any noncompliance with a permit condition constitutes a violation of the Federal Clean Air Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. [District Rule 218]

25. In an enforcement action, the fact that the City of Santa Cruz would have to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit is not a defense. [District Rule 218]

26. This permit may be modified, revoked, reopened and reissued, or terminated for cause as determined by the District. The filing of a request by the City of Santa Cruz for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [District Rule 218]

27. This permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. [District Rule 218]

28. The City of Santa Cruz shall furnish to the District, within a reasonable time, any information that the District may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. Upon request, the City of Santa Cruz shall also furnish to the District copies of records required to be retained by this permit. [District Rule 218]

29. For applicable requirements that will become effective during the permit term, the City of Santa Cruz shall meet such requirements on a timely basis unless a more detailed schedule is expressly required by the applicable requirement. [District Rule 218]

30. Any document submitted to the District pursuant to this permit shall contain certification by the responsible or the alternative responsible official of truth, accuracy and completeness. All certifications shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. The City of Santa Cruz shall promptly, upon discovery, report to the District a material error or omission in these records, reports, plans, or other documents. [District Rule 218]

31. Upon any administrative or judicial challenge, all the emission limits, specific and general conditions, monitoring, record keeping, and reporting requirements of this permit, except those being challenged, remain valid and must be complied with. [District Rule 218]

32. For this federal operating permit to remain valid through the permit term of five years from the date of issuance, the City of Santa Cruz shall pay an annual emission fee based upon the requirements of District Rule 308. [District Rule 218]

33. The City of Santa Cruz shall have available at the facility at all times a copy of this federal operating permit. [District Rule 218]

34. Upon presentation of credentials, the City of Santa Cruz shall allow the District, the ARB, the EPA, or an authorized representative, to perform the following [District Rule 218]:

    A) enter upon the premises where the federal operating permit source is located or in which any records are required to be kept under the terms and conditions of this federal operating permit;

    B) to have access to and copy any records required to be kept under the terms and conditions of this federal operating permit;

    C) to inspect any equipment, operation, or process described or required in this federal operating permit; and,

    D) to sample emissions from the source.

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