pennsylvania
DEPARTMENT OF ENVIRONMENTAL
PROTECTION

June 3, 2021

Keystone Sanitary Landfill, Inc.
c/o Mr. Dominick DeNaples, Jr, Site Manager
249 Dunham Drive
Dunmore, PA 18512-0249

Re: Major Permit Modification
Phase III Site Development
Keystone Sanitary Landfill, Inc.
Dunmore & Throop Boroughs, Lackawanna County
Facility I.D. # 101247
APS ID# 860390; AUTH ID# 1057908

Dear Mr. DeNaples:

Your application for a major permit modification for the Phase III Site Development (Phase III Expansion) is hereby approved. This approval is based on the Department of Environmental Protection's (DEP or Department) review of information in the application entitled "Major Permit Modification – Phase III Site Development," supplementary information submitted during the review process, and public comments received. The application was received by DEP on March 20, 2014. The application was prepared and certified by CECO Associates. Supplementary information was received on September 30, 2014 and November 7, 2014.

Environmental Assessment Process (EAP) review letters were issued on October 13, 2015 and May 25, 2017. Responses were received on May 17, 2016 and August 23, 2017. Technical deficiencies were identified in the final EAP review document and supplemental information was received in response on March 27, 2020. Technical deficiency letters were issued on September 8, 2020 and January 26, 2021. Responses to the deficiency letters were received by the Department on November 25, 2020 and March 19, 2021.

This major permit modification caused an increase in the facility's bonding. The revised bond amount is $48,745,352.

Enclosed as part of this approval is a permit modification Form 13-A. The conditions stated on the enclosed Form 13-A modify, replace, and/or add permit conditions regarding your current operating permit. All other items and conditions from your permit shall remain in full force and effect. A comment-response document was completed by DEP as well. This comment-response document is included as an attachment to the Form 13-A.

Previously, DEP completed its review of the EAP for the Phase III Expansion in July 2019. Information received after July 2019, as part of the technical review of the expansion application, has resulted in changes to the proposed project. DEP has updated the EAP document to reflect these changes. The updated EAP document is enclosed with this letter.

Keystone Sanitary Landfill will also need to obtain an Air Quality Plan Approval and a 25 Pa. Code Chapter 105 permit for this project.

Any person aggrieved by this action may appeal the action to the Environmental Hearing Board (Board) pursuant to Section 4 of the Environmental Hearing Board Act, 35 P.S. § 7514, and the Administrative Agency Law, 2 Pa.C.S. Chapter 5A. The Board's address is:

Environmental Hearing Board
Rachel Carson State Office Building, Second Floor
400 Market Street
P.O. Box 8457
Harrisburg, PA 17105-8457

TDD users may contact the Environmental Hearing Board through the Pennsylvania Relay Service, 800-654-5984.

Appeals must be filed with the Board within 30 days of receipt of notice of this action unless the appropriate statute provides a different time. This paragraph does not, in and of itself, create any right of appeal beyond that permitted by applicable statutes and decisional law.

A Notice of Appeal form and the Board's rules of practice and procedure may be obtained online at http://ehb.courtapps.com or by contacting the Secretary to the Board at 717-787-3483. The Notice of Appeal form and the Board's rules are also available in braille and on audiotape from the Secretary to the Board.

IMPORTANT LEGAL RIGHTS ARE AT STAKE. YOU SHOULD SHOW THIS DOCUMENT TO A LAWYER AT ONCE. IF YOU CANNOT AFFORD A LAWYER, YOU MAY QUALIFY FOR FREE PRO BONO REPRESENTATION. CALL THE SECRETARY TO THE BOARD AT 717-787-3483 FOR MORE INFORMATION. YOU DO NOT NEED A LAWYER TO FILE A NOTICE OF APPEAL WITH THE BOARD.

IF YOU WANT TO CHALLENGE THIS ACTION, YOUR APPEAL MUST BE FILED WITH AND RECEIVED BY THE BOARD WITHIN 30 DAYS OF RECEIPT OF NOTICE OF THIS ACTION.

If you have any questions, please contact me at (570) 826-2201.

Sincerely,

Roger Bellas
Environmental Program Manager
Waste Management Program

cc: Dunmore Borough (w/enclosure)
Throop Borough (w/enclosure)
Lackawanna County (w/enclosure)
Lackawanna County Planning Commission (w/enclosure)
LaBella Associates (w/enclosure)

ER-WM-38; Rev. 8/86

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

FORM NO. 13-A
MODIFICATION TO SOLID WASTE DISPOSAL AND/OR PROCESSING PERMIT

Under the provisions of Act 97, the Solid Waste Management Act of July 7, 1980, Solid Waste Permit Number 101247 issued on (date original permit was issued) May 23, 1990 to
(permittee) Keystone Sanitary Landfill, Inc.
(address) 249 Dunham Drive
Dunmore, PA 18512

is hereby modified as follows:

1. This permit modification is being issued pursuant to the Pennsylvania Solid Waste Management Act of July 7, 1980 and the Municipal Waste Management Regulations effective September 14, 2002.

2. This major permit modification is based on the information in the application package received by the Department on March 20, 2014 entitled "Major Permit Modification – Phase III Site Development" and supplemental information. The application was prepared by CECO Associates, Inc. and includes the following documents:

Volume 1
PaDEP Permit Major Modification Checklist
General Information Form
Form A - Application for Municipal or Residual Waste Permit
Form B – Professional Certification
Form B1 - Application Form Certification
Form C1– Compliance History Certification

Volume 2
Form D – Environmental Assessment Process for Municipal Waste Management Facilities

Volume 3
Form E – Contractual Consent of Landowner
Form F – Soils Information – Phase I
Form G(A) – Air Resources Protection
Dust Emissions Estimate and Control Plan
Form G(B) – Air Resources Protection
NMOC Emission Estimate and Control Plan
Form H – Revegetation
Form I – Soil Erosion and Sedimentation Controls
Form J – Soils Information – Phase II
Form K – Gas Management

Volume 4
Form L – Contingency Plan
Form X – Radiation Protection Plan
Form 1 – Facility Plan

Form 2 – Map Requirements – Phase I Municipal Waste and Construction/Demolition Waste Landfills
Form 3 – Map Requirements – Phase II
Form 6 – Geologic Information – Phase I

Volume 5
Form 7 – Hydrogeologic Information – Phase I
Form 8 – Municipal Waste Landfill Initial Ground Water Background Analysis – Phase I

Volume 6
Form 11 – Mineral Deposits Information – Phase I
Form 12 – Alternate Water Supply
Form 14 - Operation Plan – Phase II
Form 18 – Water Quality Monitoring System – Phase II
Form 24 – Liner System – Phase II

Volume 7
Form 25 – Leachate Management – Phase II
Form 28 – Closure
Form 45 – Protection of Capacity
Form 46 – Relationship Between Municipal Waste Management Plans and Permits
Form 54 – Background Meteorological Monitoring

Volume 8
Form 11 – Part I Appendices
Part II Keystone/Dunmore Settlement Analysis

Volume 9
Form 11 – Part III Consolidation Settlement Due to Fill Weight on Unconsolidated Materials Between Subgrade and Top of Rock.

Supplemental Information was received on September 30, 2014, November 7, 2014, May 17, 2016, August 23, 2017, March 27, 2020, November 25, 2020, and March 19, 2021.

3. The permittee shall, within 90 days of the issuance of this permit, provide to the Department two (2) copies and one (1) electronic copy of the final comprehensive application, including full size drawings and revisions in their correct sections.

4. KSL is permitted to use ClosureTurf as a temporary cover material during the winter or non-growing months to provide visual and aesthetic enhancement. However, to use ClosureTurf to supplement viewshed enhancements for both temporary and permanent cap installations, KSL shall obtain an approved minor permit modification from the Department.

5. At any given time, the amount of uncapped portion of the active area shall not be greater than 65.35 acres.

6. KSL shall maintain an on-site soil stockpile reserve of no less than 176,210 cubic yards to be used for final cover construction.

7. Construction of the facility shall be in accordance with the approved landfill sequencing

plans (drawing numbers 12 through 34b). A minor modification application is required in order to request to deviate from these sequence plans.

8. The permittee shall complete stage II (Isolation and Metering of Keystone/Dunmore landfill leachate flows) as per approved permit modification number 101247-A185 to upgrade leachate collection systems within 1 year of the issuance of the permit.

9. The permittee shall notify the Department upon commencement and completion of each phase of construction listed below. The completed phases of construction shall be certified using the Department's Form 37 – Certification of Facility Construction Activity submitted by a registered Professional engineer.

   The construction certification phases include the following:

   a. Construction of each stage of the Phase III that includes construction of a new liner system in the following construction segments:
      1. Construction of subbase,
      2. Construction of liner and leachate detection zone,
      3. Construction of protective cover and leachate collection system.
   b. Construction of any new ground water monitoring wells
   c. Construction of the gas migration monitoring wells that are included in the approved Subsurface Gas Probe Monitoring Plan
   d. An annual cap certification

10. The Form 37 requirements for each Pad for disposal of waste including but not limited to the installation of access roads; installation of temporary and permanent capping, as shown on the Pad Construction drawings; installation of erosion and sedimentation, landfill gas, and leachate mitigation systems and other controls as detailed for each pad.

11. A detailed fill and closure schedule for Pad 16 (closure areas 16A through 16E) shall be submitted prior to Cell 15 construction to include timeframe associated with each closure area.

12. Installation of Temporary Cap will meet the requirements of final cap including liner thickness, drainage layer, two (2) feet of cover soil and vegetation.

13. Monitoring well investigations shall be performed on the following wells: MW-3AD, MW-5AD, MW-6AD, MW-8AD, MW-9AD, MW-11AD, MW-12AD, MW-13AD, MW-14AD, MW-15AD, MW-16AD, MW-17AD, MW-19ARD, MW-22AD, MW-23AD, MW-24AD, MW-25AD, MW-26AD, MW-27AD, MW-28AD and MW-30U. MW-32D and MW-33D will be included if these wells remain in-place during the investigation period. The investigation shall include but not limited to verifying casing and well depth, casing and screen integrity and groundwater characteristics as needed. Reasonable maintenance or repairs with Department involvement shall be made as needed. The work shall be conducted within a 6-year time-period, beginning 6 months after permit expansion approval, with 3-5 wells being investigated every year. Details on the work performed shall be provided in the annual quality evaluation of groundwater, leachate and leachate detection flow.

14. Well(s) installation investigation, in the area of Basin 6, shall be conducted to determine if a

structural component of the bedrock orients regional groundwater aquifer flow onto the landfill property. If the regional groundwater flow in this area does return to the property, monitoring wells MW-25AD and MW-19ARD will monitoring the aquifer. If the regional groundwater does not flow onto the landfill property a new well shall be installed. The investigation shall also determine if the Dunmore #3 coal seam is present and its orientation. A Mine Drainage Flow well shall be installed, in the area of Basin 6, if the Dunmore #3 is present in the area. Well(s) installation shall precede construction of Pad 12a/12b allowing for one (1) year of quarterly background quality data to be obtained.

15. An updated stand-alone water quality Sampling and Analysis Plan shall be submitted within 60 days following installation of monitoring wells MW-52D and MW-53D. The plan shall be updated every 5 years. The plan shall include, but not be limited to the following:

    a. Monitoring point location map with groundwater contours (regional and mine drainage)
    b. Well construction logs
    c. Form 18 for each monitoring well
    d. Sampling protocol for each well
    e. Quality control/quality assurance protocol
    f. Leachate/leachate detection sampling location points and protocol

16. An annual groundwater and leachate detection zone quality evaluation shall be submitted by June 1 of the following year. At a minimum each well shall have its leachate indicator parameters plus nitrates reviewed for increases and statistical evaluation performed where warranted. Metal (dissolved) concentration in the monitoring wells shall be reviewed for increases and statistical evaluation where appropriate. Graphs shall be provided for the leachate indicators.

17. The landfill monitoring network with this permit expansion will consists of following monitoring wells:
    MW-1AD, MW-2AD, MW-3AD, MW-4ARD, MW-5AD, MW-6AD, MW-7AD, MW-8AD, MW-9AD, MW-10AD, MW-11AD, MW-12AD, MW-13AD, MW-14AD, MW-15AD, MW-16AD, MW-17AD, MW-19ARD, MW-20AD, MW-22AD, MW-23AD, MW-24AD, MW-25AD, MW-26AD, MW-27AD, MW-28AD, MW-29UR, MW-30U, MW-31DR, MW-32D, MW-33D, MW-37D, MW-38D, MW-39D, MW-40D, MW-41D, MW-42D, MW-43D, MW-46D, MW-47D and wells to be constructed MW-52D and MW-53D.

    Compliance wells for the lagoon area groundwater degradation are MW-49D and MW-50D.

18. As the expansion moves forward, the following wells will be eliminated: MW-20AD (Pad 2 construction), MW-33D (Pad 6 construction), MW-31DR and MW-32D (Pad 13 construction) and MW-10AD (Pad 15 construction). Well abandonment protocol shall be coordinated with and approved by the Department geologist three months prior to Pad development.

19. Groundwater, leachate, and leachate detection zone analytical data completed for the site during a quarter shall be submitted to the Department within 15 days after completion of laboratory reporting.

20. In conjunction with the odor mitigation practices approved in the Phase II Western Boundary Adjustment Permit Modification issued on June 10, 2013 and currently being utilized, KSL shall also implement additional odor mitigation practices contained in the approved Nuisance Minimization and Control Plan (NMCP) submitted as part of the Phase III permit application. These measures include, but are not limited to:

    a. For intermediate slopes in place for 6 months or upon the completion of the initial sixty-foot lift, whichever comes first, KSL will initiate enhanced surface monitoring on these slopes. Evaluation of the results of this monthly surface monitoring will be evaluated to determine if additional gas mitigation efforts need to be implemented as per the NMCP. (Mitigation measures include, but are not limited to the addition and compaction of clay like soils, adjustments to existing gas collection devices and/or construction of additional gas collection devices, prompt mitigation of any leachate break outs, installation of geosynthetic cap, etc.)

    b. When intermediate slopes are in place for twelve months, KSL will deploy temporary geosynthetic cap that meet closure cap standards including cover soils and vegetative stabilization.

21. KSL shall implement the approved Ambient Air Monitoring Plan. The plan includes an initial one-year study that consists of the collection of air monitoring data from six air monitoring stations located around the perimeter of the site. Four quarterly sampling events will be conducted to ensure sampling is representative of all operating and weather conditions. This one-year study will be completed within 22 months of the issuance of this permit. Within six months of completion of this study, KSL will submit a health risk assessment of the data obtained. Additional health studies will be conducted every five years for the life of the permit. This plan was developed to address recommendations contained in the 2017 PADOH Health Consultation.

22. KSL shall implement the approved Subsurface Gas Probe Monitoring Plan. The plan consists of four gas probe monitoring locations along the southern perimeter of the site. The gas probes will be monitored quarterly as per the monitoring plan for landfill gas constituents. The monitoring plan needs to be in place at least six months prior to the commencement of construction of Phase III. This plan was developed to address recommendations contained in the 2017 PADOH Health Consultation.

23. The permittee shall continue to contract with the U.S. Department of Agriculture (USDA), APHS Wildlife Services, PA to control the bird population at the landfill and plan assistance, regarding wildlife conflicts and management issues, for the duration of the Phase III expansion. The permittee shall submit quarterly reports to the Department summarizing the vector control activities.

24. All disturbed areas not at final grade which will be without significant activity for more than twenty (20) days shall be seeded with temporary seed Mix #1, as described in the Form H. Final cover shall be seeded with seed Mix #2.

25. Permit renewal: A permittee that plans to dispose of or process municipal waste after the expiration of the term set under § 271.211 (relating to term of permits) shall file a complete application for permit renewal on forms provided by the Department. The complete

application for a disposal facility at least 1 year before the expiration date of the permit term. The application shall also include, at a minimum:

a. A clear statement of the remaining permitted capacity of the facility, with documentation, in relation to the requested term of the permit renewal.
b. Reevaluation of the construction schedule and update to dates as necessary
c. Soil balance calculations
d. Traffic study including any need to import soil during the renewal period,
e. Reevaluation of the NMCP, PPC, Traffic control plans
f. Reevaluation of leachate generation rates

26. The permittee shall provide in each annual operations report submitted a breakdown of the approved benefits realized for this expansion along with a description addressing details for each. The approved benefits are as follows:

    a. Recycling and cleanup programs
    b. Purchase of local goods and services
    c. Continued employment
    d. Pennsylvania disposal fees
    e. Tax revenue
    f. PADOT Adopt A Highway Program
    g. Benefits associated with Host Agreements

27. The permittee shall conduct a noise study annually and provide the results in each annual operations report. The permittee shall also include a comparison to the 2016 noise study along with details of the noise mitigation program instituted at the site.

28. The permittee shall have additional landfill gas beneficial use agreement(s) in place and operational within 2 years.

29. The permittee shall implement the Property Value Protection Plan (PVPP) as described in the approved application.

30. The permittee shall, within 90 days of the issuance of this permit, provide to the Department two (2) copies and one (1) electronic copy of the final comprehensive application, including full size drawings and revisions in their correct sections.

This modification shall be attached to the existing Solid Waste Permit described above and shall become a part thereof effective on (date) June 3, 2021.

FOR THE DEPARTMENT OF ENVIRONMENTAL PROTECTION

Comment-Response Document

Keystone Sanitary Landfill
Phase III Site Development
Permit No. 101247
Dunmore and Throop Boroughs, Lackawanna County
July 18, 2016 Public Hearing

Prepared by:
Pa. Department of Environmental Protection
Northeast Regional Office
Waste Management – Facilities Section

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

PROJECT DESCRIPTION

The Keystone Sanitary Landfill (KSL or Keystone) is an existing municipal waste landfill located at 249 Dunham Drive in Dunmore and Throop Boroughs, Lackawanna County. The site is comprised of three closed disposal areas (Keystone/Dunmore, Logan and Tabor) and a current active Phase II disposal area. The Keystone/Dunmore disposal area is the oldest and is unlined. The immediate surrounding area consists of highway (Interstate 81 and Route 6) to the west, south and east; and commercial areas to the north and northwest. The area beyond the highway to the south and east is wooded, and a residential area is located immediately beyond the highway to the southwest. On March 20, 2014, the Department of Environmental Protection (DEP or the Department) received the application for KSL's Phase III expansion project. The expansion area is located within the current permit boundary and involves expanding over and between existing fill areas.

In their application, KSL originally proposed to increase the height of the landfill by 165 feet. As the first step in the review process, DEP reviewed the Form D – Environmental Assessment, and portions of the application that were relevant to the evaluation of harms or benefits. On October 13, 2015, DEP issued the first Environmental Assessment review letter. KSL's response to this review letter was received by DEP on May 17, 2016. The response included a significant reduction in the proposed final height of the expansion and a reduction in volume and design life of the proposed expansion. KSL modified the project to lower the peak elevation to that of the previously permitted Phase II height (1,585 feet). The majority of disposal will occur in the valley between the existing disposal areas. The revised proposal expanded KSL's life-span by approximately 42 years, based on its current permitted average daily volume. The project does not propose to increase the daily maximum or quarterly average waste acceptance rates for the landfill.

