

19 September 2022

Pennsylvania Department of Environmental Protection (DEP)
Southwest Regional Office Air Quality Program
400 Waterfront Dr
Pittsburgh, PA 15222

Re:

Attn: Air Quality Program of the DEP,

The Westmoreland Sanitary Landfill (WSL) in Belle Vernon, PA has an extended and deep history of non-compliance with permits issued by the DEP. The DEP has a duty to protect residents surrounding the landfill, and all residents of Pennsylvania, from the environmental hazards posed by WSL and their continuous lack of effort to follow proper permits and protocols. Under chapter 121 of the Pennsylvania code, which defines *air pollution* as “the presence in the outdoor atmosphere of any form of contaminant...in a place...which may be inimical to public health.”, the installation and operation of a new leachate evaporator system at WSL will exacerbate the air pollution in Allegheny and Westmoreland Counties, which have both spent the past 10 years in non-attainment for 8-hour ozone, and Allegheny for PM_{2.5}, and SO₂. To keep the public safe from further health issues, **we demand that the the air quality plan be denied for the proposed leachate evaporation system (Plan #PA-65-00767C).**

Examples of non-compliance issues to WSL from the DEP include multiple hazardous waste transportation permit deficiencies, unlawful leachate trucking, improper daily bookkeeping of disposal, and a complete lack of mud and sediment control¹. Noble Environmental, holding company of WSL, also has a history of non-compliance with their subsidiary Penn Ohio Landfill (Negly, OH)². Almost three years ago the PA DEP received an application for the installation of a leachate evaporator system at the WSL. Since then, WSL has received a number of deficiency notices from the DEP regarding the incomplete information regularly being provided to the DEP on the evaporator system. The continuous lack of capability displayed by Noble Environmental and WSL LLC to provide accurate and sound environmental information regarding their proposed evaporator system is an overarching concern for the health of community members surrounding the landfill. In combination with hundreds of past deficiency notices, this behavior exemplifies the inability of WSL LLC to responsibly manage a leachate system; therefore, the

¹<<https://www.dep.pa.gov/About/Regional/SouthwestRegion/Community%20Information/Pages/Westmoreland-Sanitary-Landfill-LLC.aspx>>

²<<https://www.wkbn.com/news/local-news/pennohio-waste-in-negley-to-pay-50k-for-epa-violations/>>

leachate system should **be denied by the DEP** until a time when WSL LLC can prove they are capable of adhering to the permits they are continuously allotted by the DEP.

Although the proposed air quality plan regarding the leachate evaporator system has experienced multiple draft rounds, it is still scientifically inadequate and does not properly provide details and monitoring techniques to ensure public safety. In *Section D, III, #012* of the plan, volumetric flow rate the leachate entering the hydrocarbon recovery unit is required to be monitored in order to adhere to 25 PA Code 127.12b. However, there is no requirement to report the volumetric flow rate to the DEP and to the public. An unreported flow rate to the DEP or the public leads to an inability of DEP scientists or our NGO scientists to develop accurate emission rates that reflect the National Ambient Air Quality Standards (NAAQS) developed by the EPA. We therefore question how the *Section D, I, Emission Restrictions* were developed, as no mass inflow of leachate was reported, and therefore no mixing ratio for emissions can be calculated. While we recognize *Section D, I, #004* conditionalizes pollutant emissions from the leachate evaporation system, the units are presented in pounds per hour and total per year—both of which are incapable of being converted to the milligrams or micrograms per meter cubed (or the mixing ratio parts per billion) without mass inflow rate. **The lack of transparency in the emissions calculations is concerning to the public, as it indicates the DEP is not requiring the leachate evaporator to adhere to the NAAQS. Therefore, we request the emissions calculations of the air quality plan adhere to the NAAQS.**

There is also no daily percent error requirement on the flow rate, which allows WSL to pass a very wide range of leachate volumes through the system. Overall, **we request transparency** on how and if the emissions restrictions from the evaporator adhere to the NAAQS and the 25 PA Code 121.1 emission limits. The DEP also refers to two “open-top leachate storage tanks” for the leachate in between the hydrocarbon recovery unit step and the filtered leachate step. In alignment with the lack of information regarding flow rate, no information is provided regarding the size of the storage tanks, the quantity of leachate that will be stored in the tanks, and the quantity of leachate that will evaporate from the open-top tanks during storage. We emphasize a complete lack of transparency and clarification regarding all size, storage capacity, and flow rate specifications of the leachate evaporation system.

