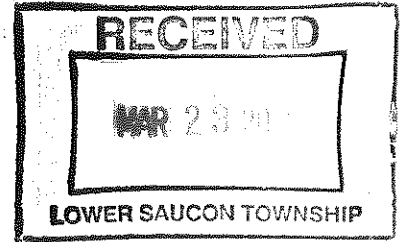




pennsylvania

DEPARTMENT OF ENVIRONMENTAL PROTECTION

NORTHEAST REGIONAL OFFICE



March 23, 2017

Lower Saucon Township Council
3700 Old Philadelphia Pike
Bethlehem, PA 18015

Attention: Leslie Huhn, Township Manager

Dear Ms. Huhn:

Thank you for your January 25, 2017 letter, requesting additional ambient air quality sampling in the vicinity of IESI Pa Bethlehem Landfill (IESI). Your request refers to the Health Consultation Report for IESI prepared by the Pennsylvania Department of Health dated December 12, 2016 (Health Consultation Report).

In considering your request, the Department of Environmental Protection (DEP) closely reviewed the Health Consultation Report, as well as the July 27, 2015, DEP Bureau of Laboratories (BOL) Report, the numerous inspections and complaint investigations conducted by DEP staff, odor complaint logs maintained by DEP, and IESI correspondence relative to landfill gas collection system enhancement projects completed since the June 2015 Mobile Analytical Unit (MAU) air monitoring project was performed.

Based on our review of all this information, we believe that additional ambient air monitoring of the areas surrounding IESI is not warranted at this time. DEP believes that proper implementation of current and proposed operational controls, mitigation plans, and the Nuisance Minimization and Control Plan (NMCP), is adequate to protect the public health, safety, and welfare.

In reaching these conclusions, DEP considered the following:

- 1.) **Health Consultation Report:** In the report, in both the "Next Steps" and "Recommendations" section, the Department of Health recommended that in order to reduce the potential for unhealthy air exposures and nuisance odor events in this community that PADEP work with local air emission sources (e.g., landfill, wastewater treatment plant) to implement robust engineering controls to reduce air emissions. The report went on to state, "if additional engineering controls are not taken to better control these sources of air emissions/odors, PADOH recommends more rigorous environmental sampling and analytical methods to identify and quantify specific chemical emissions and to better characterize exposures to these chemicals in the surrounding community's ambient air". DEP believes that IESI has implemented robust engineering controls necessary to reduce air emissions as detailed below.

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- 2.) **Robust engineering controls implemented at IESI to reduce air emissions:** Since DEP's Bureau of Laboratories' Mobile Analytical Unit MAU conducted its sampling in June 2015, IESI has completed several major projects to enhance their ability to capture and ultimately destroy the landfill gas generated by the waste disposed of on site. The most significant of these projects was the installation of over 7 acres of temporary synthetic cap on the intermediate slope in the southwest portion of the landfill. The area that was capped was believed to be the most likely source of periodic landfill gas odors observed on and off site. Installed in conjunction with this cap, was a network of horizontal gas collection devices under the cap to enhance IESI's ability to convey these gases to either the on-site flare or the Bethlehem Renewable Energy facility for destruction. IESI also installed, 4.4 acres of final cap on the north slope, an additional 17 vertical landfill gas extraction wells, additional horizontal landfill gas collectors, additional header pipe to enhance the facilities ability to get influence on the areas furthest from the landfill gas collection system blowers, and added 12 dewatering pumps to existing vertical landfill gas collection wells that were being hampered by excess fluids. As a result of these projects, DEP has observed an improvement in overall landfill gas collection and landfill gas quality.
- 3.) **DEP staff observations:** DEP staff who have visited the site have noticed significant improvement over site conditions observed in 2015. As you are aware, DEP issued IESI a Notice of Violation (NOV) on May 12, 2015. The NOV stemmed from site conditions observed during an April 21, 2015, inspection of the facility. At that time, DEP staff observed the condition of the intermediate slope areas in the southwest portion of the landfill to be inadequate to prevent odors. In response to this NOV, IESI proposed to add additional cover to some of the areas and install temporary synthetic cap on others. This work, coupled with the landfill gas collection system enhancements, has resolved the issues observed in 2015. DEP staff, including Waste Program Manager, Roger Bellas, visited IESI on March 2, 2017, and found the site to be in very good condition. There were no landfill gas odors observed on or off the site.
- 4.) **Reduction in odor complaints:** DEP staff has reviewed the number of odor complaints registered against IESI since January 1, 2014. In 2014, there were 207 complaints registered against IESI. In 2015, there were 198 complaints registered against IESI. In 2016, there were 17 complaints registered against IESI. The reduction in complaints coincides with the gas collection system improvements and temporary cap installation detailed above.
- 5.) **MAU results from BOL Report dated July 27, 2015:** DEP staff has reviewed the results of the MAU sampling conducted in June of 2015. These results **do** appear to show a link between emissions from IESI and one of the community locations, but not for any chemicals that exceeded acute health-based comparison values. The only observations indicating the potential of being influenced by the landfill are those readings obtained at the Hader Lane location. During the time the MAU was at this location, DEP staff did observe a faint odor similar to that of landfill gas and there was an easterly

component to the wind direction making the Hader Lane location periodically downwind from the landfill. On that day detections of methane and dimethyl sulfide were observed. These two compounds were detected at their highest levels of the event when the MAU was located at the landfill lower location. This location is in very close proximity to the Hader Lane location, approximately 1000 feet west of the perimeter of the landfill. Based on recent inspections of the landfill by DEP, it appears that the onsite odors that existed at IESI in 2015 have been addressed. As long as IESI maintains their current levels of gas collection, emissions from the landfill should not pose any risk to the public.

As also recommended in the Health Consultation Report, DEP will continue its oversight, permit enforcement, timely odor complaint response, and groundwater monitoring. We will keep the Township informed and if conditions change, we will revisit your request for additional monitoring.

Thank you again for your letter. If you have any additional questions, please contact me or Roger Bellas, Waste Management Program Manager at 570.826.2201.

Sincerely,



Michael D. Bedrin
Regional Director
Northeast Regional Office

cc: Acting Secretary Patrick McDonnell
Mr. Nicholas Rogers, IESI Bethlehem Landfill
Mr. Don Hallock, IESI Bethlehem Landfill
Dr. Farhad Ahmed MBBS, MPH, Health Assessment
Section Chief, PADOH

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