A public hearing regarding the Phase III application was held on July 18, 2016. The Municipal Waste regulations require DEP to prepare a summary of the written and oral comments submitted at a public hearing and provide responses to the comments. This Comment-Response Document summarizes public comments received by DEP, including public comments received at the July 18, 2016 Public Hearing and provides DEP's responses to those comments.

Additionally, since the application has been submitted, DEP has received over 1,500 public comments regarding the proposed expansion. All commenters are individually listed in this document. Comments/concerns which were not raised as part of the hearing comments have also been included and responded to. In some cases, comments were received that may not necessarily be applicable to the KSL expansion specifically, but rather relate to health, safety and environmental concerns in a more general sense. In other cases, individual comments expressed concerns which DEP has summarized in order to provide a comprehensive response to the individually expressed concerns on related issues. Regardless, DEP has considered all comments received. This comment response document reflects that consideration.

Comments both for and against KSL's expansion were received by DEP. Over 1,000 unique entities or individuals opposed to the expansion provided Comments; some of these commentors sent correspondence multiple times to DEP citing different concerns. Many of the contacts received in opposition to KSL's expansion, approximately 121, were in a form letter format. This form letter cited concerns regarding negative impacts to health, property values, local drinking water, groundwater, radioactivity, mine subsidence, stormwater, gulls, and odors. Over 400 additional contacts, citing general opposition to the landfill without substantive comments, were received. Also received was a letter from Friends of Lackawanna (FOL) that contained hand-written comments from over 125 individuals and a printed log of over 700 individuals that commented through FOL's online petition. DEP also received numerous letters from local, state, and federal legislative representatives voicing their concerns and the concerns of their constituents.

DEP also received over 125 contacts from unique entities or individuals supporting KSL's Phase III expansion. Most contacts indicated that KSL has been a good neighbor, caused little to no negative impacts to them, supports local businesses, provides employment to local residents and provides a significant tax break to residents of Dunmore and Throop Boroughs. Included as support of the KSL Phase III expansion was a petition with over 1,000 signatures of those supporting KSL. These signatures were not individually recorded by DEP.

COMMENTS AND RESPONSES

Relocation of Keystone/Dunmore Waste

1. **Comment:** DEP should ensure the waste in the Keystone/Dunmore area is properly tested before it is excavated and removed.

   Response: KSL is no longer proposing to relocate the waste from the Keystone/Dunmore area. The approved expansion permit includes construction of portions of the Phase III expansion area over top of the capped Keystone/Dunmore area. While this eliminates the concern of testing this waste before it is excavated and relocated, it presented other concerns that have been addressed by KSL. DEP requested that KSL evaluate what, if any, adverse effect leachate, from waste left in place in this area, could have on the groundwater. KSL commissioned a subsurface investigation of the moisture in the waste proposed to remain in the Keystone/Dunmore landfill area using the sonic vibratory technique. The results of the investigation show no indication of saturated waste at depth in the borings. Overall, the results of KSL's investigation indicated that saturated conditions are not prevalent within the disturbed material beneath Keystone/Dunmore. In addition, KSL will cap the remaining waste in place by constructing the Phase III liner system over top of the Keystone/Dunmore area. KSL has shown, and the Department concurs, that the presence of liquids in the Keystone/Dunmore landfill area are minimal and that expulsion of leachate from the remaining waste should not be an issue.

Environmental Impact

2. **Comment:** No long-term study on air, soil or water impacts from the landfill has ever been completed.

   Response: The Health Consultation completed by the Pennsylvania Department of Health (PADOH) and the Agency for Toxic Substances and Disease Registry (ATSDR), only considered air sampling conducted over a three-month period. The Department recognizes the limited duration of the sampling period, and for that reason, has attempted to address the recommendations spelled out by the 2019 PADOH and ATSDR in their Health Consultation Report:

   PADOH/ATSDR Health Consultation recommendation number 2:

   (2) consider a fence line air monitoring program that includes publicly accessible real time results for selected limited analytes as part of the landfill's future permit requirements

   The DEP understands the limitations of the air monitoring that was conducted in support of the Health Consultation and has taken into consideration the recommendations included in the report. It is for this reason that DEP requested KSL

develop an air monitoring plan for the site as part of the expansion application. This plan will be implemented as conditioned in the Phase III expansion permit.

Regarding studies of groundwater and soil, please note, the PADOH and ATSDR did not believe that groundwater was a pathway that needed to be evaluated. See comment from the Health Consultation below:

> ***Eliminated Exposure Pathway***
> *Ingestion and absorption of landfill contaminants through groundwater and leachate water:*
> *Residents in Dunmore and Throop Boroughs are connected to the public drinking water system. Groundwater that may be impacted by contamination from the landfill is not being accessed for the public drinking water source. Exposure from the landfill leachate water is also eliminated based on information from PADEP and from our site visits, because it appears that people do not have access to leachate on the landfill property.*

That said, the study of groundwater is continuous and ongoing. The DEP has over 30 years of groundwater data that has been collected from the groundwater monitoring wells around Keystone Landfill. KSL, at a minimum, collects samples from the monitoring wells quarterly. The DEP, at least annually, collects samples from these same wells. The results from these sampling events are evaluated regularly to ensure the landfill is not posing a risk to the environment or the community. The evaluation of this data is what led DEP to cite KSL for a release of leachate from a leaking leachate storage lagoon. While this data did show an impact to groundwater in close proximity to the leaking lagoon, DEP's regular review of this data does not indicate that the landfill poses any health risk to the community. DEP's review of the data has also shown that the issue with the leachate lagoon, which caused impact on the groundwater in that area, has been resolved. Special conditions that are specific to this project were added to the permit to ensure the groundwater is protected.

3. **Comment:** KSL, DEP and the Sewer Authority cannot handle the monitoring of an expansion of this size/duration.

   Response: DEP disagrees with this statement and believes that KSL, DEP, and PA American Water Scranton Wastewater are capable of properly monitoring the operations that will be conducted at KSL under the Phase III expansion permit. Specific aspects of the monitoring of KSL are addressed in additional responses to other comments.

4. **Comment:** DEP does not monitor for compliance, but rather they rely on the permittee to monitor.

   Response: While KSL has many self-monitoring requirements under its permits, DEP monitors compliance at the site very closely. On average, DEP staff are on site more than twice per month. These site visits include visual observation of the

operations and records reviews. These inspections also include periodic monitoring for methane at the surface of the landfill and groundwater sampling. Many of these inspections are conducted unannounced. Along with these regular inspections, DEP staff conduct regular offsite observations of the landfill that include monitoring odors, litter, dust, and visible emissions.

5. **Comment:** Recently, a Grand Jury report investigating the DEP's oversight of the fracking industry concluded: "...officials did not do enough to properly protect the health, safety and welfare of the thousands of Pennsylvania citizens who were affected by this industry" that "government institutions often failed in their constitutional duty to act as a trustee and guardian "of all the people," as Article 1, Section 27 [of the Constitution] provides" and "We believe some DEP employees saw the job more as serving the industry than the public." And though KSL's expansion is a different industry, the conclusions of the Environmental Hearing Board ("EHB") reached in 2017 are eerily similar when it ruled on how the DEP regulated KSL. It found that DEP has not "consistently exercised vigorous oversight of the landfill consistent with its regulatory and constitutional responsibilities with just as much concern about the rights of the landfill's neighbors as the rights of the landfill."

   Response: DEP does not find the reference to the Grand Jury report relevant to the review of the KSL application or oversight of the landfill. DEP carefully oversees and monitors KSL's operation and has taken appropriate measures to require KSL to correct issues in the past in accordance with Pennsylvania law and its Constitution. In doing so, DEP has demonstrated its ability to properly monitor the operations that will be conducted at KSL under the Phase III expansion permit. Regular inspections of the landfill are one of the critical aspects of DEP's oversight. DEP inspectors are physically at the landfill at least monthly to conduct unannounced compliance inspections. All of these inspections involve the observation of all activities and operations, as well as the review of records concerning the operation and maintenance of the landfill. Prior to every unannounced inspection and periodically between site inspections, DEP inspectors monitor the perimeter of the landfill to ensure odor and dust mitigation efforts are being effectively implemented. Periodically, DEP inspectors conduct surface monitoring events to ensure proper landfill gas collection. DEP engineering staff conduct monthly announced inspections to monitor construction and operation activities at the landfill. DEP professional geologists regularly visit the site to observe mine mitigation efforts and groundwater monitoring events. At a minimum, DEP staff conduct groundwater monitoring annually.

   With regard to the June 25, 2020 Report 1 of the Forty-Third Statewide Investigating Grand Jury, DEP directs the commenter to the agency's full response to this report: **DEP Response to Grand Jury Report**. (https://files.dep.state.pa.us/Newsroom/NewsroomPortalFiles/2020/DEPResponseReport1to43dStatewideInvestigatingGrandJury-May72020.pdf)
   It is important to understand that the Grand Jury Report represents the observations and opinions of the grand jury after a limited presentation of information related to

the historical administration of the Oil and Gas Program. The Grand Jury Report does not constitute factual findings of a court or administrative tribunal about the current DEP program administration following the presentation of evidence in accordance with court rules and due process.

6. **Comment:** One commenter specifically noted: "Keystone landfill makes everything look great and copacetic for the dog and pony show. But when all the eyes are not watching everything goes back to business as usual which is very questionable. I go there on a regular basis for my job, I see huge holes dug in the garbage on a daily basis and tanker trucks dumping chemicals into the holes then it get filled in with garbage. I've seen chemicals dumped in sewer manholes. If they see you taking pictures they come and take your phone and delete the pictures. The new truck wash bay has only been open one day the day that DEP was there to see it operate. The night DEP was called to Drinker Place because of the over powering chemical smell I was there DEP took samples of the chemicals in the sewer line then DEP was taken to the start of the line which is on Reeves St. next to the landfill. DEP tested the leachate but not the chemicals that the landfill brings in from the fracking companies. Don't be fooled by what you see what goes on behind the scenes is dangerous to the community and to the lives of the people in this area. The landfill is slowly killing us."

   Response: While DEP does not know the dates or specifics of this commenter's observations as expressed, DEP is aware of the way KSL is authorized to handle special loads and can address it here in response. There are many types of waste for which KSL will dig a pit in the working face to properly handle. Some loads involve wastes that are extremely odorous, other loads may contain asbestos. These loads are dumped into pits in the working face to alleviate odors or to eliminate the potential of workers exposure to asbestos. The landfill also has approval to dispose of some of its leachate treatment plant liquid wastes as well. KSL is only required to utilize the truck wash to control the tracking of mud onto Dunham Drive. If mud/dirt is being contained to KSL's property and not creating dust problems, KSL is not required to utilize the truck wash. DEP conducted an exhaustive review in coordination with the Scranton Sewer Authority in an attempt to determine the source of the material that caused odors to emanate from the sewer lines on the night of September 24, 2015. Sample results indicated that the substance that caused the odors was most likely a small quantity of some type of petroleum-based substance. The investigation concluded that the substance did not originate from KSL. If someone sees questionable activities at or near the landfill, they should call the DEP complaint line for prompt investigation. DEP is not aware of receiving any complaints of improper handling of wastes at KSL.

7. **Comment:** There is no consideration for the cumulative impacts of other pollution sources in the area.

   Response: DEP understands that some of the public comments related to cumulative impact are associated with the concern that they are already subject to a number of environmental impacts caused by other activities and facilities, both past and present, that impact health, safety and the environment in the areas situated near or around Keystone Landfill. Comment at the public hearing raised impacts related to Northeastern Pennsylvania's long history of extractive coal mining in the past and natural gas development today. Other facilities mentioned in proximity to Keystone Landfill included the Marjol Battery "Superfund" site, the Invenergy power generating plant, and the fact that another landfill, Alliance Sanitary Landfill, operates nearby in Taylor Borough, all of these facilities and others already being located in Lackawanna County. While DEP does not believe that any of these past and present environmental activities and facilities are exacerbated by the operation of Keystone Landfill through its Phase III expansion, DEP recognizes the comment raised that some believe that they either already have or currently shoulder enough incursion to their community and the environment.

   Pollution sources in Pennsylvania, including KSL, are comprehensively regulated under multiple environmental statutes and regulations administered by the Department in addition to the waste authorization that is the subject of this public comment opportunity. Consideration of the cumulative impact of various pollution sources, is integrated into the Department's comprehensive regulation and oversight. For example, the water and air programs, which apply to this landfill expansion, regularly assess and reassess the quality of the surface water and air resources in Pennsylvania, taking into account the impact of pollution sources on these resources. The limitations established in regulations and in permitting actions such as the one at issue are based upon this ongoing assessment process.

   Consideration of cumulative impacts for permitting of the expansion was also accomplished through the permit coordination process. As to Keystone Landfill itself, the landfill has been in operation and held permits issued by DEP for decades. KSL has an Air Quality Title V permit, an industrial stormwater discharge permit, and a mining permit. KSL must also obtain a Chapter 105 permit for a wetland disturbance and an Air Quality Plan Approval for the expansion. All of these permits are evaluated to ensure compliance with regulatory standards which are protective of the environment and the community.

   In addition to its initial waste permitting of the landfill for Phases I (in 1987) and II (in 1997) a volume increase (in 2012) and permit renewals (in 2005 and 2015), DEP has reviewed and approved a number of permit modifications for KSL over the years. These permit reviews often raise many of the same concerns of impacts raised here now with respect to the Phase III Expansion. DEP's awareness of these issues and

knowledge of KSL's operations has been considered in its evaluation of the Phase III Expansion decision. DEP conducted a "harms-benefits" environmental assessment analysis required by DEP's Municipal Waste Regulations at 25 Pa. Code §S 271.126-127. DEP's environmental assessment policy and regulatory review related to it, are similar to and stem from concepts existing in Article I, Section 27. Keystone Landfill has now been the subject of 3 "harms-benefits" reviews required by regulation, one in 1997, 2012 and 2016. Most recently, a review of many of the same concerns of impacts discussed with respect to the Phase III Expansion were considered in a decision to grant a renewal of remaining airspace/capacity under KSL's Phase II permit.

In addition to the waste permit, KSL also must obtain an authorization through the Air Quality permitting process. KSL currently operates under a Title V Operating Permit. EPA has established National Ambient Air Quality Standards (NAAQS) pollutants, which are called "criteria" pollutants, for the protection of public health and welfare. Primary NAAQS provide public health protection, including protection for the health of "sensitive" populations such as asthmatics, children, and the elderly. Secondary NAAQS provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings. DEP maintains monitoring stations across the State that continuously monitor for certain criteria pollutants to show that the area being monitored is in attainment with the NAAQS. One of these stations is located close to KSL, near Marywood University and historically has verified compliance with NAAQS. Protection of the NAAQS is maintained, in part, through the Department's Best Available Technology (BAT) requirements during the permitting process. Plan approval applicants, including those for minor modifications such as what is being proposed at KSL, are required to show that emissions will be the minimum attainable using BAT (*See* 25 Pa. Code §§ 127.1 and 127.12) and address greenhouse gas emissions. Adherence to these BAT requirements, as well as the other requirements in the Plan Approval and applicable state and federal regulations, will help ensure that the modifications at KSL do not have a significant impact on regional air quality.

There is also a comprehensive environmental assessment that applicants must prepare and submit in support of water obstruction and encroachment applications under 25 Pa. Code Chapter 105, which the KSL has done here. This assessment includes consideration of cumulative impacts.

Consultation, coordination and discussion with other programs within DEP such as Safe Drinking Water, Air Quality, Environmental Clean-up and Brownfields, Bureau of Abandoned Mine Reclamation, Clean Water Program, Waterways and Wetlands and Oil & Gas indicate that the expansion will not cause unreasonable degradation or diminution of the environment.

8. **Comment:** DEP does not establish baseline measurements of water, air, or noise.

   Response: Baseline standards for groundwater at KSL were established over 30 years ago. Every time KSL has expanded over the years, the groundwater monitoring plan has been evaluated to determine its efficacy. Many times, it is found that additional ground water monitoring wells need to be added to ensure any contamination can be detected if the landfill has problems. Any new wells need to be constructed and sampled for at least four quarters before disposal in new expansion areas can commence. This establishes baseline groundwater data.

   DEP maintains monitoring stations across the State that continuously monitor for certain criteria pollutants to show that the area being monitored is in attainment with the NAAQS. The closest station to KSL is near Marywood University.

   In 2016, KSL conducted a study of noise levels attributable to KSL. The Noise Impact Assessment concluded the landfill is not significantly affecting noise levels at the nearest receptor sites. Special conditions that are specific to this project were added to the permit to ensure noise impacts, if present, will be identified and addressed. A Noise Study will be performed annually during the Phase III operations and any variations from the noise levels in the 2016 Study, attributable to KSL, will be included in the Annual Operations Report along with the details of the mitigation program instituted by KSL. KSL also employs the following measures to control potential off-site noise: prohibit use of "jake brakes", vegetative plantings, and annual noise monitoring inspections.

9. **Comment:** KSL has a compliance history with numerous documented deficiencies, violations, and engineering shortcomings.

   Response: The Department conducted a thorough evaluation of KSL's compliance history as well as a review of KSL's related entities' compliance histories. This evaluation concluded that KSL and its related parties have not shown a lack of intent or ability to comply with Department regulations. DEP determined that Keystone Landfill and/or its related parties did not hold a history of compliance failure such that the applicant demonstrated a "lack or ability or intent to comply" as DEP understands that term pursuant to Section 503 of the Solid Waste Management Act, 35 P.S. § 6018.503.

   Keystone Landfill has been subject to DEP oversight and regulation for more than 30 years now. Inspectors employed by DEP conduct unannounced inspections of the landfill at least 12 times per year and as needed; an engineer conducts monthly inspections to monitor critical components of landfill construction; a hydrogeologist visits the landfill to observe and/or sample as needed; and many others employed by the Department are extensively familiar with the facility's operations and compliance with applicable environmental requirements. Moreover, DEP's consideration of

compliance history includes DEP's familiarity with Keystone and its operations day over day, year over year. While KSL has had some occasions of non-compliance over that time, it is DEP's position that KSL's landfill operations are, as a general rule, well-managed and compliant, and provide a basis to support issuance of the Phase III Expansion.

10. **Comment:** DEP's continued entertaining of landfill expansions and the construction of new landfills impacts efforts for increased recycling, new recycling and composting technologies, emerging recycling markets, or the legislative will to incent or call for any or all of the above.

    Response: DEP strongly supports efforts statewide to recycle and reduce waste. However, that does not impact the permitting of a landfill to address waste disposal. Landfills providing for the correct disposal of solid waste, reduce the risk of environmental pollution to water, the soil and air, while addressing the waste disposal needs stemming from modern community and industrial development.

Odors

11. **Comment:** Odors from KSL have continued to be a complaint and have reached communities several miles away.

    Response: Odors are a potential harm for any landfill facility, particularly where the landfill is situated in close proximity to residential areas. Public comment suggests that there are frequent, even daily odors at KSL. However, DEP has not received odor complaints, nor has it otherwise confirmed odors, in such numbers as would be expected if the landfill had off-site odors on such a regular basis. DEP's experience, based on inspections and complaint investigations, is that KSL's odor mitigation has generally been successful. However, there have been occasions when there were odors detected in the vicinity of the landfill.