The proposed air quality plan requires WSL to perform stack tests on their evaporator system 180 days after initial startup for an array of harmful pollutants, but only requires the testing once every five years following this initial test. In combination with no flow rate provided or required by the plan, it is impossible to tell if the stack is regularly adhering to proper emission levels when samples are only analyzed once every five years. Our scientific analysis suggests that stack testing should occur for all pollutants at least once every year to ensure compliance with air quality standards and to avoid negative public health outcomes. It appears *Section D, III, #014* aimed to ensure the ambient air would be monitored for non-compliance with air pollutants. However, the term “outdoor perimeter air monitors” does not describe the pollutants required to

be monitored, and WSL is unlikely to be able to monitor all pollutants of concern with only four monitors. It is irresponsible of the DEP to request only four air monitors, to propose no specifications on the pollutants monitored, and to have no requirements regarding monitor placement—responsible monitoring would ideally occur prior to and post emission source based on wind direction. The U.S. Environmental Protection Agency only accesses meteorological data from eight stations across Pennsylvania, and only one of those is within 50 km of the WSL; due to the prevailing wind direction, **we highly advise a new meteorological monitoring station be established proximal to the WSL for accurate reporting of atmospheric conditions and air pollutant movement. Additionally, we request specific testing to be required for residual waste components in the air with analytical results and sampling methodologies regularly available for public viewing.**

In line with the above emission concerns, the document is lacking technical information regarding the full characterization of pollutants (1) created by the leachate evaporator process and (2) emitted into the air because they are enveloped in leachate. In agreement with engineer Dr. Ranajit Sahu, we highlight the lack of clarity on the variables included in the models produced for the air quality plan. No information was provided to the public regarding the timeliness of the characterization for radiative components in the leachate or the accuracy of the characterization. As the fate of radiative components through phase-changes is not well understood in the literature, the DEP has an expectation to adhere to the precautionary principle by taking measures to protect human health and the environment, including refusal to put the public in harm's way from the leachate evaporation system. If the DEP chooses to ignore the environmental precautionary principle, **we request sampling for the fate of all radiative components in the leachate throughout the entire evaporation process** in order to further scientific knowledge.

In line with our concerns, we also include reservations regarding the air quality plan from the staff scientists at the Center for Health, Environment, and Justice (CHEJ)³. The main concerns of CHEJ address the failure of the DEP to require testing in the air quality plan for other constituents of leachate not mentioned in the plan. It is well-known that leachate contains chlorinated and fluorinated compounds that are persistent in the environment, including vinyl chloride and polyfluoroalkyl substances. The extreme temperatures brought about by the thermal burner will also produce products of incomplete combustion, such as dioxins, and compounds not yet identified by the air quality plan. Therefore, it is the assessment of both Protect PT and CHEJ that the DEP has failed to prioritize the safety of Pennsylvania residents by neglecting to place emission standards for the above mentioned pollutants. **We request emission standards be placed and regular sampling be conducted for the above mentioned pollutants.**

It is clear the air quality plan itself has an abundance of downfalls completely unaddressed by the DEP and WSL LLC. In addition to the lack of clarity proposed by the plan and lack of measures

³ <<https://chej.org/>>

included to protect public safety, it is undeniable that WSL LLC continuously fails to adhere to the permits they are issued. The Pennsylvania DEP has a duty to protect residents of the State from environmental contaminants in our natural resources. Allegheny and Westmoreland Counties are consistently in non-attainment with air quality regulations, so the addition of further pollution poses a large threat to the health of their residents. **We request the DEP deny the installation and operation of the proposed leachate evaporator system at the WSL** until a time when WSL can (1) prove their ability to follow regulations and (2) develop an air quality plan for the system that does not risk the safety and health of residents across the State.

Regards,



Jenna Rindy, M.S. & M.Sc.
Staff Environmental Scientist
Protect PT



Gillian Graber
Executive Director
Protect PT

Ranajit Sahu, Ph.D.
Consulting Engineer