



PERMIT
Under the Environmental Conservation Law (ECL)

IDENTIFICATION INFORMATION

Permit Type: Air Title V Facility
Permit ID: 9-1462-00001/00013
Effective Date: 06/25/2009 Expiration Date: 06/24/2014

Permit Issued To: WASTE MANAGEMENT OF NEW YORK LLC
1001 FANNIN STE 4000
HOUSTON, TX 77002

Contact: THOMAS LEWIS
WASTE MANAGMENT OF NY LLC - CHAFFEE
10860 OLEAN RD
CHAFFEE, NY 14030-9799
(716) 496-5192

Facility: CHAFFEE LANDFILL
10860 OLEAN RD
CHAFFEE, NY 14030-9799

Contact: THOMAS LEWIS
WASTE MANAGMENT OF NY LLC - CHAFFEE
10860 OLEAN RD
CHAFFEE, NY 14030-9799
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Description:

This permit is for the renewal and modification of the Title V Renewal Permit for Chaffee Landfill. The renewal incorporates the Western Expansion Landfill (WEX), a landfill designed to hold approximately 8.3 million cubic yards of non-hazardous waste. This renewal also incorporates the operation of a renewable energy facility (REF) that presently contains six internal combustion reciprocating engines (ENG01, ENG02, ENG03, ENG04, ENG05 & ENG06) rated at 1148 Bhp per engine. The modification will add two more engines (ENG07 & ENG08) to the REF. Gas generated by the existing landfill and WEX will be directed to the REF and/or to a control device.

Chaffee Landfill, Inc. was issued a NYSDEC 6 NYCRR Part 360 Operation Permit (No. 2629) for a solid waste management facility, in November 1981. The permit included provisions for construction of a leachate collection system in and around the 36 acres "original fill area". The area within the leachate collection system, known as the "original fill area," covered approximately 36 acres, or 70 percent of the permitted area. The original 36 acres of developed landfill are unlined (waste was placed directly on native clay/glacial till). Subsequent renewals and modifications to that permit increased the area permitted for landfill development from the original 36 acres to 50.93 acres. The additional 15 acres of landfill area was built with a 2 foot clay liner and a leachate collection system. In addition to daily cover, temporary cover (12 inches of compacted soil) is applied to areas that do not receive waste within 30 days. Interim final cover (24 inches of compacted soil) is applied after the waste reaches final grade to allow for settlement, followed by the installation of final cover (including a geomembrane layer). Currently, approximately 28 acres of the landfill have received a final cap. The remaining



calculate the 12-month rolling total of NO_x emissions from the engines. The emissions factor is calculated as follows: lb/hr NO_x emission rate measured during stack test divided by the kwh output from the engine during the test equals the lb/kwh emission factor. NO_x emissions are calculated as kwh multiplied by the lb/kwh emissions factor equals lb/month (then converted to tons/month).

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 35 tons per year

Monitoring Frequency: MONTHLY

Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2009.

Subsequent reports are due every 6 calendar month(s).

Condition 89: Compliance Certification
Effective between the dates of 06/25/2009 and 06/24/2014

Applicable Federal Requirement:6NYCRR 202-1

Item 89.1:

The Compliance Certification activity will be performed for:

Emission Unit: P-00001

Regulated Contaminant(s):

CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 89.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The design emission rates of the internal combustion engines for nitrogen oxides (NO_x) and carbon monoxide (CO) are 1.40 grams per brake horsepower-hour (g/bhp-hr) and 2.71 g/bhp-hr, respectively. These emission rates are conservative emission rates based on performance tests data of similar engines. The design emission rates were used to assess compliance and applicability to New Source Review (6NYCRR Part 231-2), Prevention of Significant Deterioration (40CFR52.21) and Reasonable Available Control Technology for Oxides of Nitrogen (6NYCRR Part 227-2). The Department requires routine performance testing and periodic monitoring of the internal combustion engines to confirm the engines consistently operate within the design criteria.

NO_x:

Compliance Certification shall include the following



monitoring:

Monitoring Type: Periodic Monitoring

Monitoring Description: The facility is required to analyze stack emissions on each engine with a portable NOx analyzer.

The suitability of the portable analyzer shall be approved by the Department. The analyzer shall be calibrated in accordance with the manufacturer's recommended procedures and schedule. A report for each calibration shall be kept on site and made available for Department review upon request. The analyzer shall be zeroed prior to each use following manufacturer's procedures.