    According to DEP's records, there were 38 odor complaints in 2016, 12 in 2017, 116 in 2018, and 74 in 2019, 67 in 2020, and 46 as of May 18, 2021. DEP noticed an increase in odor complaints starting in mid-2018, the majority of calls coming in the month of December. In response to this increase in odor complaints, DEP initiated after-hours odor patrols. During December 2018 and January 2019, DEP conducted eight such patrols. On December 19, 2018 and January 4, 2019, DEP was able to quickly respond to multiple odor complaints. Although no odors were detected at the complainant's properties, DEP staff did observe some localized off-site odors attributable to KSL.

    DEP regulations require that landfill operators minimize and control odors through the implementation of measures outlined within a Nuisance Minimization and Control Plan (NMCP) or their permit. Numerous inspections of KSL by Department

staff did not indicate noncompliance with KSL's NMCP. The results of the odor patrols evince KSL's NMCP is effective at minimizing off-site odors.
It is noted that during the fall and winter of 2018/2019, most of the landfills in the Northeast Region experienced excessively wet weather and other weather extremes that required the implementation of measures beyond regular NMCP protocols. KSL was not immune to the difficulties facing all landfills located within the region at that time. KSL had to consider additional measures in an attempt to adequately capture the elevated amounts of landfill gas being generated at the site due to the weather extremes. DEP inspections conducted at KSL in March and April 2019 verified that the additional steps made by KSL to address the issues were effective. Some of the additional efforts that were implemented have now been incorporated into KSL's current NMCP, specifically those in the "Enhanced Monitoring Program."
Supplemental odor control measures were also added to the revised NMCP plan approved for the Phase III expansion. These measures include more surface monitoring and the increased use of temporary geosynthetic capping on intermediate slopes. There have also been special conditions developed for the Phase III permit that are unique and specific to controlling odors.

Property Values

12. **Comment:** The expansion of the landfill will negatively affect property values for homes in the vicinity.

    Response: KSL retained a Real Estate Appraiser to evaluate the performance of real estate markets in the vicinity of KSL. The evaluation concludes that proximity to KSL has not diminished the residential property values in the surrounding neighborhoods. However, recognizing the future residential property value and/or perceived property values still may be classified as a potential harm; KSL commits to implement a Property Value Protection Plan (PVPP) upon issuance of the Phase III permit modification. DEP believes that KSL has proposed adequate mitigation to address potential impacts to property values.

Stability

13. **Comment:** If the structure were to fail leachate would get into the groundwater within the mine voids and pathways for vapor intrusion could open up.

    Response: The structural integrity of the proposed Phase III landfill was fully evaluated during the technical review. DEP regulations clearly state liner and construction requirements in order to protect the environment. As such, the design of this expansion is a double lined system with leachate collection and detection. The review indicated that the landfill design met or exceeded all applicable design standards. Once landfill construction commences, KSL is required to certify all of its construction work. These certifications are reviewed by DEP staff to ensure all construction standards were met.

14. **Comment:** There is a risk of landfill slides.

    Response: As with all landfill construction projects, slope stability is addressed in the design of the project and fully evaluated by DEP during the technical review. Slope stability analysis was evaluated over the entire landfill. This includes areas of new construction and areas of construction over existing waste.

15. **Comment:** No one can guarantee that the mines will hold under the increased weight of hundreds of thousands of tons of trash. A collapse to the mine would be catastrophic to the area.

    Response: The subsidence potential for portions of the KSL site that were permitted after 1990 have already been defined. This potential has been mitigated in some areas of the proposed Phase III area in the Logan, Tabor, and parts of the Phase II disposal area by measures taken during the construction of these areas. Eventually mitigation measures will be completed for all of the Phase II disposal area, though to date it has not yet been completed for some disposal pads in the Phase II area. For the areas that had not yet been subjected to a study or mitigation, KSL provided the results of a geologic investigation to define the potential for mine subsidence and proposed mitigation measures. Based on the review of the subsidence evaluation report, boring logs, boring log videos, mine maps, discussions and consultation with DEP's Bureau of Abandoned Mine Reclamation, and follow up discussions with KSL and its consultants, the subsidence risks within Phase III have been adequately addressed and no further review is required.

Air Quality

16. **Comment:** The landfill results in residents being exposed to air pollutants and dust.

    Response: KSL conducted dispersion modeling which demonstrated that there is minimal to no impact on the ground level concentrations of fugitive particulate matter emission as a result of the proposed expansion. Onsite portable particulate matter monitoring was also conducted. The average PM10 concentration was below the 24-hour National Ambient Air Quality Standard (NAAQS). The average PM2.5 concentration was above the 24-hour NAAQS; however, based on landfill operations being limited to 12 hours or less per day, it is expected that the 24-hour onsite value would be less than the standard. A new meteorological station has been installed. The data is analyzed daily and adjustments are made to operations to minimize impacts. DEP Air Quality staff has reviewed PM2.5 data from DEP air monitoring stations located at Marywood University and Penn State Worthington Scranton campuses. This data verifies compliance with 24-hour and annual NAAQS. Any contribution KSL may have to local PM2.5 ambient levels has not led to any NAAQS violations.

Based on the Air Quality review of the air monitoring and air dispersion modeling conducted by KSL, as well as the DEP air monitoring station data, DEP does not believe current KSL operations nor the approved expansion will cause any negative impacts on ambient air particulate concentrations. Other air pollutants are addressed below.

17. **Comment:** Results of air sampling conducted in April and June 2015 found toxic chemicals present in the air. Additional testing should be conducted especially in the Sherwood Park area.

    Response: The April 1, 2019 PADOH and ATSDR Health Consultation Report concluded that chronic (long-term) exposure to the chemicals detected in ambient air near the landfill at the monitored locations is not expected to cause harmful non-cancer health effects under the landfill's current operating conditions. However, chronic exposure to benzene and formaldehyde may cause a very low increased cancer risk. Benzene and Formaldehyde are commonly found in outdoor air and the cancer risk estimates based on community measurements were typical of exposure across similar suburban/urban communities in the United States. The Consultation also concluded that acute (short-term) exposure to some of the contaminants detected in ambient air near the landfill could have caused transitory health effects for sensitive populations, such as pregnant women, children, older adults and people with respiratory disease. To address these conclusions, the consultation recommended that DEP consider a fence line air monitoring program as part of the landfill's future permit requirements to ensure that conditions do not change in the future after new operations commence in the landfill area. To address this recommendation contained in the Consultation, KSL proposed a comprehensive air monitoring program. This proposal was reviewed and approved by DEP. The comprehensive air monitoring is a requirement of the expansion permit.

18. **Comment:** Harmful gases are migrating through the coal seams and entering Dunmore homes and it has been indicated KSL is the likely source.

    Response: DEP is aware of the 1997 incident involving carbon monoxide migrating to homes in the Swinick development and the studies conducted after the incident to determine the source of the carbon monoxide. Several reviews of the 1997 gas migration incident have concluded that KSL was not the source. Furthermore, there have been no recorded incidents prior to the 1997 incident and there have been no subsequent issues in the area since. DEP does not consider the potential gas migration from the unlined disposal area as a known or potential harm of the project and is not aware of any evidence that would suggest further monitoring or investigation is needed. That said, to address this concern KSL proposed enhanced onsite underground gas migration monitoring. DEP reviewed and approved this plan. The onsite underground gas migration monitoring is a requirement of the expansion permit.

Leachate

19. **Comment:** KSL had leachate leaking into the groundwater for 13 years.

    Response: Groundwater monitoring well MW-15A, which is in close proximity to the leachate treatment plant and the leachate storage lagoons, began exhibiting issues in August 2002 with increases in the indicator parameters. Assessment was required in July 2003. Numerous investigative efforts and remedial measures were taken by KSL over the years to find and arrest the source of the MW-15A variants. Over this time, there appeared to be positive results regarding a lowering of contaminant levels in MW-15A, but ultimately none of the remediation actions resolved the issue. In 2016, DEP issued KSL a Notice of Violation for the degradation of groundwater, in the area of MW-15A. After numerous studies and the installation of additional groundwater monitoring wells, KSL was able to definitively determine that the source of the groundwater degradation was the leachate lagoons. This issue was further addressed by the EHB decision on November 8, 2017 that required KSL to submit another groundwater assessment plan as part of the remanded KSL permit renewal. KSL's remediation measure to reconstruct the lagoon liner system to address liner, pipe and/or boot leakage resolved the issue in 2017. DEP's review of data collected from other nearby monitoring wells indicates that the groundwater degradation was isolated to the area around the lagoons and areas downgradient.

20. **Comment:** Documents obtained from the City of Scranton state that there have been leachate overages from KSL. KSL's leachate puts undue stress on the sewer authority lines.

    Response: Flow of treated leachate to PA American Water Scranton Wastewater is permitted and monitored by PA American Water Scranton Wastewater. On January 2, 2019, PA American Water Scranton Wastewater issued KSL Industrial Wastewater Contribution Permit 97-007 A-1. Based on this permit, PA American Water Scranton Wastewater has determined that they can adequately convey and treat KSL's effluent at their wastewater treatment facility.

21. **Comment:** KSL's leachate should not be conveyed through the public sewer lines to the sewer plant.

    Response: Flow of treated leachate to PA American Water Scranton Wastewater is permitted and monitored by PA American Water Scranton Wastewater. On January 2, 2019, PA American Water Scranton Wastewater issued KSL Industrial Wastewater Contribution Permit 97-007 A-1. Based on this permit, PA American Water Scranton Wastewater has determined that it can adequately convey and treat KSL's effluent at its wastewater treatment facility.

22. **Comment:** Eventually all landfills fail and will leak.

    Response: The landfill design and the materials to be utilized during construction of the proposed Phase III landfill were fully evaluated during the technical review. DEP regulations clearly state liner and construction requirements in order to protect the environment. As such, the design of this expansion is a double lined system with leachate collection and detection. The review indicated that the landfill design met or exceeded all applicable design standards. Once landfill construction commences, KSL is required to certify all of its construction work. These certifications are reviewed by DEP staff to ensure all construction standards were met.

23. **Comment:** Contaminants from KSL are leaching into the Lackawanna River.

    Response: DEP's evaluation of over 30 years of groundwater monitoring data has not indicated any conditions that would result in the leaching of contaminants from KSL into the Lackawanna River, nor is DEP aware of any evidence that the Lackawanna River is being negatively impacted by KSL.

Water Quality

24. **Comment:** The landfill operation is placing the Lackawanna River at risk along with recreational activities such as trout fishing.

    Response: The groundwater monitoring in place at KSL has not indicated that landfill activities would place recreational activities along the Lackawanna River at risk. Also, KSL has appropriate erosion and sedimentation (E&S) controls in place to ensure stormwater from the landfill does not adversely affect the Lackawanna River or any of its tributaries.

25. **Comment:** The landfill is causing sediment pollution in Eddy Creek.

    Response: KSL has appropriate E&S controls in place to ensure stormwater from the landfill does not adversely affect Eddy Creek. Observations and inspections of these controls have indicated that they have been effectively controlling stormwater. KSL has proposed additional E&S controls as part of the Phase III expansion application. The proposed E&S controls have been evaluated by DEP's Waterways and Wetlands Program staff and determined to be compliant with all applicable 25 Pa. Code Chapter 102 standards.

26. **Comment:** The landfill is leaking into groundwater and the runoff likely flows to Eddy Creek. The runoff from the open source in the Phase III expansion will not be treated and will be discharged directly to the creek.

Response: The groundwater monitoring in place at KSL has not indicated that landfill activities are adversely affecting the groundwater. Also, KSL has appropriate E&S controls in place to ensure stormwater from the landfill does not adversely affect Eddy Creek. KSL has proposed appropriate E&S controls as part of the Phase III expansion. A thorough evaluation of KSL's stormwater management plan has indicated that the storm water management controls currently in place, coupled with the proposed additional controls will ensure stormwater from the landfill does not adversely affect the surrounding areas. Any stormwater that comes in contact with waste will be directed to the leachate treatment plant and be properly treated prior to discharge to PA American Water Scranton Wastewater. KSL also has an Industrial Stormwater Discharge permit that includes requirements to be protective of Eddy Creek.

27. **Comment:** A bigger landfill will lead to accelerated runoff and flooding in the area.

Response: KSL has proposed appropriate E&S controls as part of the Phase III expansion. A thorough evaluation of KSL's stormwater management plan has indicated that the storm water management controls currently in place, coupled with the proposed additional controls will ensure stormwater from the landfill does not adversely affect the surrounding areas.

28. **Comment:** The Phase III landfill expansion will negatively impact the area's drinking water supply.

Response: The communities neighboring KSL are serviced by PA American Water for their public water needs. PA American Water provides public water supply to the area, with the water supplied to the area being derived from Lake Scranton. This reservoir is nearly 2 ½ miles from KSL. That said, PA American Water does maintain a back-up water supply reservoir known as the Dunmore Reservoir Number One. Dunmore Reservoir Number One is located in close proximity to the KSL landfill, but is located upgradient based on local groundwater aquifer data. Periodic sampling of this reservoir, by PA American Water, has not indicated any concerns with the quality of water. As the local community is serviced by a public water supply and there are no known water supply wells near KSL, the operation of the landfill is not expected to have any impacts on the drinking water supply.

Health

29. **Comment:** The landfill poses a health risk to the people living in the area.

Response: Regulations and permits are developed to be protective of public health. Implementation of proposed operational controls, mitigation plans and the NMCP is adequate to protect public health. The April 1, 2019 PADOH and ATSDR Health Consultation Report concluded that "chronic (long-term) exposure to the chemicals detected in ambient air near the landfill at the monitored locations is not expected to

cause harmful non-cancer health effects under the landfill's current operating conditions. However, chronic exposure to benzene and formaldehyde may cause a very low increased cancer risk. Benzene and Formaldehyde are commonly found in outdoor air and the cancer risk estimates based on community measurements were typical of exposure across similar suburban/urban communities in the United States." The Consultation also concluded that "acute (short-term) exposure to some of the contaminants detected in ambient air near the landfill could have caused transitory health effects for sensitive populations, such as pregnant women, children, older adults and people with respiratory disease." An additional conclusion of the report was that "a data gap exists for assessing current and future potential exposures from subsurface vapor migration from the landfill into residences (i.e., vapor intrusion). Planned changes in landfill operations (including excavation, liner construction and landfilling in an area closer to the Swinick community) could adversely impact future subsurface vapor migration pathways."

To address these conclusions, the consultation recommended that "DEP continue to oversee landfill activities and enforce landfill permit regulations, including nuisance odor rules; consider a fence line air monitoring program that includes publicly accessible real-time results for selected limited analytes as part of the landfill's future permit requirements; make publicly available the response and oversight activities that DEP has conducted at the landfill; conduct timely responses to nuisance odor complaints; consider maintaining and posting an odor complaint log; and consider working with the landfill to perform vapor intrusion investigations in the Swinick community to evaluate current indoor air levels of volatile organic compounds and to ensure that conditions do not change in the future after new operations commence in the landfill area."

DEP staff inspect the landfill regularly, respond to complaints, and review data collected by the landfill including groundwater monitoring data. DEP records related to oversight of the landfill are available in DEP's public files. The recommendation to include a fence line air monitoring program as part of the landfill's future permit requirements were considered. DEP assessment of this concern differs from that of the health consultation's conclusions regarding vapor intrusion. Several reviews of a 1997 gas migration incident have concluded that KSL was not the source. Furthermore, there have been no recorded incidents prior to the 1997 incident and there have been no subsequent issues in the area since. DEP does not consider the potential gas migration from the unlined disposal area as a known or potential harm of the project and is not aware of any evidence that would suggest further monitoring or investigation is needed. That said, to address the recommendations contained in the Consultation, KSL proposed both a comprehensive air monitoring program and enhanced onsite underground gas migration monitoring. These proposals were evaluated and approved by DEP during the technical review phase.

30. **Comment:** There have been no health studies completed or any regular offsite environmental data collected.

    Response: A Health Consultation was completed by the Pennsylvania Department of Health (PADOH) and the Agency for Toxic Substances and Disease Registry (ATSDR) on April 1, 2019. One of the recommendations of this consultation was for DEP to "consider a fence line air monitoring program that includes publicly accessible real-time results for selected limited analytes as part of the landfill's future permit requirements." To address this concern, DEP is requiring KSL to submit a health risk assessment of the data obtained during perimeter air quality monitoring required by a condition of the expansion approval. Additional health studies will be conducted every five years for the life of the permit.

31. **Comment:** A comprehensive study of health-related data should be prepared in communities in close proximity to the landfill.

    Response: A Health Consultation was completed by PADOH and the ATSDR on April 1, 2019. One of the recommendations of this consultation was for DEP to "consider a fence line air monitoring program that includes publicly accessible real-time results for selected limited analytes as part of the landfill's future permit requirements." To address this concern, DEP is requiring KSL to submit a health risk assessment of the data obtained during perimeter air quality monitoring required by a condition of the expansion approval. Additional health studies will be conducted every five years for the life of the permit.

32. **Comment:** Lackawanna County has a much higher than average rate of cancer, serious birth defects, low birth weights, seizures and learning disabilities.

    Response: A Health Consultation was completed by PADOH and the ATSDR on April 1, 2019. The consultation did not indicate any of the above-mentioned issues were of concern as a result of their evaluation of medical information for the areas in close proximity to the landfill.

Quality of Life

33. **Comment:** The landfill has a negative impact on the quality of life of those living and working in the area and the area's regional reputation.

    Response: While the DEP does not use the terms "quality of life" or "regional reputation" in relation to impact a landfill is expected to have on the surrounding area, it does require a landfill applicant to submit an Environmental Assessment. In the Environmental Assessment, which is included as part of Form D of the application, the applicant identifies several criteria in the area of the landfill that may be impacted. These criteria include any potential geologic hazards, stream or river

impacts, traffic, aesthetics, stormwater discharge rates, wetland impacts, parks and recreational areas, fish, game and plant impacts, groundwater, potential impacts to historical areas, airport impacts, air quality impacts, and a determination on whether the landfill meets zoning criteria. DEP also requires the applicant to address potential harms that may not be included in the Form D. These potential harms can be raised through public comment, DEP concerns, or concerns raised by other departments within state government. Where necessary the applicant develops mitigation measures for impacts the landfill will create. Examples of these mitigation measures are contained in the KSL's nuisance minimization and control plan, groundwater monitoring plan, air monitoring plan and gas migration monitoring plan. The applicant then conducts an evaluation of the environmental, social, and economic harms and benefits that would occur should the permit application be approved. The Department then reviews all of the above information and makes its own evaluation of the harms and benefits of the project. In this instance the Department found the benefits of the project to outweigh the harms.

34.Comment: The landfill has a negative impact on the economic growth of the area.

Response: Although public comment indicates there is a concern that the landfill has had a negative impact on the local economy; no definitive, factual information has been found linking the operation of KSL to a negative impact on the economy. In fact, purchases of local goods and services, continued employment and increased tax revenue are known benefits of the project.

