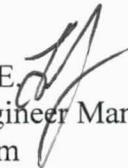


COMMONWEALTH OF PENNSYLVANIA
Department of Environmental Protection
Southwest Regional Office

TO AQ Case File TVOP-65-00767

FROM Noor Nahar 
Air Quality Engineering Specialist
Air Quality Program

THROUGH Thomas Joseph, P.E. 
Environmental Engineer Manager
Air Quality Program

Mark Gorog, P.E. 
Program Manager
Air Quality Program

DATE October 20, 2015

RE Review Memo of Title V Application
Westmoreland Sanitary Landfill, LLC.
Sanitary Landfill
Rostraver Township
Westmoreland County

APS 864018 AUTH 1061705 PF 514148

BACKGROUND

Sanitary Landfill operates a municipal solid waste landfill in Rostraver Township, Westmoreland County, Pennsylvania. Sanitary Landfill disposed of waste in an unlined area from the 1960s through 1991. The existing lined Phase I, II, and III areas began accepting waste in 1991 and approached capacity in 2004. The Landfill was expanded again in 2006 through the permitting of the North & South expansion, which covered 148.75 acres and is projected to reach capacity in 2036. Air Quality Operating Permit OP-65-322-002 was issued to Westmoreland Waste, LLC (previous owner) in 1994 to allow the operation of a candle flare to control emissions of landfill gas. Condition 4 of the permit required that an enclosed flare be installed at the site if the waste acceptance rate ever exceeded 500 tons per day, or by March 31, 1999. In late 1998, the permittee approached the Department about postponing and/or eliminating the requirement for the installation of the enclosed flare. The permittee attempted to institute a project which would result in the off-site utilization of the landfill gas, however, the off-site utilization of the LFG never materialized. A Plan Approval for the installation of two ground flares (each rated 5,500 scfm) was issued in March, 2004. The company originally anticipated that LFG flow rates would eventually exceed 5500 cfm. However; the actual LFG flow rate to the flare has generally been

in the 1500 to 2000 cfm range, and installation of the second flare has not been necessary. The present control devices include one 5500 cfm flare and a 3000 cfm back-up candle/utility flare utilized in alternative operation to the enclosed flare during significant down times.

Sources and the control devices at this facility are:

- Landfill Gas
- Paved and Unpaved Roads
- Landfill Construction/Operation
- Soil Processing
- Overburden Blasting
- Paint Spraying
- Odor Neutralizer
- Diesel Air Compressor
- Rock Crusher (operated by outside contractor)
- LFG Flare #1 (Enclosed Flare)
- Water Spray
- LFG Back-up Candle/ Utility Flare

Other insignificant activities are listed at the end of the TVOP.

The initial Title V operating permit application was submitted by Westmoreland Sanitary Landfill, LLC on August 12, 2005.

In 2011, the landfill was purchased by CCS Midstream Services, LLC. On September 30, 2011, the company changed ownership from Westmoreland Sanitary Landfill, LLC to CCS Midstream Services, LLC. On November 3, 2011 an addendum was submitted to pending Title V operating permit application to update the sources and site-specific requirements relative to landfill gas extraction wells.

On October 31, 2012 the company changed ownership from CCS Midstream Services, LLC to Tarvita, LLC.

On July 8, 2013 an addendum to the pending Title V operating permit application was made to include the back-up candle flare and odor neutralizer. These units were installed at the facility though an exemption granted under the provisions of Pa Code §127.14 (a)(8) due to the insignificant amount of emissions.

On February 2, 2015 the company changed the ownership from Tarvita, LLC to Westmoreland Sanitary Landfill, LLC.

REGULATORY ANALYSIS

This source is defined as a Title V facility and is therefore subject to the Title V permitting requirements adopted in 25 Pa. Code, Chapter 127, Subchapter G.

All of the conditions derived from Title 25 of the Pennsylvania Code in the original Title V permit have been included in this renewal. The applicable emission limitations, monitoring, recordkeeping, reporting and work practice standard requirements of Title 25 Pa. Code Sections 123.1, 123.2, 123.13, 123.21, 123.31, 123.41, 123.42, 127.511, 127.513, 129.52 and 135.5 have been included in this Title V permit.

