

January 5, 2026

Keystone Sanitary Landfill, Inc.  
c/o Mr. Dominick DeNaples Jr., Site Manager  
249 Dunham Drive  
Dunmore, PA 18512  
Via email: [dominickd@kslco.com](mailto:dominickd@kslco.com)

Re: Permit Renewal Application Second Review Letter  
Keystone Sanitary Landfill  
Permit Application #: 101247-A241  
APS ID#: 1111148, AUTH ID#: 1479927  
Throop and Dunmore Boroughs, Lackawanna County

Dear Mr. DeNaples:

The Department of Environmental Protection (DEP) has reviewed Keystone Sanitary Landfill's (KSL) September 17, 2025 response to DEP's July 18, 2025 review letter of the above referenced Permit Renewal application and the April 1, 2025 Environmental Hearing Board Adjudication on the appeal of DEP's approval of Keystone's Phase III Expansion Major Modification Application, which remanded the major modification back to DEP for further consideration. The DEP has identified the following:

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**Form HW-C**

- There are enforcement actions issued to N&L Transportation, Inc. and CSY, Inc. that are missing from the list in Section D that should be included as follows:

N&L Transportation, Inc. (Client ID # 202278)

Enforcement ID	Date Issued
431283	07/08/24
431337	07/22/24
431447	07/24/24
440490	04/02/25

CSY, Inc. (Client ID #96066)

Enforcement ID	Date Issued
434950	10/21/25

## Condition 25 Requirement of Major Modification Phase III (paragraph F)

- Leachate Generation
  - On December 30, 2025 KSL submitted the results of the Tabor site investigation, including the geophysical investigation., Because monthly surface monitoring data cannot be relied upon to identify any possible stormwater infiltration from terraces, gas well boots, and cleanouts within capped areas when the vacuum from the gas collection system is sufficiently strong, KSL employed additional methods, such as moisture balance assessments, to evaluate cap performance in relation to precipitation. DEP will review this report and determine if a description of these procedures should be added to KSL's Nuisance Minimization and Control Plan (NMCP) and/or Form 25.
  - KSL states that actual, recent, site-specific leachate generation rates should be used rather than HELP model predicted numbers but then does not provide projected leachate generation rates using the site-specific data. Previous HELP model calculations predict maximum leachate generation of 127,644 gpd would occur during pad 8 operations. As current leachate generation rates exceed this number, site-specific leachate generation rates should be used to calculate maximum leachate generation rates over the duration of the expansion project. These new site-specific leachate generation rate calculations should be compared to the currently designed, leachate conveyance, storage and treatment systems to ensure adequate capacity.
  - KSL has calculated its leachate treatment capabilities to be 360,000 gpd, this equates to all four Reverse Osmosis (RO) units operating at the same time at 90% efficiency. KSL's data shows actual efficiencies in the range of 75-81%. Furthermore, part of the reasoning to have multiple RO's is to allow for continued operation while one or more units are down for maintenance or other reasons. KSL should recalculate its current leachate treatment capacity using site-specific efficiency data and its ability to operate all four RO units simultaneously.
  - KSL states that it has "contractual arrangements for offsite leachate disposal totaling 9,229,167 gallons per month, which supports compliance with storage and treatment requirements." KSL is only permitted to haul leachate for emergency purposes. Emergency Hauling capabilities should not be considered when determining compliance with leachate treatment and storage requirements. If KSL would like to have the option to haul as a basic treatment method, then it should revise its Leachate Management Plan to include hauling as a regular method and KSL should analyze the traffic associated with this to determine if traffic associated with hauling of leachate is greater than 10% of the total number of vehicles delivering waste and other materials to the site. If greater than 10%, a new traffic impact analysis is needed, and DEP would need to consider the traffic in the Harms/Benefits analysis.