Proximity of a landfill this size to the communities:

35. Comment: KSL is too close to residential areas.

Response: This expansion is entirely within the footprint of the existing permit area. Location of landfills is primarily governed by local zoning and land use determinations. KSL's application indicates that local land use ordinances are being met. To DEP's knowledge, Keystone is properly zoned in both Throop and Dunmore Boroughs and has operated as a landfill in these municipalities since approximately 1972. The Phase III expansion is to be located entirely within and overtop of the existing permitted landfill area. DEP's permit provides that nothing in this permit shall be construed to supersede, amend or authorize violation of the provisions of any valid and applicable local law, ordinance or regulation, provided that said local law, ordinance or regulation is not preempted by the Pennsylvania Solid Waste Management Act, the Act of July 7, 1980, Act 97, 35 P.S. 6018.101, et seq., and Act 101, Municipal Waste Planning, Recycling and Waste Reduction Act, July 28, 1988 (53 P.S. §§4000.101 et seq.). DEP regulations have certain siting criteria for landfill operations related to distances that landfill operations need to be from property lines and occupied dwellings. Through review of the application, DEP has determined that the proposed expansion complies with all landfill siting criteria.

36. **Comment:** Why does this expansion need to be for so long and be so big?

Response: DEP does not limit the proposed size or duration of a designed landfill project. DEP can however take into consideration all of the potential impacts a project of this size and duration can have over the life of the project. When KSL submitted the original application in 2014, it included an increase of the landfill's operational life of over 47 years and proposed a significant height increase above the site's current height limit. DEP determined that the information submitted by KSL was deficient because it lacked the detail necessary for DEP to adequately evaluate a project of this size. Over the duration of DEP's evaluation of this expansion application, DEP has requested voluminous amounts of additional information and clarifications regarding all aspects of the project including, additional engineering details, additional benefit details, as well as additional harm mitigation details. This review has resulted in changes to the expansion which include reductions in the overall volume of waste to be received, the duration of the landfill operations, the proposed maximum height, and the use of construction materials and engineering standards that at times exceed regulatory standards. DEP has been actively reviewing and commenting on the project for nearly 6 ½ years. DEP believes that KSL has adequately responded to all of its concerns and therefore can approve an expansion request of this size. The permit that DEP has developed for this expansion includes numerous special conditions that are unique and specific to this project. Also, DEP will only issue a permit for 10 years. Every 10 years, the landfill will need to submit a permit renewal application to DEP for review. At the time of this renewal application evaluation, DEP will determine if KSL's permit needs to be amended to ensure that the permit is reflective of the most current operating requirements, as well as current technology and management practices. The DEP can require modification, suspension, or revocation of the permit if necessary. KSL's current permit, including the Phase III expansion, expires April 6, 2025 and will need to be renewed prior to that date.

37. **Comment:** Many people in the community don't want the landfill to expand, enough is enough. DEP has also received communications from local, state, and federal officials opposing the expansion.

Response: DEP acknowledges many in the community and those that represent them within local, state and federal governments may oppose this expansion.

Visual Impacts

38. **Comment:** The landfill is a negative visual impact on the area.

Response: The Department recognizes that visual and aesthetic impacts associated with the Phase III project are a particularly important concern within the community. A line of sight study was completed to assess this issue and KSL did modify the project to lower the elevation to that of the previously permitted Phase II height.

Additionally, an aggressive closure capping and revegetation program is planned to mitigate visual impacts.

Beyond visual impacts of the completed project, the Department acknowledges that visibility of active construction, disposal activity and temporary capped areas can also negatively impact surrounding communities. KSL is proposing to reduce visibility of active landfill operations by working inside the valley between existing disposal areas. This will shield the active landfill operations from view for some periods of time. However, the duration of the project is significant and there will be visual impacts associated with the landfill. The Department took visual impacts into consideration as a harm in its environmental assessment review for Phase III.

Environmental Justice Community

39. **Comment:** People in EJ communities face a greater burden of lung disease making them more vulnerable to air pollutants. Communities already bearing substantially more than their fair share of the burden of environmental impacts should have those burdens mitigated and they certainly should not be expected to bear even bigger burdens.

Response: The EJ community is located in a portion of Dunmore Borough and is based on census and income information. The EJ designation is an internal DEP policy to address education of these communities about pending projects in their vicinity. DEP followed its EJ policy by conducting additional outreach and public meetings. In applying the policy for Phase III, there was extra effort made by DEP to inform the public that there was an expansion application pending and how they could participate in that review. A Local Municipality Involvement Process (LMIP) meeting was held in May 2014 with both Dunmore and Throop Boroughs and other county and local officials to discuss the expansion application. The public comment period for the Phase III application began on January 3, 2015, with a notice published in the PA Bulletin. Two public meetings (one occurring in Dunmore and one occurring in Throop) have been held and DEP has accepted all public comment up to the time of its decision on the permit application. DEP also hosted a public hearing in July 2016 at the Mid Valley High School to take comments from the public about the expansion application. DEP also participated in an open house with the PADOH and the ATSDR at the Throop Community Civic Center in April of 2015 to listen to residents with concerns about a Health Consultation that was being conducted and the affects the landfill and the proposed landfill expansion could have on their health. After the Health Consultation was completed a public availability meeting was held at the Mid Valley High school on January 29, 2018. At this meeting the public was provided an opportunity to ask questions of PADOH, ATSDR, and DEP regarding the findings of the Health Consultation report. A copy of the Phase III permit application, and copies of official Department correspondence has been posted on DEP's website and is updated regularly.

DEP recognizes that some EJ communities may be vulnerable to air pollutants. Here, one way DEP mitigates this potential vulnerability is to ensure that the NAAQS is not violated in communities like Dunmore Borough. The NAAQS provides public health protection, including protection for the health of "sensitive" populations such as asthmatics, children, and the elderly. In this particular case, KSL was required to submit a plan approval application to ensure that the air emissions associated with this expansion would not violate the NAAQS. 25 Pa. Code § 127.12(a)(4). Additionally, KSL was required to demonstrate that its emissions would be controlled through best available technology. 25 Pa. Code § 127.12(a)(5). KSL has made this demonstration to the satisfaction of DEP. Moreover, DEP maintains monitoring stations across the State that continuously monitor for pollutants to show that the area being monitored is in attainment with the NAAQS. The closest station to KSL is near Marywood University. As a result, DEP believes that the EJ community near KSL is protected from any emissions coming from the facility.

Airport

40. **Comment:** Due to the proximity of the Wilkes-Barre Scranton airport is there a concern for approaching aircraft? Is this a Federal Aviation Administration (FAA) issue and because that is a federal administration should the National Environmental Policy Act (NEPA) be triggered?

    Response: KSL meets all setback requirements as detailed in 25 Pa Code § 273.202(a)(14). A Notice of Proposed Construction to FAA was submitted reflecting maximum vertical height. The FAA response states the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the structure is marked/lighted in accordance with FAA requirements. With respect to the FAA, it is DEP's understanding that the NEPA requires federal agencies to assess the environmental effects of their actions prior to making final decisions. While DEP cannot speak to what FAA staff considered in their response to the Notice of Proposed Construction, the Department believes that an environmental impact analysis (triggered pursuant to the NEPA), would only be required for requests from an airport to the FAA.

Traffic

41. **Comment:** Heavy truck traffic is a negative impact on the community. Many of the trucks are unsafe.

    Response: The Department considered truck traffic as a harm for purposes of its environmental assessment review. It is noted that the Department has found that KSL's Transportation Compliance and Vehicle Safety Action Plan is generally effective at reducing the number of unsafe vehicles and ensuring that drivers are in compliance with applicable rules and regulations. Further, a traffic study was conducted in 2011 for the then pending increase in daily volume application. The

Pennsylvania Department of Transportation (PennDOT) evaluated the study and concurred that the road network as existing can handle the volume of traffic associated with the landfill. KSL's Transportation Compliance and Vehicle Safety Action Plan includes a notification and warning, delay the driver, and a 60-day ban from the site for overweight vehicles/repeat offenders. Keystone tracks all overweight vehicles and provides this information to DEP. Monthly reviews of landfill vehicle weight records show that KSL adequately addresses this concern.

42. **Comment:** Garbage trucks kick up rocks which can lead to damage to the cars travelling behind them.

    Response: The Federal Motor Carrier Safety Administration and PennDOT regulate truck transportation on public roads. As such, commercial drivers are required to obtain a license. Commercial Learner's Permit (CLP) and Commercial Driver's License (CDL) holders are required to conduct pre-trip inspections of their vehicles prior to operating on public roads. These inspections would include inspecting the tires of the vehicle for lodged material. These inspections should be conducted prior to trucks leaving the Landfill.

43. **Comment:** Landfill truck traffic is causing wear and tear on the roads.

    Response: KSL identified that the landfill operation may cause a portion of Dunham Drive and Tigue Street to require more frequent paving due to traffic accessing the landfill. KSL has committed to establishing a trust fund dedicated to pay for necessary improvements to Dunham Drive and Tigue Street. KSL will inspect Dunham Drive and Tigue Street annually and necessary repairs/improvements will be made in accordance with the Roadway Inspection Program.

44. **Comments:** Landfill trucks track mud onto the roads.

    Response: DEP has received complaints about dirt and mud on local roads. It had been DEP's observation that occasionally dirt and mud was not prevented from leaving the site by prior mitigation measures taken by KSL. KSL's mitigation, rather than preventing the tracking of dirt and mud off-site was to wash it from the roads once it has been tracked off-site. For these reasons, DEP requested that KSL should propose mitigation measures that will prevent the tracking of dirt and mud off-site. In 2015, KSL completed a bituminous pavement project in the vehicle hauling transition area. Also, a minor permit modification was approved in 2015 for a new site entrance and to expand the vehicle hauling transition and staging area. The new site entrance and expanded transition area work were completed, and the construction certification was approved on October 5, 2016. The additional mitigation measures appeared to be effective most of the time; however, during wet or adverse weather DEP had observed mud being tracked off site to varying degrees. Once the mud dries on the roadways the potential for dust is greater. KSL proposed additional measures to keep tracked material from reaching Dunham Drive. KSL submitted an application for

minor permit modification for installation of a truck wash on March 8, 2018. The application was approved, and the truck wash was installed. DEP has concluded that the utilization of the truck wash combined with existing road maintenance practices should enhance efforts to prevent the tracking of dirt and mud offsite to provide adequate mitigation.

Waste Types

45. **Comment:** KSL accepts waste from Marcellus Shale. Due to this industry being fairly new, one does not know the harmful effects this waste has on the environment and human health.

    Response: KSL has taken waste streams from the Marcellus Shale Oil and Gas (O&G) industry. KSL has been approved to accept several different types of residual waste from the industry ranging from unused frac sand and drill cuttings to waste generated from the treating and/or storage of fracking materials. To DEP's knowledge, KSL has never disposed of any reportable O&G related Technologically Enhanced Naturally Occurring Radioactive Material (TENORM) waste. By reportable, DEP means that KSL has never disposed of any O&G industry related waste streams that triggered its radiation monitors. By regulation, radiation monitoring devices at landfills are to be set at a maximum of 10 microroetgens/hr above background.

46. **Comment:** KSL accepts radioactive drill cuttings and other fracking-related substances.

    Response: In May of 2016, DEP released a report evaluating TENORM's potential impacts on employees that work around the material, public exposure, disposal impacts, and other possible environmental impacts. This report was based on sampling conducted at landfills within the Commonwealth in 2013. Based on the results of this sampling, DEP determined that the levels of radioactive material in KSL's leachate was consistent with that of municipal waste landfills statewide and did not pose any significant risks. The 2016 report indicated that TENORM waste can be safely disposed of at modern municipal waste landfills. Based on this report calculations were developed to determine maximum quantities of TENORM waste that can be safely disposed of at each landfill in the state. Each municipal waste landfill in the Commonwealth is assigned a monthly source term allocation each year that is calculated by the Department's Bureau of Radiation Protection for the amount of TENORM the landfill can receive. This monthly limit is calculated based on the size of the landfill and amount of waste received each year. Acceptable tonnage varies based on the levels of radiation in the waste stream.

    KSL has taken waste streams from the Marcellus Shale O&G industry. KSL has been approved to accept several different types of residual waste from the industry ranging from unused frac sand and drill cuttings to waste generated from the treating and/or

storage of fracking materials. To DEP's knowledge, KSL has never disposed of any reportable O&G related TENORM waste.

All waste entering KSL must pass through radiation monitors located at the scales. These monitors are set at very low radiation detection levels approved by DEP's Bureau of Radiation Protection. If a waste load entering KSL triggers one of these monitors, KSL needs to evaluate the type of radiation that was detected and take appropriate action.

47. **Comment:** KSL accepts a large percentage of out-of-state garbage and that is the cause of the need of the expansion.

    Response: DEP cannot take into consideration the quantity of out-of-state waste that is disposed of at KSL. The transport of waste across state boundaries is considered a matter of interstate commerce. Interstate commerce is protected by the Commerce Clause of the United States Constitution, Article I. A state may not prohibit or place barriers to articles of commerce entering or exiting its boundaries without express Congressional authorization or a compelling state interest; solid and liquid refuse and the rights to landfill space to dispose thereof are articles of commerce under the Commerce Clause.

48. **Comment:** Why does KSL need more capacity when there are other landfills in the area that still have capacity?

    Response: Landfills providing for the correct disposal of solid waste, reduce the risk of environmental pollution to water, the soil and air, while addressing the waste disposal needs stemming from modern community and industrial development. There may be value in using existing landfill airspace and/or footprint as opposed to developing new or "greenspace" for needed landfilling activity. DEP does not prohibit a landfill from proposing to lawfully expand its capacity simply because other landfills currently have existing waste disposal capacity at the same time.

49. **Comment:** Per- and Polyfluoroalkyl Substances (PFAS) have been documented in landfills and is a concern at KSL.

    Response: At this time, neither EPA nor DEP has any regulatory standards or guidance regarding PFAS containing waste streams. DEP is working in conjunction with the Governor's PFAS Action Team to determine the necessary steps to evaluate potential PFAS impacts from landfill operations and determine if changes to leachate treatment at landfills and/or wastewater treatment facilities needs to be considered.

Noise

50. Comment: Offsite noise from the landfill is a nuisance.

Response: A Noise Impact Assessment concluded that KSL is not significantly affecting noise levels at the nearest receptor sites. A Noise Study will be performed annually during Phase III operations. Any variations from the noise levels in the 2016 Study, attributable to KSL, will be included in the Annual Operations Report along with the details of the mitigation program instituted by KSL.

The Department recognizes that the project will extend the potential for offsite noise from KSL's operations and did take this into consideration in its environmental assessment review for Phase III. Special conditions that are specific to this project were added to the permit to ensure noise impacts, if present, will be identified and addressed.

Litter

51. Comment: Litter blows offsite from the landfill.

Response: In the Department's experience, KSL takes effective mitigation measures to control litter. KSL's litter control plan includes: litter collection crews, portable litter fencing, the prompt compaction of waste and the application of daily cover, limiting the size of the working face, a permanent litter fence along the Lackawanna Valley Industrial Highway and the tarping of vehicles. A new meteorological station has been installed on the top of a secondary litter fence pole paralleling the Lackawanna Valley Industrial Highway. This new station will enhance the ability to monitor weather conditions. Data is analyzed daily and used to orientate and/or increase the number of litter fences, to aid in the effective deployment of KSL's daily, full-time litter cleanup crew and to generally adjust operations to minimize the potential for offsite litter. If a litter issue is identified during the Compliance Officer's daily tour of the site and adjacent roadways, an additional litter cleanup crew will be assigned. Further, if extreme wind conditions prevail, disposal operations will be relocated to valley locations. The Department recognizes that the control of litter is contingent upon the proper implementation of these measures. Therefore, DEP did take the potential harm of litter blowing offsite into consideration in its environmental assessment for Phase III.

Fire Risk

52. Comment: There is a risk of fire at the landfill.

Response: The risk of fires and subsurface reactions is a known, potential harm for any landfill operation. The landfill has had four subsurface fire incidents (2009, 2011,

2014 and 2015) in its recent history. DEP determined that KSL responded appropriately and abated each thermal event. It's noted that these events were caused by the introduction of ambient air into the waste at landfill gas collection wells, rather than a particular waste stream that was disposed of.

KSL addresses landfill fire mitigation measures in its PPC plan. Measures to prevent fires and subsurface reactions in the plan include ensuring that all waste is properly covered at the end of each working day and properly grading the active working area to eliminate the ponding of water. Water level monitoring is conducted semi-annually to monitor for perched water inside the waste mass. If water is located, it is pumped out. The gas collection system is monitored on a daily basis and each gas extraction well is monitored on a monthly basis. In the event combustion is determined to be active in the waste mass, KSL will immediately implement a Fire Suppression Plan.

Vectors

53. **Comment:** Scavenger birds frequenting the landfill are a health hazard to the community.

Response: KSL' s vector controls include: compact and cover waste daily; limit the acceptance of wastewater sludge to certain times to limit attraction of insects; limit the size of the working face; maintain a compact working face to disrupt congregation of birds; use of decoys or noisemakers to limit attraction of birds; and retaining outside vector control professionals. KSL executed an agreement with the U.S. Department of Agriculture (USDA), APHS Wildlife Services, PA to control the bird population at the landfill and plan assistance, regarding wildlife conflicts and management issues, to residents of communities surrounding KSL. DEP is provided copies of the USDA reports summarizing the activities that take place at the landfill to control birds and other wildlife. KSL will continue to contract with USDA for the duration of the site life of the Phase III expansion. Though birds will congregate at the landfill at times, the Department's observations of KSL's operations have confirmed the mitigation is adequate. A special condition specific to this project was added to the permit to ensure the bird management practices described above continue for the life of the project.

Article I Section 27 of the PA Constitution

54. **Comment:** "The people have a right to clean air, pure water, and to preservation of the natural, scenic, historic and esthetic values of the environment. Pennsylvania's public natural resources are the common property of all people, including generations yet to come. As a trustee of these resources, the Commonwealth shall conserve and maintain them for the benefit of all people." How can DEP approve this expansion and still uphold the PA Constitution?

Response: The Department has reviewed this expansion application in accordance with the laws, regulations and Article I Section 27 of the Pennsylvania Constitution. After a thorough evaluation, DEP has determined that the expansion of the KSL, as per the approved application, will not cause unreasonable degradation or diminution of the environment while providing a safe and legal waste disposal option. An extensive environmental assessment was completed in coordination with various local, state and federal entities where necessary. As part of the application review, DEP evaluated the current and historic compliance of the site as well as the related parties identified on forms submitted with the application. DEP's Professional Geologists (P.G.) conducted a review of the groundwater monitoring plan and the Underground Gas Migration Monitoring Plan. The Mine Mitigation Plan was also reviewed by the Waste Program's P.G., with additional consultation from staff of the Bureau of Abandoned Mine Reclamation. The Bureau of Air Quality participated in the review of the Air Monitoring Plan. Throughout the review of the expansion, facilities and operations sections within the Waste Management Program discussed the operations at KSL. Operations staff reviewed KSL's Preparedness, Prevention, and Contingency Plan as well as participating in the review of the Nuisance Minimization and Control Plan. Staff from the Waterways and Wetlands program reviewed the stormwater management plans. Consultation, coordination, and discussion with other programs within DEP such as Safe Drinking Water, Environmental Clean-up and Brownfields, Bureau of Abandoned Mine Reclamation, Clean Water Program, and Oil & Gas indicate that the expansion will not cause unreasonable degradation or diminution of the environment.