The collection and control system is subject to the Department's Bureau of Air Quality Permit Manual, Section 7.10; Air Quality Permitting Criteria Including Best Available Technology (BAT) Criteria for Municipal Waste Landfills New Source Performance Standards (NSPS).

Title 25 PA Code Section 122.3 adopts in entirety the Standards of Performance for New Stationary Sources and Emission Guidelines for Existing Sources promulgated in 40 CFR Part 60 Subpart WWW. The applicable requirements of Subpart WWW have been included in this Title V permit.

Title 25 PA Code Section 127.35(b), and 40 CFR Part 63 NESHAP for Source Categories are incorporated by reference into the Department's permitting program. The applicable requirements of 40 CFR Part 63 Subpart AAAA- National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills has been included in this Title V permit.

The portable soil/stone processing plant is owned and operated by a separate entity and is subject to NSPS of 40 CFR Part 60 Subpart OOO. Conditions for the portable soil/stone processing plant have been included as an Alternative Operation.

The diesel engines which power crusher and air compressor are subject to the NESHAP for Stationary Reciprocating Internal Combustion Engines (RICE) found in 40 CFR Part 63 Subpart ZZZZ. Applicable requirements from this subpart have been placed in the permit. They were constructed prior to 2005 and are not subject to 40 CFR Part 60 Subpart IIII.

The Greenhouse Gases Tailoring and the Mandatory Greenhouse Gas Reporting rule of 40 CFR Subchapter C, Part 98 have been evaluated for applicability to this site. Requirements from these regulations may apply to certain facilities that have taken a NSR or PSD permitting action. This facility has not undertaken a NSR or PSD permitting action; consequently, the previously mentioned GHG rules do not apply. However, the Department has elected to require reporting of GHG emissions for new construction & modifications to existing sources. As this permitting action does neither of those requirements been included.

EMISSION SOURCES AND CONTROL EQUIPMENT

Sources and emissions at this facility consist of the landfill itself (consisting of disposal areas being constructed, disposal areas actively accepting waste, and closed disposal areas), emitting fugitive VOCs, HAP; roads and earthmoving equipment emitting fugitive PM₁₀, a landfill gas collection system (wells, manifolds, routed to a flare) emitting undestroyed VOCs, HAP, NO_x, CO, PM₁₀, emergency generators, an airless spraying device and soil processing systems (fugitive PM₁₀).

The flares are equipped with a flue gas temperature monitor, ultraviolet flame scanner, automatic fail safe valve, auxiliary fuel supply, automatic start-re-start, flow/temperature recorder, purge blower, automatic and manual temperature control louvers, and an aluminum flame arrester. It is estimated that the flare would achieve a 98% destruction efficiency.

The company also utilizes an odor neutralizer system to control odor beyond property borders. The facility utilizes water spray to minimize particulate emissions. The gasoline, diesel storage tanks, mobile lube truck and mobile diesel fuel tankers are insignificant sources at this site. There are no specific regulations governing these sources.

The reported emissions from the facility for 2014 are NO_x 14.71 tpy; CO 58.36 tpy; SO₂ 2.84 tpy; NMOC 14.58 tpy; VOC 4.70 tpy; HAPs 3.11 tpy and PM₁₀ 32.35 tpy. Attached table shows the summary of facility's potential and actual emissions.

Per company's explanation, the actual CO emissions (from 2014 EI Report) are greater than the Title V Potential Emissions because the CO emission factor used for the 2014 EI Report (which was received on February 26, 2015) is the manufacturer's guaranteed value and the Title V permit calculations used the CO emission factor from the recent stack test (report prepared March 11, 2015 which was after the 2014 EI Report was submitted). Note 2 on Table 1 that explains the difference between the 2014 Actual Emissions and the Title V Potential Emissions for CO and NO_x.

CONCLUSIONS AND RECOMMENDATIONS

Westmoreland Sanitary Landfill has met the regulatory requirements associated with this application submittal. The recent stack test was conducted on the enclosed flare on January 13, 2015. The most recent inspection was conducted on February 25, 2015. Reports indicate that facility is in compliance with all regulatory requirements. The attached proposed permit reflects terms and conditions as described in this permit application. It is my recommendation to issue a Title V Operating Permit for this facility as proposed upon completion of the public comment period. Notice of intent to issue this TVOP will be published in Pa Bulletin and local newspaper. EPA, the company and Air Quality inspector will be provided with this proposed TVOP.