A permanent sample port shall be installed in each engine exhaust at a location to obtain a representative sample from the flow profile. To reduce uncertainties in the measurements, a sampling method should be followed including: instructions on the assembly of the equipment, details of any leak checks, calibration procedures, and time to allow the instrument to stabilize. The sample collection and analysis shall be completed during normal operating conditions.

Monitoring will be performed on a monthly basis. A threshold for NOx (in ppm) will be established based on the assumed emission factors included in the Title V Permit and the measured exhaust stack conditions from the most recent performance test. If the threshold is exceeded, the engines shall be tuned and monitoring repeated within 10 business days. If the threshold is exceeded upon remonitoring, performance testing shall be conducted. If corrective actions are taken as specified, the monitored exceedance is not a violation of the operational requirements, however the permittee shall report these episodes as deviations.

Records shall be maintained to include: (1) date and time of the measurement, (2) a log of the NOx measurements in ppm, (3) backup for determination of monitoring threshold, and (4) description of adjustments made to the engine (if any). The records shall be kept on-site and be made available to the Department upon request.

A summary of all monthly monitoring results shall be reported to the Department semiannually.

CO:

Compliance Certification shall include the following



monitoring:

Monitoring Type: Periodic Monitoring

Monitoring Description: The facility is required to analyze stack emissions on each engine with a portable CO analyzer.

The suitability of the portable analyzer shall be approved by the Department. The analyzer shall be calibrated in accordance with the manufacturer's recommended procedures and schedule. A report for each calibration shall be kept on site and made available for Department review upon request. The analyzer shall be zeroed prior to each use following manufacturer's procedures.

A permanent sample port shall be installed in each engine exhaust at a location to obtain a representative sample from the flow profile. To reduce uncertainties in the measurements, a sampling method should be followed including: instructions on the assembly of the equipment, details of any leak checks, calibration procedures, and time to allow the instrument to stabilize. The sample collection and analysis shall be completed during normal operating conditions.

Monitoring will be performed on a monthly basis. A threshold for CO (in ppm) will be established based on the assumed emission factors included in the Title V Permit and the measured exhaust stack conditions from the most recent performance test. If the threshold is exceeded, the engines shall be tuned and monitoring repeated within 10 business days. If the threshold is exceeded upon remonitoring, performance testing shall be conducted. If corrective actions are taken as specified, the monitored exceedance is not a violation of the operational requirements, however the permittee shall report these episodes as deviations.

Records shall be maintained to include: (1) date and time of the measurement, (2) a log of the CO measurements in ppm, (3) backup for determination of monitoring threshold, and (4) description of adjustments made to the engine (if any). The records shall be kept on-site and be made available to the Department upon request.

A summary of all monthly monitoring results shall be reported to the Department semiannually.

ROUTINE PERFORMANCE TESTING

The facility completed the initial performance test on



engine # 4 (ENG04) of the original six engines (ENG01, ENG02, ENG03, ENG04, ENG05 & ENG06) on August 29, 2008. The average of three test runs was 1.2 grams NO_x per brake horsepower-hour. This is below the limit of 2.0 grams per brake horsepower-hour contained in 6 NYCRR Part 227-2 and 1.4 grams per brake horsepower-hour used to allow the engines to limit emissions below the applicability level of 6 NYCRR Part 231-2..

- 1.) An initial performance test on one of the additional two engines (ENG07 or ENG08) must be performed no later than 180 days of startup of the engines.
- 2.) In addition to the above testing, a performance test shall be completed, at a minimum, every five years on one engine from each similar engine type at the facility. For purposes of this testing, engines 1 through 6 will be considered one engine type and engines 7 and 8 will be considered another engine type. More frequent performance testing may be required as determined necessary by the Department.
- 3.) Performance tests must demonstrate compliance with the design emission rates of 1.40 g/bhp-hr NO_x and 2.71 g/bhp-hr CO.
- 4.) The specific engine to be tested will be selected by the Department. The test must be completed at the maximum normal operating load.
- 5.) The methods used to measure NO_x and CO shall include EPA Methods 7 or 7E and EPA Method 10 from 40CFR60, Appendix A or another reference method approved by the Department.
- 6.) A performance test protocol shall be submitted to the Department for approval at least 60 days prior to completion of the test. The Department must be notified 10 days prior to the scheduled test date so a Department representative may be present during the test.
- 7.) A performance test report of the results shall be submitted to this office within 45 days of completion of the test.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2009.

Subsequent reports are due every 6 calendar month(s).

Condition 90: Compliance Certification