KSL has an Air Quality Title V permit, an industrial stormwater discharge permit, and a mining permit. KSL must also obtain a Chapter 105 permit for a wetland disturbance and an Air Quality Plan Approval for the expansion. All of these permits are evaluated to ensure compliance with regulatory standards which are protective of the environment and the community.

Finally, DEP included special conditions that are specific to this project to ensure the environment and the community are protected.

Miscellaneous

55. **Comment:** KSL and its owners created an intimidating environment at the public hearing with at least 10 people dressed in black recording everything that was said. Also, DEP officials were seen being friendly and smiling while conversing with KSL owners and employees.

Response: Many DEP representatives attended the public hearing at the Mid Valley High School on July 18, 2016. At a public hearing it is common for the party whose project is being considered to have multiple representatives attend. Attendance by multiple people helps the responsible party develop responses to the concerns raised at the hearings. As to the demeanor of DEP staff members at the hearing, DEP staff

always attempt to have a cordial working relationship with both the project developers and the concerned citizens. DEP staff had conversations with both concerned citizens and KSL representatives before and after the hearing. All conversations were cordial and friendly. The appearance of these cordial conversations should in no way be construed as an indication that DEP does not take seriously its obligations to enforce environmental rules and regulations.

56. **Comment:** In light of the news regarding the Attorney General's investigation of Keystone Sanitary Landfill, DEP should hold on the decision for KSL's expansion request until the investigation is completed.

Response: DEP is aware that the Office of Attorney General is conducting an investigation of KSL. DEP has and continues to cooperate with the Office of Attorney General's investigation. At this time, the Office of Attorney General has not made the Department aware of any information that would prevent DEP from acting on the expansion application. DEP understands the issues giving rise to the investigation and took this into consideration in making its decision.

Keystone Landfill Phase III Expansion Public Comments

Last Name	First Name	City, State
Aberto	Christine	Jefferson Twp, PA
Acquaviva	Mary Alice	Elmhurst Twp, PA
Acquaviva	Tony	Elmhurst Twp, PA
Adamec	Stephanie	Dunmore, PA
Adams	Mary Ann	Scranton, PA
Adhikari	Dhanapati	Scranton, PA
Ahern	Matthew	Dunmore, PA
Ahern	Kim	Dunmore, PA
Ahern	Marnel	South Abington Twp, PA
Ahern	Marilyn	
Ahern	Kaitlin	Dunmore, PA
Albert	Stephen	Scranton, PA
Algar	Judy	Duryea, PA
Algar	Lisa	Clarks Green, PA
Alpesh		Dunmore, PA
Altmiller	Anna	Elmhurst Twp, PA
Alunni	Tina	Jefferson Twp, PA
Alunni	Debbie	Jessup, PA
Amendola	Amy	Madison Twp, PA
Amico	Vince	Dunmore, PA
Amico	Celia	Dunmore, PA
Amico	Grace	Dunmore, PA
Amico	Olivia	Dunmore, PA
Amico	Cecelia	Scranton, PA
Andreski	Charlotte	Jefferson Twp, PA
Anonymous		
Anonymous		
Anonymous		
Anonymous		
Anonymous		
Anonymous		
Anonymous		
Anuszewski	Ellen	Dunmore, PA
Anuszewski	Alexander	Dunmore, PA
Aposhian	Regina	Dunmore, PA
Archer	Donna	Factoryville, PA
Armbrust	Lori	Canton, PA
Armezzani	Nicole	Philadelphia, PA
Arnold	Lee	Madison Twp, PA
Aronka	Pam	Dunmore, PA
Ashcroft	Karlie	Highland Mills, NY
Bachetti	Jean Louise	Scranton, PA
Balint	Linda	Jessup, PA
Balise	Elizabeth	Scranton, PA
Balton	Chris	Scranton, PA
Barbetti	Michael A.	Dunmore, PA
Barbuti	Joseph Sr.	Scranton, PA
Barnes	Joelle	Jessup, PA
Baron	Maria	Dunmore, PA
Barrett	Nancy	Dunmore, PA
Barrett	Kathleen	Scranton, PA
Barrett	Barbara	Dunmore, PA
Barrows	Chelsea	Dunmore, PA
Barth	Richard	Dunmore, PA
Bartkovsky	Mary	Dunmore, PA
Bartlett	Chris	Dickson City, PA
Battle	Melissa	Spring Brook Twp, PA
Becchetti	Jim	Dunmore, PA
Becchetti	Rachel	Dunmore, PA
Beck	Johanna	Scranton, PA
Beckage	S.J.	Baton Rouge, LA
Bedford	Terri	Factoryville, PA

Last Name	First Name	City, State
Beebe	Lisa	Scranton, PA
Beechko	William	Mayfield, PA
Belavitz	Michelle	Moscow, PA
BeLewdy Jr.	John	Throop, PA
Beliveau	Amber	Beacon Falls, CT
Belotti	Christa	Harding, PA
Berardelli	Ann	Olyphant, PA
Berardelli	Joe	Scranton, PA
Bergstrasser	Robert	Wilkes-Barre, PA
Bertha	Maria	Scranton, PA
Betachini	Susan	Archbald, PA
Betti	Julia	
Betti	Rita	Scranton, PA
Beynon	Ann	Olyphant, PA
Bialkowski	Julie	Old Forge, PA
Bieski	Eric	Nanticoke, PA
Bjornstad	Carsten	
Black	Judy	Jefferson Twp, PA
Blackledge	Sally	Dalton, PA
Blackledge	John & Eileen	Scranton, PA
Blake	John	
Bluhm	Emily	Plymouth Meeting, PA
Bobar	Mary Ann	Scott Township, PA
Bochicchio	William	Dunmore, PA
Bogdan	Casey	Dunmore, PA
Boland	Patrick	Scranton, PA
Boland	Chris	Scranton, PA
Boland	Margaret	Scranton, PA
Boland	Amanda	South Abington Twp, PA
Boland	Peggy	Scranton, PA
Boland	Maura	Peckville, PA
Bolus	Bob	Throop, PA
Bonadio	Anthony	Throop, PA
Bonadio	John	Throop, PA
Bondy	Laura	Dickson City, PA
Boorady-Kunkel	Victoria	Liverpool, NY
Borough Council	Dunmore	Dunmore, PA
Borough Council	Dunmore	Dunmore, PA
Bosley	David	Scranton, PA
Bosley	Dottie	Scranton, PA
Bowen	Mari	Clarks Summit, PA
Bowers	Sara	Egg Harbor Twp, NJ
Boyanoski	Mandi & Jeff	Dunmore, PA
Boyanoski	Jeffrey	Dunmore, PA
Boyanoski	Margaret	Dunmore, PA
Boyanoski	John	Greenville, SC
Bradley	Mike	Dunmore, PA
Brandt	John	Dalton, PA
Brandt	Marie	Dalton, PA
Brandt	Andrew	Dalton, PA
Braz	Lynn	Scranton, PA
Brazil	McKenna	Dunmore, PA
Brees	Jeremy	Scranton, PA
Brees	Emily	Scranton, PA
Brees	Emily	Scranton, PA
Brennan	Patricia	Dunmore, PA
Brennan	Mark	Carbondale, PA
Breuninger	Drew	Dunmore, PA
Brier	Kay	Dunmore, PA
Brier	Frank	Scranton, PA
Brier	Mary Claire	Scranton, PA
Brier	Tim	Dunmore, PA

Last Name	First Name	City, State
Brier	Janet	Dunmore, PA
Brown	Dorothy	Olyphant, PA
Brown	William	Clarks Summit, PA
Brown	Dar	Olyphant, PA
Brown Jr	Michael E.	Scranton, PA
Bruno	Peter	Drums, PA
Bubser	Andrew	Scranton, PA
Buch	Caitlin	Great Meadows, NJ
Budney	Justin	Archbald, PA
Bunkhouse	Barbara	
Bunnell	Ann	Scranton, PA
Burke	Timothy	Dunmore, PA
Burke	Carmela	Dunmore, PA
Burke	Christine	Scranton, PA
Burke	John	Dunmore, PA
Burke	William	Moscow, PA
Burke	Thomas M.	Throop, PA
Burke	Jason	Throop, PA
Burke	Ruth	Scranton, PA
Burke	Thomas	Whitehall, PA
Burke	Neil	Scott Township, PA
Burke	Robert	Clarks Summit, PA
Burke	Tom	Scranton, PA
Burke	Terry	Clarks Summit, PA
Burke	Gabriella	Dunmore, PA
Burke	Katie	Schwenksville, PA
Burke	Breighan	Schwenksville, PA
Burke	Ronan	Schwenksville, PA
Burkhauser	Beth	Scranton, PA
Burkhouse	Ellen	Scranton, PA
Burnham	Dr. Bryan	Scranton, PA
Burns	Emily	West Wyoming, PA
Burns	Regina	Scranton, PA
Burns	Melanie	Scranton, PA
Butler	Casey	Easton, PA 18045
Butler	Lester L.	Jefferson Twp, PA
Butlers Disposal, Inc.		Jefferson Twp, PA
Byman	David	Clarks Summit, PA
Cady	Peter	Dunmore, PA
Caines	Kevin & Ellen	Olyphant, PA
Cairone	Kari	Newtown, PA
Calabro	Peter	Old Forge, PA
Cali	Daina	Clarks Summit, PA
Cali	Gregory E.	
Calicano	Lisa	Dunmore, PA
Callahan	Molly	Dunmore, PA
Cancelleri	Chuck	Dunmore, PA
Capman	Amy	Olyphant, PA
Caputo	Anthony	Roaring Brook Twp, PA
Carey	Kelly	Clarks Summit, PA
Carl	Marjorie	Scranton, PA
Carr	Michael J.	Dunmore, PA
Carrick	Margaret	South Abington Twp, PA
Carrick	Richard	Tampa, FL
Cartwright	Matt	
Casey	Robert P., Jr.	Washington DC
Casper		Throop, PA
Caulson	Marge	Scranton, PA
Cavanaugh	James	Farmingdale, NY
Cawley	Karissa	Dunmore, PA
Cawley	Breanna	Dickson City, PA
Cephas	Emily	Peckville, PA
Cerra	Fran	
Chapman	Robert	Dunmore, PA

Last Name	First Name	City, State
Checefsky	Susan	
Christman	Mary & Dennis	Dalton, PA
Chun	Joseph	South Abington Twp, PA
Cimini	Louis, A.	Scranton, PA
Cinquina	Marcel	Moosic, PA
Ciocca	Mark	
Clark	Kristen	Dunmore, PA
Clark	Patrick	Dunmore, PA
Clark	Courtney	Dunmore, PA
Clark	Gail	Scranton, PA
Clark	Bridget	Scranton, PA
Clark	Jennifer	Scranton, PA
Clark	Kevin	Scranton, PA
Clark Glennon	Christine	Dunmore, PA
Clarke	Kristen	Scranton, PA
Clemens	Roberta	Dunmore, PA
Clemente	Joe	Dunmore, PA
Clifford	Maureen	Jefferson Twp, PA
Clifford	Patrick	Jefferson Twp, PA
Close	Laureen	Dunmore, PA
Cobley	Kate	Scranton, PA
Coco	Samantha	Exeter, PA
Coggins	Helen	Dickson City, PA
Cohen	Will	Scranton, PA
Cola	Anita	Scranton, PA
Coleman	Emily	Scranton, PA
Coleman	Brad	Dunmore, PA
Coleman	Michael T.	
Colleran	Kelley	Clarks Summit, PA
Collins	Michael D.	Dunmore, PA
Collins	Mauri & Joe	Scranton, PA
Collins	Chelsea	Throop, PA
Collura	Maureen	Carbondale, PA
Complete Hauling & Mobile Dumpster Service, LLC		Taylor, PA
Conaboy	Conan	Dunmore, PA
Conaboy	Mary	Archbald, PA
Conaboy	Patrick Dr	Archbald, PA
Concilio	Alphonsa	Scranton, PA
Condel	John	Lititz, PA
Connor	Jim	Dunmore, PA
Connor	Casey	Scranton, PA
Contreras	Fawn	Archbald, PA
Conway	William	Dunmore, PA
Conway	Kelly	Philadelphia, PA
Cook	Patrick	Jefferson Twp, PA
Cooper	John	Scranton, PA
Cooper	Jack	Scranton, PA
Corbo	Lucille	Dunmore, PA
Corcoran	Sarah	Canadensis, PA
Cordaro	Ross	Dunmore, PA
Corkill	Catherine	Scranton, PA
County Commissioners	Pike	Milford, PA
Coyer	Bridget	Dunmore, PA
Crawford	Andrew	Scranton, PA
Crolly	Sherry	Dunmore, PA
Cron	Carol	Dunmore, PA
Cronk	Mindy	Dunmore, PA
Cross Luciani	Tiffany	Scranton, PA
Cuff	Sharon Blake	Dunmore, PA
Cuff	Jason	Throop, PA
Cuff	Sean	Dunmore, PA
Cuff	Matthew	Dunmore, PA
Cuff	Betty	Dunmore, PA
Cuff	Elizabeth	Dunmore, PA

Last Name	First Name	City, State
Cuff	Emily	Dunmore, PA
Cuff	Bob	Dunmore, PA
Cummings	Dan	Brick, NJ 08724
Cunningham	Barb	Eynon, PA
Cunningham	John	Dublin, Ireland
Curtis	Jamie	Springfield, VA
D	J	Clarks Green, PA
D	S	Clarks Green, PA
D. Hill & Son Container Service, LLC		Scranton, PA
Dailey	Nadia	Scranton, PA
Dakey	Diana	Dalton, PA
D'Amico	Ralph	Dunmore, PA
Darmofal	Donna	Peckville, PA
Dauzico	Kay & Lou	Dunmore, PA
Davies	Cathy	Clarks Green, PA
Davies	Liza	Scranton, PA
Davis	Michele	Dunmore, PA
Davis	Robert	Dunmore, PA
Davis	Diane	Throop, PA
De Marco	Joseph, C.	Dunmore, PA
Dean	Bridget	Garden City, NY
deBarros	Bev	Scranton, PA
Degilio	Howard	Olyphant, PA
DeJesse	Jeshua	Susquehanna, PA
DelVecchio	John	Dunmore, PA
Demchenko	Vera	Lakeville, PA
Demeck	Elizabeth	Scranton, PA
Demian	Mia	Olyphant, PA
Dempsey	Michele	
Dempsey	Karen	Jefferson Twp, PA
Dempsey	Thomas, P.	Dunmore, PA
Dempsey	Thomas	Dunmore, PA
Dempsey	Sean	Dunmore, PA
Dempsey	Sarah	Clarks Green, PA
Dempsey	PJ	Jessup, PA
DeNapoli	Charles & Joan	Dunmore, PA
Dende	Helen	Dunmore, PA
DeNinno	Marc	Scranton, PA
Dennebaum	Mark	Scranton, PA
Dennebaum	Sarah	Scranton, PA
Denniston	Nicholas	Lords Valley, PA
DeSando	Michael	Dunmore, PA
DeSantis	Sidney R.	Dunmore, PA
DeScipio	Joe	
Desmarteau	Joseph	Clarks Green, PA
DeSousa	Alex	Olyphant, PA
Devitto	Rebecca	Dunmore, PA
DiGregorio	Daniela	Scranton, PA
Dinkelaker	Emily	Middle Village, NY
DiVizio	Toni	Dunmore, PA
Dixon	Donna	Olyphant, PA
Dobson	Nanci	Dunmore, PA
Dominick-Noll	Dolores	Scott Township, PA
Donahue	Hal	Scranton, PA
Donnelly	Nell	Scranton, PA
Douaihy	Tom	Dunmore, PA
Dougherty	Patricia	St. Augustine, FL
Doughton	Karen	Moscow, PA
Douglas	Lindsay	
Dowling	Mariellen	Nicholson, PA
Dragann	Heather	Waverly Twp, PA
Duffy	Alison	Scranton, PA
Duggan	Tim	Dunmore, PA
Dunbar	Danielle	Scranton, PA

Last Name	First Name	City, State
Dunkle	Alberta	Dunmore, PA
Dunleavy	Patrick	Moosic, PA
Dunleavy	Mary	Moosic, PA
Dunleavy	Richard & Elisa	Scranton, PA
Dunmore Senior Center		Dunmore, PA
Durkan	Patricia	
Durkin	Kristin	Dunmore, PA
Durkin	Larry	Scranton, PA
Eastman	Robert	Moosic, PA
Egreczky	George	Elmhurst Twp, PA
Ehnot	Charles and Deborah	Dunmore, PA
Ehnot	Thomas & Jean	Dunmore, PA
Ei	Julian	Scranton, PA
EIO Waste Solutions Inc.		Monroe Twp, PA
Ellis	Jane	Scranton, PA
Ellis	Rosanne	Moosic, PA
Elmy	Nicholas	Dunmore, PA
Employees of Keystone Landfill		
Esposito	Toni	Somers Point, NJ
Evabs	Meg	Moscow, PA
Evanick	John, Jr.	
Evanik	John, Jr.	Dickson City, PA
Evanik	John	Dickson City, PA
Evans	Jenna	Throop, PA
Evans	Deborah	Chambersburg, PA
Evergreen Sanitation		Dunmore, PA
Fadden	Darron	Jenkins Twp, PA
Fagnan	Bernard	Throopo, PA
Fahey	Gus	Scranton, PA
Fangio	Alice	Dunmore, PA
Fannetta	Peggy	Covington Twp
Farina	Frank	
Fayocavitz	Phyllis & Joe	Clarks Green, PA
Fazio	Alyssa	Dunmore, PA
Fendruck	Kris	Simpson, PA
Ferguson	Amy	Dunmore, PA
Ferguson	John	Dunmore, PA
Ferguson	Patricia	Moosic, PA
Ferra	Peggy	Coatesville, PA
Fetterman	John	Harrisburg, PA
Finnerty	T	
Fiorelli	Katie	Jessup, PA
Fiorillo	Tara	Scranton, PA
Fisne	Marianne	Throop, PA
Fisne	Brian	Bloomsburg, PA
Fitch	Barbara	Dunmore, PA
Fitzpatrick	Anne	Ardmore, PA
Fitzpatrick	Robert B. & Maryann	Dunmore, PA
Fitzpatrick	James	Dalton, PA
Flynn	Maureen	Hamlin, PA
Foley	Melissa	Throop, PA
Foley	John	Throop, PA
Foley	Brian	Throop, PA
Foley	Alice	Dunmore, PA
Foley	Sean	Scranton, PA
Fontanella	Evelyn	Clarks Green, PA
Foote	Susan	PA 19003
Franko	Elizabeth	Falls, PA
Franus	Fay	Scranton, PA
Frederici	Anthony	South Abington, PA
Friends of Lackawanna		Dunmore, PA
Gabel	JJ	Lake Ariel, PA
Gable	John	Taylor, PA
Gaghardt	Ann Marie	Waverly Twp, PA