## **RO Concentrate Management**

KSL evaluated safe volumes of RO reject water (concentrate) that could be disposed of in the landfill working face in 2024. The results of this evaluation indicated that approximately 206,000 gallons per day could be disposed of in the working face of the landfill. The impact to slope stability should be mitigated as long as KSL does not exceed 206,000 gallons/day of RO concentrate disposed in the landfill. RO concentrate disposal can have other impacts relative to leachate generation, leachate quality and accelerated landfill gas generation. KSL should continue the use of H2S scavenger products and offsite disposal of concentrate to reduce the potential for odors. DEP has some concern regarding any impact the RO concentrate disposal has on landfill gas generation. KSL should compare the actual landfill gas collection rates for the Phase III area of the landfill to the predicted landfill gas generation rates as modeled by the most recent Landfill Gas Emissions Model and determine if the currently designed landfill gas collection systems will adequately capture the landfill gas being generated to prevent offsite landfill gas odors.

## **Odor and Landfill Gas Management**

- DEP requested that KSL reevaluate and propose improvements on the enhanced surface monitoring protocols and overall NMCP. There are areas of KSL's NMCP that need additional updating, specifically:
  - In the list of typical on-site odor sources at the landfill and in Exhibit C, KSL omitted the leachate treatment plant. This odor source should be specifically identified in the NMCP and the mitigation and monitoring measures KSL is implementing to mitigate this odor source should be included in Exhibit C.
  - The leachate storage lagoons/tanks section of the plan needs to be updated to reflect the current operational status. Included in this section, should be a description of the odor control systems in place and the monitoring conducted to ensure the systems are operating properly.
  - The Ineffective Cover Material section should be updated to include the periodic testing of the cover material that is conducted as a result of the March 29, 2024 Consent Order and Agreement.
  - In Exhibit C of the NMCP, the prevention of odors from the leachate storage lagoons should be updated to include the use of sulfur reducing additives to the leachate.
  - The “SEM Evaluation Process” should be renamed to “Enhanced Surface Monitoring Evaluation process” and the definition provided. The opening paragraph should reference that the monthly active area monitoring and the well monitoring was implemented under KSL’s enhanced surface monitoring procedures. “Active Area” should also be defined.
  - In Exhibit G of the NMCP, item 15 should also include consideration of horizontal gas collection along haul roads in areas of intermediate cover. Please ensure that the NMCP includes all current mitigation measures currently being implemented.

- Please reevaluate the maximum acreage of intermediate cap that can be properly managed for odor control and leachate management.
  - Currently KSL has proposed to maintain intermediate capped areas to less than 50 acres. Please reevaluate to minimize the maximum area of intermediate cap particularly to minimize potential offsite landfill gas odors.
  - This “maximum acreage of intermediate cap” can exclude any areas where rain tarp has been installed directly on top of protective coverage as long as appropriate measures are in place to minimize the potential of landfill gas migration into these areas through the leachate conveyance piping and rain tarp/intermediate cap interface.

## Air Quality

- PADOH and ATSDR Health Consultation Report
  - On December 12, 2025 KSL submitted an updated air monitoring Sampling Plan. This plan is currently under review by DEP and Pennsylvania Department of Health. KSL should perform another round of comprehensive air monitoring once the updated air monitoring Sampling Plan is approved.

Please submit a response within 60 calendar days.

If you believe that any of the items stated is not significant, instead of submitting a response, you have the option of asking the DEP to decide based on the information that you have already made available. If you choose this option, you should explain and justify how your current submission is satisfactory. Please keep in mind that if you fail to respond, your application may be denied.

Should you have any questions, please contact Bradley Lester at (570) 820-4841.

Sincerely,

*David F. Matcho*

David F. Matcho, P.E.  
Environmental Engineering Manager  
Waste Management Program

cc: Dunmore Borough (w/enc.) email: [greg.wolff@dunmorepa.gov](mailto:greg.wolff@dunmorepa.gov).  
Throop Borough (w/enc.) email: [lcimini@throopboro.com](mailto:lcimini@throopboro.com)