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COMMONWEALTH OF PENNSYLVANIA Department of Environmental Protection Southwest Regional Office July 22, 2010

SUBJECT: Title V Renewal Review Memo

Evergreen Landfill

Center and Brush Townships

Indiana County

TO:

Air Quality File TV-32-00266

THROUGH: Barbara Hatch, P.E.

Environmental Engineer Manager

Air Quality

Mark A. Wayner, P.E. Program Manager *Maw*

Air Quality

FROM:

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Air Quality

Background:

Evergreen Landfill, Inc. owns and operates the Evergreen municipal solid waste landfill in Center and Brush Valley Townships, Indiana County, Pennsylvania. Evergreen Landfill, Inc. is a wholly owned subsidiary of Waste Management, Inc. The facility encompasses 191 acres. The Bureau of Waste Management (BWM) first issued a permit (No. 100434) on August 12, 1980 and in August of 1998 an Air Quality Plan Approval (PA-32-00266A) was issued for the Phase II expansion. Another Air Quality Plan approval (PA-32-00266B) was issued on September 18, 2007 for Phase III expansion. Evergreen estimates the maximum waste disposal rate at this landfill to be 1500 tons per day (1000 tons per day on average) and the design capacity of this facility is established at 7.3 million tons of municipal solid waste. The permitting date, and Design Capacity of this facility make it subject to the Emission Guidelines and New Source Performance Standards for Municipal Solid Waste Landfills, found at 40 CFR 60, Subparts Cc and WWW. Per 40 CFR 60.752(a), this landfill is subject to Part 70 permitting requirements.

The initial Title V Operating Permit for Valley Landfill was issued on December 19, 2001 with an expiration date of December 31, 2006. A Title V renewal application was received by the Department on December 8, 2005, and was determined to be administratively complete.

EQUIPMENT AND EMISSIONS:

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, roads, and earthmoving equipment; emitting fugitive (uncollected) VOCs and PM₁₀), a landfill gas collection system (wells, manifolds, routed to a flare or gas processing facility; emitting undestroyed VOCs, NOx, CO, PM₁₀), and a soil processing system (fugitive PM₁₀).

Landfill gas collection system has an estimated gas collection efficiency of 75% from the old Landfill and 90% for all lined and synthetically capped areas. The system exhausts into the enclosed ground flare. The remaining 25% of landfill gas is fugitive. The enclosed ground flare has a rated destruction efficiency of 98%. Emissions of other pollutants (products of combustion), resulting from the operation of the flare, are attributed to the landfill gas collection system. In Plan Approval PA-32-266B the proposed Collection and Control Plan has been reviewed for conformance with 40 CFR §60.752(b)(2)(ii). It met the requirements of the regulations, in that it was developed by a professional engineer, it is sufficient to handle the maximum expected gas flow over its intended use, it routes collected gas to an approved control device, and it is designed to minimize off-site migration of subsurface gas. The plan was found to address issues of refuse depths, gas volume and flow characteristics, leachate cleanout and condensate management, all phases of monitoring, gas extraction well construction, and flare operation in a manner consistent with good engineering practices.

Landfill gas is currently captured by gas recovery wells installed in the portions of the Phase I/II landfill and is piped to an existing flare station. The Phase III gas recovery system has been designed to be inter-connected with the Phase I/II gas system. As the Phase III Area is constructed and incrementally capped, the Phase III gas wells and piping will be connected to and operated with the Phase I/II gas system in accordance with the landfill NSPS requirements (40 CFR Part 60, Subpart WWW.

After stack testing, company established the maximum allowable emissions from the facility after controls. These limits have been included in the Title V.

The Soil Processing System consists of a diesel engine, a screen, a crusher, conveyors and various earthmovers. The NSPS Subpart OOO for nonmetallic mineral processing applies to this affected facility.

The gasoline and diesel storage tanks have a capacities varies from 200 -10,000 gallons each. There are no specific regulations governing this size of tank. These sources are included in the Miscellaneous Section of the permit for site inventory purposes only.

REGULATORY ANALYSIS

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 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, Section 60.750 Municipal Solid Waste Landfills that commence construction or modification after May 30, 1991 are subject to the New Source Performance Standards Subpart WWW. The applicable requirements of Subpart WWW have been included in this Title V renewal permit.

Part 63 National Emission Standards for Hazardous Air Pollutants (NESHAP):

Title 25 PA Code Section 127.35(b), Part 63 NESHAP for Source Categories are incorporated by reference into the Department's permitting program. Per 40 CFR Part 63 Section 63.1955, the applicable requirements of 40 CFR Part 63 Subpart AAAA have been included in this Title V renewal permit.

Evergreen Landfill is not subject to the requirements of the Compliance Assurance Monitoring (CAM) rule because the facility is currently regulated under NSPS/NESHAP regulations.

PREVIOUS OPERATING PERMITS AND PLAN APPROVALS:

32-330-001- In 1991 an application was submitted by Pellegrene Construction Company for the installation of a soil processing plant at their landfill located off Ridge Road in Homer City. On November 30, 1994, a Plan Approval 32-330-001A was issued for a new soil processing plant. February 15, 1996, the ownership changed from Pellegrene Construction Company to Sanifill of Pennsylvania, Inc.

PA-32-266A – This Plan Approval was issued August 31, 1998 for the construction of a gas collection and control system at Sanifill of Pennsylvania,

Inc.'s Pellegrene Municipal Landfill, located in Center and Brush Valley Twps, Indiana County.

PA-32-266B - This Plan Approval was issued on September 18, 2007 for the Phase III landfill expansion project at the Evergreen Landfill, Inc. Evergreen facility located in Center and Brush Valley Townships, Indiana County. Evergreen landfill had a waste capacity of approximately 2.75 million tons. The Phase III expansion increased that capacity by 4.56 million tons up to 7.3 million tons.

Operating Flexibility:

The Title V permit may include provisions to allow a permitted facility to make certain changes without requiring a permit revision. Evergreen landfill has requested the flexibility of increasing emission by the de minimus levels specified in 25 Pa Code § 127.449(d) and the installation of the minor sources listed in 25 Pa Code § 127.449(e). These provisions will be specified in the Title V permit.

STREAMLINING:

Pennsylvania implemented a BAT policy for landfills in 1990. Some of the BAT requirements are more stringent than the 40 CFR 60, Subparts Cc and WWW requirements. Most notably, BAT requires that landfill gas is collected and destroyed/processed when the volume of landfill waste in place reaches 1,000,000 tons. This is generally much earlier than the control timetables prescribed by the NSPS/EG.

CONCLUSIONS AND RECOMMENDATIONS:

Evergreen Landfill Inc. has met the regulatory requirements associated with this application submittal. The attached draft permit reflects the applicable regulatory requirements associated with this facility. I recommend that the proposed Title V Operating Permit be issued for this site.