Last Name	First Name	City, State
Galardi	Marissa	Archbald, PA
Galdieri	James	Clarks Green, PA
Galdieri	Donna	Clarks Green, PA
Galenas	Jeffrey	Olyphant, PA
Galka	Linda	Dickson City, PA
Gallagher	Jennifer and Larry	
Gallo	Anna	Bethany, PA
Gannon	Margaret	Scranton, PA
Gardner	Robert	Takoma Park, MD
Gardner	Adrianne	Jessup, PA
Garrity	Loretta	Moosic, PA
Gaskin	Colleen	Seaford, NY
Gaughan	Bill	Scranton
Gavern	Nicholas	Dickson City, PA
Gavin	Dennis C.	Scranton, PA
Geadrities	Jeremy	Dunmore, PA
Gebhardt Cognetti	Paige	Scranton, PA
Geoffroy	Sarah	Olyphant, PA
George	Susan	Avoca, PA
Geroula	Linda	Throop, PA
Gerrity	Posie	Scranton, PA
Gerrity	Romayne	Scranton, PA
Gershey	William	
Giannetta	William & Helen	
Gibbs	Lois	Falls Church, VA
Gilbert	Kaitlin	Plains, PA 18705
Gilhooley	James W.	Scranton, PA
Gilhooley	Mallory	Dunmore, PA
Gillar	Kayla	Dickson City, PA
Gillar	Stephanie	Dickson City, PA
Gilorde Habeeb	Mary Ann	Dunmore, PA
Gilroy	John	Archbald, PA
Giordano	Mike	Dunmore, PA
Giordano	Paula	Dunmore, PA
Glasner	John	Newfoundland, PA
Glinsky	Judith	Throop, PA
Glinsky	John & Adele	Throop, PA
Glinsky	Joann	Throop, PA
Glover	Lisa	Honesdale, PA
Golden	Kristen	Jefferson Twp, PA
Golden Smith	Katie	Dunmore, PA
Goodwin	Susan	Perkasie, PA
Gorr	Andrew	Exton, PA
Grabowski and Altier	John and Chad	Throop, PA
Grady	Casey & Brian	Dunmore, PA
Graham	James	Scranton, PA
Gramigna-Robertson	Victor	
Gray	Natalie	Glenside, PA
Greater Scranton Board of Realtors, Inc.		Clarks Summit, PA
Grega	Tom	Dunmore, PA
Gregoire	Paul	Jefferson Twp, PA
Gregory	Rob	Archbald, PA
Grochowski	Joe	Dunmore, PA
Grochowski	Nicole	
Grogan	Patrick	Throoop, PA
Guimento	Robert & June	Dunmore, PA
Guse	April	Dunmore, PA
Gutner	Jeri	Moosic Lake, PA
Guzzi	Maureen	Dunmore, PA
H.	Janet	Peckville, PA
H.	Gene	Peckville, PA
Haag	Ellen	Scranton, PA
Haag	Bob	Scranton, PA
Haarmeyer	Laura	Scranton, PA

Last Name	First Name	City, State
Haas	Carla	Scranton, PA
Hadzima	Susan	Scranton, PA
Haggerty	Christina	Scranton, PA
Hahn-Mattioli	Elizabeth	Throop, PA
Haikes	Deana	Dunmore, PA
Hallinan	Marcus	Dunmore, PA
Hallinan	Tom	Dunmore, PA
Halpin Phillips	Bernadette	Dallas, PA
Hanagan (sp?)	Edward	Dunmore, PA
Hann	Maureen	Dunmore, PA
Harding	Leo	Scranton, PA
Hartman	Joe	Clarks Summit, PA
Hawk	David W.	Dunmore, PA
Hayes	Mariclare	Scranton, PA
Hayes	Kevin	Scranton, PA
Hayes	Jamesina	Scranton, PA
Healey	Joseph	Clarks Summit, PA
Healey	Jason	Pittston, PA
Heier	Barbara	Scranton, PA
Hennessey	Elizabeth	Dunmore, PA
Hennigan	Frank	Dunmore, PA
Hennigan	Mary Beth	Clarks Summit, PA
Hermanovich	George & Renee	Jessup, PA
Hicks	Sr. Helene	Morristown, NJ
Hill	Ginger	Throop, PA
Hinesley	Cathryn	Scranton, PA
Hinkley	Eric	
Hnat	Amy	Scranton, PA
Hnat	Ryan	Scranton, PA
Hoban	Cindy	Dunmore, PA
Hoffman	Joel & Andrea	Scranton, PA
Hogan	Mary Ann	
Hogan	Bob	Dunmore, PA
Holmes	Sarah Ann	Scranton, PA
Holmes	Bob	Dunmore, PA
Holmes	Morgan	Dunmore, PA
Honchell	Bill	Clarks Summit, PA
Hopkins	Daniel	Scranton, PA
Horger	Adrienne	South Abington Twp, PA
Horhutz	Randoolph	Mayfield, PA
Horvath	Susan	Archbald, PA
Hubbard	Frank	Moscow, PA
Hubshman	Melinda	Dunmore, PA
Hudacs	Judie	Dunmore, PA
Hughes	Gary & Frannie	Dunmore, PA
Hughes	Gary Jr	Dunmore, PA
Hughes	Frances	Dallas, PA
Humphreys	Bridget	Scranton, PA
Humphries	Christopher	Scranton, PA
Hunt	Tom & Marilyn	Dunmore, PA
Hurchick	Gail	Scranton, PA
Igoe	Fran	Dunmore, PA
Igoe	James	Jim Thorpe, PA
Igoe	MJ	Clarks Summit, PA
Indyk	Amanda	Monroe Twp, NJ
Inzillo	Nick	Scranton, PA
Irving	Maura	Dunmore, PA
J	Joe	Olyphant, PA
J.	Chris	
J.P. Mascaro & Sons		Audubon, PA
Jacobs	Rebecca	North Abington, PA
Jaffer	Susan	Waymart, PA
James	Kathy	Scranton, PA
Janesky	Donna	Pittston, PA

Last Name	First Name	City, State
Janosky	Robert	Harding, PA
Jardine	Brian	
Javier	Samantha	Corona, NY
Jeffers	Janet	Scranton, PA
Jeffery	Marina	Scranton, PA
Jeffries	Norma	Scranton, PA
Jenkins	George	Scranton, PA
Jenkins	David H.	Clarks Summit, PA
Jennings	Jamie	Clarks Summit, PA
Johnson	Glenn	Throop, PA
Jones	Blodwyn	Scranton, PA
Jones	Margene	Peckville, PA
Jones	Wendy	Scranton, PA
Jones	Blodwyn	Scranton, PA
Jordan	Julie	South Abington Twp, PA
Judge	Michael	Dunmore, PA
Kakareka	Walter	Covington Twp, PA
Kammer	Jean	Hawley, PA
Kane	Alexa	New Paltz, NY
Kane	Laila	Jefferson Twp, PA
Kapacs	Mary Ann	Olyphant, PA
Kapp	Alice	Dunmore, PA
Karboski	Teri	Olyphant, PA
Karcheski	Dee	Throop, PA
Katapski	Gene	Jefferson Twp, PA
Katapski	Peter	Scott Township, PA
Kavanagh	Quinn	Shavertown, PA
Keating	Cat Maria	Dunmore, PA
Keeler	Lynn	South Abington Twp, PA
Kelly	Rebecca	Eagleville, PA
Kelly	Kim	Clarks Summit, PA
Kelly	Thomas	Dunmore, PA
Kelly	Kristen	Dunmore, PA
Kelly	Christine	Scranton, PA
Kelly	John	Dunmore, PA
Kelly	Jan W.	Moosic, PA
Kelly	Nathan	
Kelly	Alicia	Scranton, PA
Kelly	Judith	Scranton, PA
Kelly, Jr.	James A.	Clarks Summit, PA
Kennedy	Michele	Scranton, PA
Kennedy	Chris	Scranton, PA
Kennedy Donato	Christina	
Kenowski	Christine	Throop, PA
Kenowski	Kenneth	Dunmore, PA
Keris	Sybil	Clarks Summit, PA
Kerrigan	Carol	Dunmore, PA
Kettel	Andrew	Clarks Summit, PA
Keystone Container Service, Inc.		
Kiesendahl	Jennifer	Hawley, PA
Kiley-Placko	Paula	Dalton, PA
Killian	Dina	Dunmore, PA
Killian	Marie	Dunmore, PA
King	Sandra	
King	Richard	Columbia, MO
Kinney	Sarah	Scranton, PA
Kirchner	Bernice	Tunkhannock, PA
Klauder	Patrick	Barrington, NJ
Klemens	Karen	Dunmore, PA
Kleynowski	Anthony J.	
Klien	William M. Jr.	Scranton, PA
Klinkel	Jeff	Clarks Summit, PA
Kneal	Joanne	Newberry, FL
Knicely	Jordan	Scranton, PA

Last Name	First Name	City, State
Knott	Andrew	Archbald, PA
Kochis	Nick	Scranton, PA
Kochis	Mary Beth	Jefferson Twp, PA
Koczwara	Jill	Scranton, PA
Koester	MaryFrances	Jefferson Twp, PA
Koester	Robert	Jefferson Twp, PA
Koester	Cate	Jefferson Twp, PA
Koester	James	Jefferson Twp, PA
Koester	Marion	Jefferson Twp, PA
Kofira	Kim	
Kofira	Kara	Scranton, PA
Kollar	Kathleen	Scranton, PA
Kopacz	Robert	Dunmore, PA
Korba	Donna Marie	Scranton, PA
Korba	Donna	Scranton, PA
Kornutiak	Chuck	Scott Township, PA
Kornutiak	Maddie	Scott Township, PA
Kornutiak	Suzanne	Scott Township, PA
Kosierowski	Joe	Clarks Summit, PA
Kosierowski	Bridget	Clarks Summit, PA
Kosinski	Victoria	
Kozik	Mark	Throop, PA
Krahl	Mike	
Kranick	Francis	Dunmore, PA
Kranick	Michael	Dunmore, PA
Kreis	Erin	Dunmore, PA
Krouchick	Kenneth	Scranton, PA
Kuchwara	Sam	Dickson City, PA
Kuchwara	Gail	Dickson City, PA
Kuhn	Evelyn	Scranton, PA
Kulick	Robert	Springbrook Twp, PA
Kurtzman	Nicole	Olyphant, PA
Kusy	Linda	South Abington Twp, PA
Kutch	Christina	Factoryville, PA
LaBelle	Caroline	Scranton, PA
Laboranti	Thomas	Scranton, PA
Laktash	Jeanne	Dickson City, PA
Laktash	Nick	Dickson City, PA
LaLonde	Grace	Archbald, PA
Lancia	Ralph	Scranton, PA
Lane	Joeyanna	Throop, PA
Laredo	Richard	
Larkin	Marie	Scranton, PA
Larrerd	Fred	Dunmore, PA
Lauless	Florence	Dunmore, PA
Lauless	John	Dunmore, PA
Lauless	Matthew	Dunmore, PA
Laurito	Anthony	Scranton, PA
Laurito	Kristina	Scranton, PA
Lavelle	Mark & Maria	Dunmore, PA
LaVerne	David	Dickson City, PA
LaVigna	Mari	Linwood, NJ
Lawlor	Maureen	Moosic, PA
Lefchak	Ruth	Jessup, PA
Leiva	Sandy	Greentown, PA
Lemoncelli	Ernest	Langdon, PA
Leonori	Richard	Scranton, PA
Lesh	Jennifer	Lake Ariel, PA
Lester	Stephen	Falls Church, VA
LeStrange	Melissa	
Lettieri	Rob	Scranton, PA
Libassi	Jessica	Dunmore, PA
Lipcott	Ann	Scranton, PA
Loccisano	Victoria	Rockville Centre, NY

Last Name	First Name	City, State
Lombardo	Rich	Throop, PA
Long	Emmet	Morristown, NJ
Loonstyn	Rebecca	Philadelphia, PA
Lotorto	Alex	Scranton, PA
Loughney	John	Dunmore, PA
Loughney	Brian	Dunmore, PA
Loughney	Patrick W.	Dunmore, PA
Louks	David	South Abington Twp, PA
Lovecchio	Cosmo	South Abington Twp, PA
Lucas	Jill	Dunmore, PA
Lucas	Valarie	Dunmore, PA
Luciano	Joseph & Lucy	Dunmore, PA
Ludka	Tom	Jefferson Twp, PA
Luella	Kenny	
Lynett	Noelle	Scranton, PA
Lyons	Thomas	Philadelphia, PA
Lyons	Conor	
Lyons	Charlie	
Lyons	Kelly	Dunmore, PA
Lyons	Linda	Scranton, PA
Lyoob	Patricia	Jefferson Twp, PA
M	Michele	Woodridge, NJ
Mackrell	Paul	Scranton, PA
Mackrell	Ann	
Mackrell	John	Scranton, PA
Madzin	Kathleen	Scranton, PA
Mahley	Rosemary	Clarks Green, PA
Mahoney	Margaret	Scranton, PA
Mahoney	Patricia	Rockville Centre, NY
Maier	Kathleen	Nicholson, PA
Makowski	David E.	Dunmore, PA
Malinak	Mark	Scranton, PA
Malloy	Mary	Scranton, PA
Malone	Ellen	
Malone	Conor	South Abington Twp, PA
Maloney	Nancy	Dunmore, PA
Maloney	Samantha	Scranton, PA
Maloney	Tim	Dunmore, PA
Maloney	Nancy	
Maloney	Erin	Scranton, PA
Maloney	Lori	Scranton, PA
Maloney	Casey	Dunmore, PA
Maloney	Timothy J.	Scranton, PA
Maloney	Erin	Dunmore, PA
Maloney	Noreen	Scranton, PA
Mancuso	Ernie	
Mang	William	Scranton, PA
Manger	Ellen	Dunmore, PA
Manger	Anthony	Dunmore, PA
Manley	Joe	Dunmore, PA
Manley	Kathy	Dunmore, PA
Marasco	Phil	Rockville Centre, NY
Marchegiani	Amanda	Dunmore, PA
Marchegiani	Anita	Eynon, PA
Marconi	Eleanor	Scranton, PA
Maria	Catherine	Scranton, PA
Marichak	John	Dunmore, PA
Marioth	Margie	Jefferson Twp, PA
Marioth	John	Jefferson Twp, PA
Marmo	Judith	
Maroney	Sr. Elen	Scranton, PA
Marshall	Alicia	Dunmore, PA
Martin	Paul	Old Forge, PA
Martincek	Ashley	White Haven, PA

Last Name	First Name	City, State
Marx	John H., Jr	Scranton, PA
Mascaro	Pasquale, Sr.	
Mascaro	Pasquale	
Matteucci	Theresa	Throop, PA
May	Kelly	Dunmore, PA
May	Mari	Dunmore, PA
May	Tom	Roaring Brook Twp, PA
May	Joesph	Scranton, PA
Mazzone	Sonni Rose	Philadelphia, PA
Mazzoni	Joseph	Peckville, PA
McAndrew	Mary Margaret	Olyphant, PA
McAndrew	Katie	Old Forge, PA
McAndrew	John R.	
McCabe	Jerry	Scranton, PA
McCabe	Tim	South Abington, PA
McCabe	James	Scranton, PA
McCabe	Frank	Dunmore, PA
McCafferty	Mary Ellen	Dunmore, PA
McClane	Margaret	
McConnell	Erin	
McCormick	Mary Alice	Jefferson Twp, PA
McCormick	Lillian	Archbald, PA
McDade	Michele	Scranton, PA
McDonald	Nancy	Dunmore, PA
McDonald	Kevin	Dunmore, PA
McDonald	Sharon	Dunmore, PA
McDonald	Ann Marie	Dunmore, PA
McDonald	Patrick	Dunmore, PA
McDonnell	William J.	Dunmore, PA
McDonnell	Kathy	
McDonnell	Kevin	Dunmore, PA
McGee	William	Jefferson Twp, PA
McGovern	Angela	Yardley, PA
McGowan	Jane	Throop, PA
McGrail	Maggie	Waverly Twp, PA
McGrath	Heather	Dunmore, PA
McGrath	Will	
Mcgrath	Margaret	Dunmore, PA
McGrath	Harry	Dunmore, PA
McGrath	Jack	New York, NY
McGraw	Mary	Dunnellon, FL
McGuire	Lisa	
McHale	Robert	Scranton, PA
McHale	Michelle	Dunmore, PA
McHale	William	Venice, FL
McHale	Maryellen	Venice, FL
McHale	Maggie	Philadelphia, PA
McKenzie	Victoria	Scranton, PA
Mclafferty	Stephen	Throop, PA
Mclafferty	Diane	Throop, PA
McLane	Richard	Springbrook Twp, PA
McMullen	Brigid	Philadelphia, PA
Meade	Gordon B. and Kathryn M.	Jefferson Twp, PA
Mecca	Charles	Scranton, PA
Mecca	Barbara	Dickson City, PA
Mecca	Jim & Georgette	Dunmore, PA
Mecca	Dale	Scranton, PA
Medici	Barbara	Jefferson Twp, PA
Meehan	John	Jessup, PA
Mehl	Eric	Scranton, PA
Mellow	John	
Meoni	Jess	Scranton, PA
Mercugliano	Justin	Cheshire, CT
Mercuri	Paula	Moosic, PA

Last Name	First Name	City, State
Merrigan	Thomas	Dunmore, PA
Messner	Scott	Scranton, PA
Meyer	Renata	Scranton, PA
Michael	Eric	Scranton, PA
Michalczyk	Mark	Scranton, PA
Milite	Samantha	Perkasie, PA
Mill	Audrey	Larksville, PA
Miller	Alison	Lake Ariel, PA
Miller	Allison	Australia
Minello	Mike	Dunmore, PA
Miscavage II	Bob	Scranton, PA
Mitchell	Chantel	Scranton, PA
Mithani	Sarah	Cresco, PA
Mizanty	Bev and Ed	Dunmore, PA
Mizanty	Megan	Jersey City, NJ
Mizanty	Rachel	Dunmore, PA
Mizanty	Carolyn	
Molesevich		
Monick	Barbara	
Montoro	Mary	Scranton, PA
Mooney	John	Dunmore, PA
Mooney	John	Dunmore, PA
Moosic Little League		Scranton, PA
Moran	Alberta	
Moreli	George	Dunmore, PA
Morgan	Bobette	Dunmore, PA
Morgan	Robert	Dunmore, PA
Morgan	Michelle	Pittston, PA
Morris	John	Dunmore, PA
Moss	Gary	Hawley, PA
Moyer	P.	
Moyer	Pam	
Moylan	Colleen	Clarks Summit, PA
Mozdian	Cheryl	South Abington Twp, PA
Mullaly	Catherine	Scranton, PA
Muller	Michael	Scranton, PA
Mullins	Kyle J.	
Munley	Kelly	Scranton, PA
Munley	Peg	Carbondale, PA
Munley	Mary Ann	Peckville, PA
Munley	Elizabeth	Moosic, PA
Munley	Thomas	Scranton, PA
Munley	Margaret	
Munley-Cerda	Patti	
Muro	Marilyn	Scranton, PA
Murphy	Heather	Scranton, PA
Murphy	James	Dunmore, PA
Murphy	Megan	Dunmore, PA
Murphy	Hannah	Dunmore, PA
Murphy	Megan & Neal	Dunmore, PA
Murray	JP	Scranton, PA
Musko	Joanne	Jefferson Twp, PA
Musso	Cathy	Dunmore, PA
Muto	Ann Marie	Throop, PA
Myers	Kathy	Factoryville, PA
Nagurney	Robert W, Joann, Robert J.	Throop, PA
Narcoonis	Jason	
Nardozzi	Paul	Dunmore, PA
Naro	Lisa	Dunmore, PA
Naro	Anthony & Linda	Elmhurst Twp, PA
Naro	Grace	Dunmore, PA
Nash	Lashawny	Amityville, NY
Nasser	Maggie	Dalton, PA
Nasser & Company		Dunmore, PA

Last Name	First Name	City, State
Neary	Noreen	Dunmore, PA
Neiman	Liz	Clarks Summit, PA
Nelson	Henry	Dunmore, PA
Nelson	Lynn	Dunmore, PA
Neri	Megan	Throop, PA
Neri	Julie	Throop, PA
Neri	Salvatore	Throop, PA
Nervell	Lynda	
Newbern	Jessica	Honesdale, PA
Newell	Lynda	Moscow, PA
Nicastro	Erin	Dunmore, PA
Nicholas	Rebecca	Scranton, PA
Nicholas	Victoria	Jefferson Twp, PA
Nicolaris	William & Denice	Jefferson Twp, PA
Nivert	Louis A.	Throop, PA
Nivert	Stacy	Scranton, PA
Noakes	Patricia	Scranton, PA
Nolan	Alisa	White Plains, NY
Nolen	Flo	Dunmore, PA
Noll	Martin	Scranton, PA
Nordberg	Denise	Scranton, PA
Notarianni	Katie	Philadelphia, PA
Novitch	Mark	Dunmore, PA
Novotka	Jan	Scranton, PA
O'Brien	Corey	Moosic, PA
O'Brien	Michelle R.	Moosic, PA
O'Brien	Maggie	Scranton, PA
O'Brien	Sheila	Dunmore, PA
Occhipinti	Eileen	Dunmore, PA
OConnell	Sandy	Moscow, PA
O'Donnell	Kristin	Dunmore, PA
Ogden	Bill	Dunmore, PA
Ogonosky	Margie	Scranton, PA
O'Hara	Joseph	Independence, MO
Olivetti	Delvi J., Jr.	Dunmore, PA
O'Malley	William	Clarks Summit, PA
O'Malley	Bridget	Dunmore, PA
O'Malley	William, Jr.	Dunmore, PA
O'Malley	Laura	Clarks Summit, PA
O'Malley	Michael	Dunmore, PA
Omally	Barb	Scranton, PA
Oneill	Gina	Dunmore, PA
O'Neill	Barbara	Scranton, PA
O'Neill		Dunmore, PA
Orozco	Abbey	Philadelphia, PA
Orsulak	Elyse	Northampton, PA
Osman	Andrea	Olyphant, PA
Oven	Katherine	Dunmore, PA
P.	Armond	Scott Township, PA
Padden	Mary	Macungie, PA
Padula	Patrick & Carol	Dunmore, PA
Palauskas	Jason	Scranton, PA
Palmer	Courtney	Clarks Green, PA
Palmere	Mimi	Dunmore, PA
Pane	Josephine	Dunmore, PA
Pappa	Jackie	Dunmore, PA
Parks	Amanda	Glenside, PA
Pasko	Renee	Dunmore, PA
Pattara	Elizabeth	Clarks Summit, PA
Pavalone	Janine	Jessup, PA
Pavlowski	Tom	Dunmore, PA
Pavlowski	Emily	Scranton, PA
Pearson	Jeanine	Dunmore, PA
Peloggi		Dunmore, PA

Last Name	First Name	City, State
Penick	Shirley	Jefferson Twp, PA
Penick	William	Jefferson Twp, PA
Pennington	Mandy	Scranton, PA
Pepen	Nicholas	Orefield, PA
Perdew	Sarah	Union Dale, PA
Perez	Kathy	Dunmore, PA
Perko	Christine and Bob	
Perrie	Courtnie	Scranton, PA
Perrone	William	Dunmore, PA
Perrone	Joseph	Dunmore, PA
Perrone	Joseph	
Perrone	Mary	Dunmore, PA
Perry	Lorraine	Dunmore, PA
Perry	David	Dunmore, PA
Perry	Mark T.	Dunmore, PA
Perry-Rinaldi	Shawna	Olyphant, PA
Pethick	James	Scranton, PA
Pethick	Susie	Scranton, PA
Petrochko	Jason	Jessup, PA
Petrucci	Chris	Throop, PA
Petrullo	Alexandra	Scranton, PA
Pettinato	Catherine	Clarks Summit, PA
Pettinato	Edie	Scranton, PA
Pfeiffer	Karen	Jefferson Twp, PA
Pfeiffer	Wayne	Jefferson Twp, PA
Pichiarelli	J.	Dunmore, PA
Pidich	Lorraine	Throop, PA
Piepoli	Margaret	Dunmore, PA
Pigga	Gail	Lake Ariel, PA
Pilch	Michael	Archbald, PA
Pivovarnick	John	Dunmore, PA
Pizzichemi	Kathleen	Dunmore, PA
Plappert	Robert	Dunmore, PA
Pochas	Jim	Throop, PA
Polizzi	Mary	Olyphant, PA
Pope	Fred	Dunmore, PA
Posluszny	Johanna	Dunmore, PA
Pratt	Adam	Scranton, PA
Preitz	Paul	Taylor, PA
Puorro	Anthony	Lake Ariel, PA
Pusateri	Maureen	Dunmore, PA
Puz	David M.	Dunmore, PA
Quinlan	Judy	Mount Cobb, PA
Quinlan-Sheridan	Sarah	Clarks Summit, PA
Quinn	Tom Guirk	Dunmore, PA
Quinn	J. Anthony	Scranton, PA
Quinn	Sharon M.	Dunmore, PA
Quinn	Ashley	Hawley, PA
Quinn	Mike and Noreen	Lake Ariel, PA
Quinnan	Robert and Catherine	Dunmore, PA
Quinnan	Joe	
R.	Meg	Scranton, PA
Rafalko	Mauri	Jefferson Twp, PA
Ramsthaler	Michael	Florham Park, NJ
Ranella	Nicholas	Dunmore, PA
Reedey	Judy	Scranton, PA
Renard	Ken & Mary	Dunmore, PA
Repchick	David	Throop, PA
Repchick	Michelle	Olyphant, PA
Resident Petitions		
Ricci	Mike	Peckville, PA
Ricciardi	Lynn	Throop, PA
Ricciardi	Mike	Throop, PA
Ricciardi	Chris	Peckville, PA

Last Name	First Name	City, State
Ricupero	Sarah	Canadensis, PA
Riggi	Angelo	Dunmore, PA
Ritterbeck	Mari	Scranton, PA
Rixner	Timothy	Dunmore, PA
Roberto	Kathleen	Moosic, PA
Roberts	Gary T.	Ivyland, PA
Roberts	Sandy	Lake Ariel, PA
Robertson	Frank	Throop, PA
Roche	Mary	Dunmore, PA
Rodney	Philip	Roaring Brook Twp, PA
Rogan	John	Archbald, PA
Roginski	Sharon	Scranton, PA
Rojek	Lynda	Scott Township, PA
Rojek	Taylor	Emmaus, PA
Rojek	Jillian	Scott Township, PA
Rooney	Jack	
Rosar	Marianne	Jermyn, PA
Rosar	Michael	Jermyn, PA
Rosar	William	Jermyn, PA
Rosato	Gemma	Dunmore, PA
Rose	Tim	Scranton, PA
Rosenkrans	Diane	Dunmore, PA
Rosetti	Patricia	Scranton, PA
Rossi	Cynthia	Throop, PA
Rossmell	Melissa	Dunmore, PA
Ruane	Joseph	Dunmore, PA
Ruddy	Anne	Huntersville, NC
Ruddy-Archer	Kerri	Scranton, PA
Ruggiero	Vito P.	Dunmore, PA
Russo	Ronald and Carol	Moosic Lake, PA
Sabatini	Jeff	Haddonfield, NJ
Salerno	Rosemary	Scranton, PA
Salitis	Maureen	Olyphant, PA
Salitis	Abby	Olyphant, PA
Salitis	Martin	Olyphant, PA
Sallusti	Pauline M.	Scranton, PA
Sanchez	Adriana	Nicholson, PA
Sandy	David	Scranton, PA
Santaniello	Madeline	
Santarsiero	Brian	Dunmore, PA
Sarkis	Joseph E.	Dunmore, PA
Saunders	Maureen	Scranton, PA
Sauter	Joseph	Moosic, PA
Scalzo Loughney	Frances	Dunmore, PA
Scassellati	Rella	Jessup, PA
Scavo	Frank	Old Forge, PA
Schmanski	Laura	East Northport, NY
School District	Mid Valley	
School District	Scranton	Scranton, PA
Schoonover	Carolyn	Dunmore, PA
Schuller	Linda	South Abington Twp, PA
Schumacher	Marie	
Schuster	Patrick	Dunmore, PA
Schweitzer	Robert	Clarks Summit, PA
Sciartilli	Tammy	Scranton, PA
Scott	Richard T.	Dunmore, PA
Scott	Joshua	Las Vegas, NV
Scranton City Council		Scranton, PA
Sealey	Mary Lou	
Seamans	Timothy	Jessup, PA
Seamans	Joshua	Jessup, PA
Seamon	Andrew	Dunmore, PA
Sebastianelli	Samuel	Peckville, PA
Sebastianelli	Jeanna	Jefferson Twp, PA

Last Name	First Name	City, State
Seegar	Michael C.	Dunmore, PA
Seitzinger	Mark	Scranton, PA
Seitzinger	Kara	
Sember	Debbie	Jefferson Twp, PA
Senkow-Richards	Judith	Dickson City, PA
Seveeny	Judith	Sranton, PA
Shafer	Bryan	Dalton, PA
Shaffern	Elizabeth	Scranton, PA
Shanley	Diane	Dickson City, PA
Sheehan	Patricia	Dunmore, PA
Sheehan	Mary	Scranton, PA
Sheridan	Mark	Scranton, PA
Shields	Marilynn	Dunmore, PA
Shivock	Elizabeth	Jermyn, PA
Shoemaker	Janine	Waverly Twp, PA
Shotko	Kurt	Moscow, PA
Shumaker	Robert	Scranton, PA
Siciliano	Jennifer	Scranton, PA
Siedlecki	Brandon	Samong, NJ
Sienkiewicz	Jolina	Mayfield, PA
Silvi	Mary & Emil	Dunmore, PA
Simon	Lisa	Jessup, PA
Simrell	Melissa	Scranton, PA
Siracuse	Carl	Throop, PA
Siracuse	George & Loretta	Jessup, PA
Skaluba	Roseanne	
Skoff	Alison & JB	Dunmore, PA
Skoff	Caroline	Dunmore, PA
Skolnik	Kevin	Duquesne, PA
Slachtish	Maria	Olyphant, PA
Sload	Patti	Dunmore, PA
Slocum	Arianne	Scranton, PA
Smiegal	Margaret	Jefferson Twp, PA
Smith	Wayne	Elmhurst, PA
Smith	Ashley	
Smith	Matthew	Covington Twp, PA
Smith	Doug	Dunmore, PA
Smith	Eileen	Jefferson Twp, PA
Smith	Madelyn & Gary	Jefferson Twp, PA
Smith	Paula	Dunmore, PA
Smith	Brad	Clarks Summit, PA
Smith	Jeff	Harrisburg, PA
Smith	Dorothy	Scranton, PA
Snodgrass	James, Sr.	Olyphant, PA
Snowdon	Mary	Westville, NJ
Snutes	Nancy	Pleasant Mount, PA
Snyder	Mark	Jessup, PA
Snyder	Karen	Archbald, PA
Sohns	Thomas F.	Dunmore, PA
Solid Waste Managem	Luzerne County	Forty Fort, PA
Sollami	Kera	Dunmore, PA
Sommers	Cullen	Dunmore, PA
Southwick	Eileen	Scranton, PA
Souza	Rebecca	Throop, PA
Spallette	Patricia	Scranton, PA
Spanish	Katharine	Dunmore, PA
Spanish	Todd	Dunmore, PA
Spellman Young	Maryann	Union Dale, PA
Spillar Bartovsky	Ann	Mt. Cobb, PA
Spinelli	Joseph A.	Olyphant, PA
St. Duran	Brenda	Madison Twp, PA
Stanilka	Michael	Scranton, PA
Stanseski	Pinky	Throop, PA
Stascavage	Gregory	Dunmore, PA

Last Name	First Name	City, State
Stefanski	Elizabeth	Dunmore, PA
Stegura	Jeremy	Pittston, PA
Stella	Rita	Jessup, PA
Steneck	Emily	East Northport, NY
Stephens	Laurie	Scott Township, PA
Stewart	Kelsey	Old Tappan, NJ
Stewart	Kevin	
Stockwell	David & Melanie	Lakeville, PA
Strong	Jamie	Scranton, PA
Strong	Kristen	Clarks Summit, PA
Sujkowski	Mark	Dalton, PA
Summa	Joann	Dunmore, PA
Swaboski	Madeline	Scranton, PA
Swaboski	Madeline	Scranton, PA
Sweda	Pam	Hamlin, PA
Sweeney	Janet	
Sweeney	Amber	Clarks Green, PA
Swinick	Thomas and Geralyn	Dunmore, PA
Symons	Jessica	Dunmore, PA
Szanyi	Mark	West Pittston, PA
Szymanski	Eileen	South Abington Twp, PA
Taffera	Kristen	Dunmore, PA
Talarico	Moriah	Clarks Green, PA
Talarico	Frank	Clarks Green, PA
Talarico	Ben	Clarks Green, PA
Tallarico	Caitlyn	Dunmore, PA
Tarazano	Leslie	
Taylor	Katie	Clarks Summit, PA
Taylor	Suzi	Taylor, PA
Teevan	Joanne	Dunmore, PA
Teevan	Diane	Olyphant, PA
Teevan	Joann	Dunmore, PA
Teevan	Jessi	Olyphant, PA
Teevan	James	Olyphant, PA
Telep	Lauren	Olyphant, PA
Terwilliger	Phyllis	Clarks Summit, PA
Tharp	Charles	Clarks Summit, PA
Thomas	Ricky	Hawley, PA
Thomas	Bill	South Abington Twp, PA
Thomas	Nora	Johnson City, NY
Thomas	Janet	Throop, PA
Thyberg	Jerome	Scranton, PA
Tilburg	Corey	Dunmore, PA
Tinney	Elizabeth	Olyphant, PA
Tokash	Declan	Dickson City, PA
Tokash	Isabelle	Dickson City, PA
Tokash	Paula	Dickson City, PA
Toman	Samuel E.	
Tomasetti	Donna	Dunmore, PA
Tomcho	Renee	Olyphant, PA
Toomey	Carrie	Dunmore, PA
Trama	Jo Ann	Scranton, PA
Tremblay	Dean	Appleton, WI
Trescavage	Joseph	Moosic, PA
Troutman	Justin	Scranton, PA
Trushina	Olga	Hawley, PA
Tubiolo	Thomas	Jefferson Twp, PA
Tucky	JoAnn	Spring Brook Twp, PA
Tur	Lauren	Dunmore, PA
Urzen	Bonnie	Jessup, PA
Valvano	James A.	Dunmore, PA
Valvano	James F.	Dunmore, PA
Valvano	Sharon	Dunmore, PA
Van Buskirk	Fran	Nicholson, PA

Last Name	First Name	City, State
Vangarelli	Dominic	Jessup, PA
Vangarelli	Barry	Dickson City, PA
Vanston	Alice	Jessup, PA
Veltri	Peter	Dalton, PA
Veltri	Janet	Dalton, PA
Vermylen	Virginia	Scranton, PA
Vitaletti	Ryan	Olyphant, PA
Vitaletti	Karrie	Olyphant, PA
Vogue	Marissa	Pittston, PA
Volinsky	Georganna	Scranton, PA
Voytek	Steve	Clarks Summit, PA
Voytek	Madelyn	Dunmore, PA
Wagner	William	Roaring Brook Twp, PA
Wagner	Patricia	Roaring Brook Twp, PA
Walker	Charlie	Archbald, PA
Walker	Erin	Dunmore, PA
Walker	Therese	Dunmore, PA
Walker	Lynne	Scranton, PA
Walker	Matthew	Dunmore, PA
Wallace	Susan	Scranton, PA
Wallis	Steve	Scranton, PA
Walsh	Wilhelmina	Scranton, PA
Walsh	John	
Walsh	Michael	Dunmore, PA
Walsh	Kathleen	Dunmore, PA
Walsh	John	Clarks Green, PA
Walsh	Hank & Marie	Dunmore, PA
Walsh	M	Dunmore, PA
Walsh	Erin	Scranton, PA
Walter	Francis	Langhorne, PA
Warhaftig	Lillian	New York, NY
Warholic	Bernie	Lake Ariel, PA
Washo	Craig	Olyphant, PA
Watson	Joseph	Scranton, PA
Weiland	Linda	Scranton, PA
Weiss	Paula M.	Scranton, PA
Welding	Mindy	Scranton, PA
Welshko-Williams	Melissa	Madison Twp, PA
Weshler	Joe	Scranton, PA
Westerlund	Danielle	Dickson City, PA
Wetherill	James	Scott Township, PA
Wharton	Robert, J.	Scranton, PA
White	Frederick	Covington Twp, PA
White	Addie	Covington Twp,
Widaman	Valerie	Dunmore, PA
Wieder	Emma	Ossining, NY
Williams	Paul	
Williams	Paul	Clarks Green, PA
Williams	Gerald	Carbondale, PA
Williams	Rita	
Williams	Thomas J.	Moosic, PA
Williams	Amber	Peckville, PA
Williams	Marcella	Dunmore, PA
Williams	Paige	Wyoming, PA
Wilson	Richard	Scranton, PA
Wilson	Phoebe	Scranton, PA
Wintermantel	Taryn	Olyphant, PA
Woelkers	Irene	Moscow, PA
Wolff	Marty	Scranton, PA
Woodfin	Joanne	Lees Summit, MO
Woodruff	Melissa	Dunmore, PA
Woody	Maggielyn	Clarks Summit, PA
Woody	Josephine	Clarks Summit, PA
Woody	Hannah	Scranton, PA

Last Name	First Name	City, State
Woodyatt	Catherine	Scranton, PA
Worozbyt	Owen	Dunmore, PA
Wozniak	Dennis	Olyphant, PA
Wzorek	Susan	Olyphant, PA
Yagelski-Betti	Dianne	Dickson City, PA
Yanisko	David	Dunmore, PA
Yeager	Jordan B.	Doylestown, PA
Yolanda Mata O	Elvia	Scranton, PA
Yonkondy	Jon	West Pittston, PA
Yost	Richard	South Abington Twp, PA
Young	Rebecca	Throop, PA
Zabiegala	Peter	Scranton, PA
Zabriski	Jude	Olyphant, PA
Zandarski	Grace	Dunmore, PA
Zaums	Margaret	Clarks Summit, PA
Zavada	Ed	Peckville, PA
Zeleniak	Nancy	Dunmore, PA
Zero	Shawn	Scranton, PA
Ziegler	Judith Ann	Scranton, PA
Zimmer	Molly	Dunmore, PA
Zingaro	Richard	Dunmore, PA
Zurinskas	John J.	Clarks Summit, PA
	Barbara	
		Madison Twp, PA
		Jefferson Twp, PA
	James	Dunmore, PA
	Chris	

Environmental Assessment Analysis (Harms/Benefits)

Keystone Sanitary Landfill #101247
Phase III Site Development
Environmental Assessment
Dunmore and Throop Boroughs, Lackawanna County

Prepared by:
Pa. Department of Environmental Protection
Northeast Regional Office
Waste Management

April 2021

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

ENVIRONMENTAL ASSESSMENT PROCESS

On March 20, 2014, the Department of Environmental Protection (DEP) received a major modification application for Keystone Sanitary Landfill's (KSL) Phase III Site Development project, an expansion of KSL's existing landfill located in Dunmore and Throop Boroughs, Lackawanna County. DEP's municipal waste regulations require that DEP evaluate KSL's landfill expansion permit application consistent with a two-phase process (25 Pa Code § 273.101). The environmental assessment is evaluated in Phase I prior to technical review in Phase II of the permit review. 25 Pa. Code § 271.126 and § 271.127 (relating to environmental assessment) require that an applicant conduct and demonstrate that the benefits related to the project clearly outweigh the known and potential environmental harms that remain after mitigation.

Applications subject to the environmental assessment regulations must: (1) include a detailed analysis of the potential impact of the proposed facility on the environment, public health and public safety; (2) describe the known and potential harms of the proposed project; (3) include a written mitigation plan that explains how each known and potential harm will be mitigated and the extent to which any known or potential harms remain after mitigation; and (4) demonstrate that the benefits of the project to the public clearly outweigh the known and potential environmental harms that will remain after the proposed mitigation. Benefits and known and potential harms can be identified by the applicant, DEP or other agencies, or any municipality or person.

Benefits of the project consist of social and economic benefits that remain after taking into consideration the known and potential social and economic harms of the project and may also consist of the environmental benefits of the project. To determine whether an impact is a harm or a benefit, DEP compares the applicant's proposal to the conditions that would exist if the project did not move forward. In reviewing an environmental assessment, DEP evaluates social and economic benefits after offsetting them with social and economic harms. Environmental harms are evaluated after offsetting them with acceptable mitigation plans. The environmental harms are then balanced against the social and economic and environmental benefits to determine if the benefits clearly outweigh the harms.

Benefits and harms are identified as "known" benefits or harms or "potential" benefits or harms. A known harm or benefit is one that DEP believes will occur in the future. A potential benefit or harm is one that might occur given the right circumstances. A known benefit or harm carries greater weight than if that same benefit or harm were a potential benefit or harm for a particular project.

For each benefit and harm the duration, frequency, intensity, reach (i.e., who will be affected) and sensitivity of receptor are evaluated. For this discussion, duration refers to how long a harm or benefit may continue. Frequency refers to how often it may occur. Intensity refers to how much the harm or benefit may be if or when it occurs. It should be noted that the words "duration," "frequency," "intensity," "reach," and "receptor sensitivity" will not be used to describe every harm and benefit in the analysis. However, these factors are considered for each harm or benefit and are discussed when appropriate.

Each harm is discussed individually below to determine if it has been fully mitigated. If a harm is fully mitigated, that harm is not included in the balancing portion of this document. If there is harm remaining after mitigation, that remaining harm is included in the balancing. The balancing looks at the individual and collective impacts of all the harms and the benefits to ensure that the total effect of the project is such that the related benefits clearly outweigh the harms.

KSL submitted an environmental assessment in its application that provided its analysis of the potential impact of the proposed facility on the environment, public health, and safety. DEP, after consultation with appropriate government agencies and potentially affected parties, evaluated the environmental assessment to determine whether the proposed project has the potential to cause environmental harm. Where appropriate, past performance is used to predict future conditions related to a harm or benefit. In this document, DEP provides its analysis of the known and potential environmental harm that will remain after implementation of the proposed mitigations and whether the benefits of the proposed project clearly outweigh the remaining harms.

The harms detailed below are those identified by KSL, DEP, or other parties who provided comment on the application. The mitigation measures and benefits have been edited from the application and reflect KSL's own wording or viewpoint. There is no tacit or implied acceptance of statements made by KSL within its application or repeated in the mitigation or the benefits sections of this document, by virtue of those statements being included in, or excluded from, this document. The "DEP Determination of Remaining Impacts" and "DEP Evaluation of Benefit" sections are DEP's independent evaluation of KSL's proposed mitigation and proposed benefits.

PROJECT DESCRIPTION

The Keystone Sanitary Landfill is an existing landfill located at 249 Dunham Drive in Dunmore and Throop Boroughs, Lackawanna County. The site is comprised of three closed disposal areas (Keystone/Dunmore, Logan, and Tabor) and a current active Phase II disposal area. The Keystone/Dunmore disposal area is the oldest and is unlined. The immediate surrounding area consists of highway (Interstate 81 and Route 6) to the west, south and east; and commercial areas to the north and northwest. The area beyond the highway to the south and east is wooded, and a residential area is located immediately beyond the highway to the southwest. On March 20, 2014, the Department of Environmental Protection (DEP) received the application for KSL's Phase III expansion project. The expansion area would be located within the current permit boundary and involve expanding over and between existing fill areas.

As part of the review of Keystone's landfill application, DEP's review is coordinated with various local, state, and federal entities where necessary. Local land use approval and other state and/or federal agency concurrence may be necessary prior to permitting of the expansion project. In addition, permits required by KSL from DEP may be coordinated as necessary for the project.

Pursuant to 25 Pa. Code § 271.202, receipt of a permit application for a modification that results in increased disposal capacity does not occur until a Local Municipality Involvement Process meeting is held. At this meeting DEP, the applicant, and municipal officials meet to discuss the application, DEP's review process, the public involvement steps, and any concerns and questions of the municipal officials. This Local Municipality Involvement Process meeting was held on May 20, 2014 at the Scranton State Office Building. DEP found the application to be incomplete and a deficiency letter was issued to KSL on June 24, 2014. KSL submitted additional information to DEP in response on September 9, 2014, October 2, 2014, October 27, 2014, and November 7, 2014. Following review of this additional information, the application was found to be complete and officially accepted for review on December 17, 2014.

In their application KSL originally proposed to increase the height of the landfill by 165 feet. As the first step in the review process, DEP reviewed the Form D – Environmental Assessment, and portions of the application that were relevant to the evaluation of harms or benefits. On October 13, 2015, DEP issued a first Environmental Assessment review letter. KSL's response to this review letter was received by DEP on May 17, 2016. The response included a significant reduction in the proposed final height of the expansion and a reduction in volume and design life of the proposed expansion. KSL modified the project to lower the peak elevation to that of the previously permitted Phase II height (1,585 feet). The majority of disposal would occur in the valley between the existing disposal areas. The revised proposal would increase the facility's disposal capacity by 134 million cubic yards and expand KSL's life-span by approximately 44 years, based on their current permitted average daily volume. Since 2016, KSL has made some adjustments to the sequencing and grading of the project which affected the capacity and life-span. The final project would increase the facility's disposal capacity by approximately 94 million tons and increase KSL's life-span by approximately 42 years. The project does not propose to increase the daily maximum or quarterly average waste acceptance rates for the landfill. If approved, the major modification will not change the 10-year term of the existing permit and KSL would need to apply for permit renewal prior to expiration of the current permit (April 6, 2025).

PUBLIC INPUT

DEP determined that a portion of Dunmore Borough is an Environmental Justice (EJ) area for economics and DEP has taken appropriate measures to ensure the public and EJ community is informed regarding the Phase III expansion. In accordance with DEP's EJ Public Participation Policy, DEP conducted outreach and public meetings to educate the public, including the EJ community, about the pending application and how they could participate. DEP created a fact sheet and plain language summary to explain the proposed project and made the application and all related materials accessible to the public on the DEP website.

There has been significant public interest in the application and over 1,500 comments have been received. DEP provided several opportunities for public input: a public meeting was held on February 25, 2015 at the Dunmore High School, an open house was held on April 27, 2015 at the Dunmore Community Center, a second public meeting was held on June 15, 2015 at Mid Valley High School, and a public hearing was held on July 18, 2016 at Mid Valley High

School. Concerns raised by local government and municipal officials, residents, business owners and other persons affected by the proposed expansion included odors, visual impacts, health impacts, existing and potential groundwater contamination, property values, bird nuisances, acceptance of out of state waste, discharge of leachate through combined sewer lines into the Lackawanna River, and civic pride. A community organization known as Friends of Lackawanna (FOL) was formed to oppose the ongoing landfill operation and expansion and created an online petition opposing the landfill. DEP received a harms and benefits analysis prepared by FOL dated June 26, 2015 and an updated analysis dated November 22, 2017. DEP also received comments in favor of the expansion including letters from numerous local businesses and a petition from landfill employees, friends and family supporting the landfill. All comments received were reviewed and considered as part of DEP's review.

HEALTH CONSULTATION

The Pennsylvania Department of Health (PADOH) received a request from a Pennsylvania state representative and members of FOL to conduct an environmental health study/evaluation of air quality surrounding KSL. The request indicated that the local community was concerned about harmful environmental exposures because of the landfill's operation and its future expansion. Based on these concerns, PADOH and the federal Agency for Toxic Substance and Disease Registry (ATSDR) began a collaboration with DEP to evaluate community concerns about environmental exposures near the landfill, particularly focusing on evaluating air quality data near the landfill.

PADOH and ATSDR reviewed data collected by DEP and issued their findings in a Health Consultation Report dated April 1, 2019. The report concluded that chronic (long-term) exposure to the chemicals detected in ambient air near the landfill at the monitored locations is not expected to cause harmful non-cancer health effects under the landfill's current operating conditions. However, chronic exposure to benzene and formaldehyde may cause a very low increased cancer risk. The study did not conclude the chemicals detected are coming from KSL. Benzene and formaldehyde are commonly found in outdoor air and the cancer risk estimates based on community measurements were typical of exposure across similar suburban/urban communities in the United States that are not necessarily located near landfills. The report also concluded that acute (short-term) exposure to some of the contaminants detected in ambient air near the landfill could have caused transitory health effects for sensitive populations, such as pregnant women, children, older adults and people with respiratory disease. An additional conclusion of the report was that a data gap exists for assessing current and future potential exposures from subsurface vapor migration from the landfill into residences (i.e., vapor intrusion). Planned changes in landfill operations (including excavation, line construction and landfilling in an area closer to the Swinick community) could adversely impact future subsurface vapor migration pathways. To address these conclusions, the report recommended that DEP continue to oversee landfill activities and enforce landfill permit regulations, including nuisance odor rules; consider a fence line air monitoring program that includes publicly accessible real-time results for selected limited analytes as part of the landfill's future permit requirements; make publicly available the response and oversight activities that DEP has conducted at the landfill; conduct timely responses to nuisance odor complaints; consider maintaining and posting an odor complaint log; and consider working

with the landfill to perform vapor intrusion investigations in the Swinick community to evaluate current indoor air levels of volatile organic compounds and to ensure that conditions do not change in the future after new operations commence in the landfill area.

To address the recommendations contained in the report, KSL has proposed what they believe to be a comprehensive air monitoring program and an enhanced onsite underground gas migration monitoring plan. Further, the environmental regulations and permits issued by DEP are designed and intended to be protective of public health. DEP will continue its oversight of landfill activities and enforcement of landfill permit regulations in this regard. "Health impacts" was not listed as a specific harm for the purpose of the environmental assessment, but rather the individual harms that could contribute to health impacts (e.g., air quality) are addressed separately.

HARMS AND MITIGATION

(E) = Environmental, (SE) = Social & Economic

1. **Property Values (SE):** Potential harms to the value of properties are a concern of those living in the vicinity of the landfill.

   KSL's Proposed Mitigation: KSL retained a real estate appraiser to evaluate the performance of real estate markets in the vicinity of KSL. The evaluation concludes that proximity to KSL has not diminished the residential property values in the surrounding neighborhoods. However, recognizing the future residential property value and/or perceived property values still may be classified as a potential harm; KSL will implement a Property Value Protection Plan (PVPP) upon issuance of the Phase III permit modification. This PVPP would allow a residential homeowner located within ½ mile of KSL's property boundary to enter into an agreement with KSL where KSL would purchase the property for an amount based on the average of three appraisals.

   DEP Determination of Remaining Impacts: Much of the residential development around the landfill has occurred despite the presence of the landfill, demonstrating that the landfill did not deter the sale of existing homes, or the construction of new residential development nearby. However, because the proposed expansion would make the landfill closer and more visible to some residences in nearby developments, the expansion may impact property values. KSL's PVPP provides adequate mitigation to address potential impacts to property values and no harm remains for the purpose of this environmental assessment.

2. **Visual Impacts (SE):** Visibility of the landfill is a harm of the project because the proposed project will extend the peak elevation over a larger area than the currently permitted disposal area, enlarging the unnatural, permanent mound on the horizon. The landfill will extend the peak of the landfill 3,000 feet closer to residential development and increase the height of existing final grades in areas that are presently closed by over 200 feet. Public comment indicates that those living in proximity to the landfill are particularly sensitive to the visual impact of the proposed Phase III expansion.

KSL's Proposed Mitigation: KSL modified the project to lower the peak elevation to that of the previously permitted Phase II height. A line of sight study was completed to fully assess the potential visual impacts of the project. Visual impacts during construction and daily waste placement are temporary and the majority of disposal would occur in the valley between the existing disposal areas, further mitigating the potential for visual impacts. An aggressive closure capping and revegetation program is planned to mitigate any remaining visual impacts.

DEP Determination of Remaining Impacts: The currently permitted maximum elevation of the landfill is 1,585 feet. The proposed expansion will not change that maximum height; however, the proposed expansion will elongate the profile of the landfill to extend the height across a larger distance. The profile of the top of the currently permitted Phase II landfill, which is not yet at final grade, will extend approximately 280 feet in length whereas the proposed expansion would extend this horizontal profile to approximately 4,300 feet in length[1].

The revised, lowered height (from the originally proposed 1,750 feet) and capping and revegetation program provides some mitigation; however, because the new proposed peak elevation will extend over a larger area than the currently permitted disposal area, presenting a much longer profile, and moving it closer to residential development, the project will still result in visual impacts. Harm related to the visual impact of a closed landfill on the surrounding viewscape has only vaguely been addressed. The daily landfill operations will be mostly unshielded from view from traffic on Interstate 81 and readily visible to some of the closest residents to the landfill (portions of the Swinick development). Some residents in this area will not be screened by natural or unnatural buffers. The line of sight analysis provided by KSL shows that the landfill will be clearly visible from some of these areas. The intensity of the visual harms related to the expansion will be greatest during construction activities and active working face operations which are projected to last approximately 42 years. KSL characterizes this as temporary; however, the duration is still significant. KSL has planned the sequencing of the expansion to reduce visual impacts related to active landfill operations. By working inside the valley between existing disposal areas, active operations will be screened from view by finished disposal areas for some of the time during the life of the project. Because KSL's proposed mitigation will not completely eliminate visual impacts, harm will remain for the purpose of this environmental assessment.

3. **Odors (E):** Odors from waste disposal and landfill gas production are a potential harm. Public comment indicates that odors are a concern for those living in proximity of the landfill.

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[1] For purposes of evaluating the visibility of the horizontal profile of the expansion, DEP used an elevation of 1,575 feet. The profile of the current permitted Phase II landfill that will be at or above this elevation (1,575') will be approximately 280 feet. The profile of the proposed Phase III landfill that will be at or above this elevation (1,575') will be approximately 4,300 feet.

KSL's Proposed Mitigation: KSL will continue to follow its Nuisance Minimization and Control Plan (NMCP) to address the potential for odors including employing the following: odor patrols, gas detection equipment, odor neutralizers, portable flares, horizontal gas collectors, temporary gas wells, stone columns to promote leachate drainage, temporary liner, vacuum equipment installation, limiting size of the working face, immediate disposal of odorous waste, daily monitoring of gas collection system, and aeration systems within leachate lagoons. KSL also indicates that the protocols in place from the landfill's ISO 14001 certification aid in the mitigation of off-site odor concerns and reduce potential by maximizing awareness among employees and establishing procedures for monitoring the landfill in this regard. Also, a new meteorological station has been installed on the top of a secondary litter fence pole paralleling the Lackawanna Valley Industrial Highway. The station provides data upon which operational activities can be modified to minimize any potential odor issues.

DEP Determination of Remaining Impacts: DEP regulations require landfill operators to minimize and control odors through the implementation of measures outlined within a NMCP. DEP's experience based on inspections and oversight is that KSL generally operates in compliance and has effective mitigation measures in place to control odors. However, this past fall and winter most of the landfills in DEP's Northeast Region experienced weather extremes (excessively wet weather and temperature fluctuations, etc.) that have required implementation of measures beyond regular NMCP protocols. KSL was not unique to the difficulties facing all of the region's landfills. KSL has had to consider additional measures in an attempt to adequately capture the elevated amounts of landfill gas being generated at the site due to the excessively wet weather experienced by the region last year. These measures included the deployment of temporary geosynthetic capping material on intermediate slopes before required by the permit, use of a more clay like material as intermediate cover on some of the intermediate slopes, and modifications of KSL's "Enhanced Monitoring Program." DEP inspections conducted at KSL in March and April 2019 have verified that the additional measures implemented by KSL to address the issues caused by the recent weather extremes have been effective. Some of these additional measures that were implemented have been incorporated into KSL's NMCP, specifically those in the "Enhanced Monitoring Program." While KSL has proposed adequate mitigation, it is unlikely to provide complete elimination of odors at all times. Furthermore, the mitigation could fail to work as intended due to improper implementation or maintenance. Some potential harm will remain for the purpose of this environmental assessment.

4. **Litter (E):** On and off-site litter from the acceptance and disposal of waste is a potential harm.

   KSL's Proposed Mitigation: KSL follows its litter control plan that includes: Vehicles are tarped and swept out, portable litter fencing, prompt compaction of waste and application of daily cover, placement of top liner within 1 year, limit size of working face, litter collection crews, permanent litter fence along the Lackawanna Valley Industrial Highway, daily monitoring, monitoring weather conditions and adjusting operations accordingly. Also, a new meteorological station has been installed on the top of a secondary litter fence pole paralleling the highway. The data is analyzed daily and used to adjust the orientation and/or increase the number of litter fences and to assign the daily full-time litter cleanup crew. If a litter issue is identified during the Compliance Officer's daily tour to the site and adjacent roadways, an additional litter cleanup crew will be assigned. Additionally, if extreme wind conditions prevail, disposal operations will be relocated to valley locations.

   DEP Determination of Remaining Impacts: KSL has proposed adequate mitigation measures to prevent litter from being unsightly or leaving the site. DEP's experience based on inspections and oversight is that KSL generally operates in compliance and has effective mitigation measures in place to control litter. However, because the mitigation depends on proper implementation of various measures some potential harm will remain for the purpose of this environmental assessment.

5. **Noise (E):** Off-site noise is a potential harm.

   KSL's Proposed Mitigation: KSL has identified that the use of existing horizontal buffers such as nearby limited access highways, the industrial park, and forested areas will maintain the horizontal separation of over ¼ mile from the closest residential areas. KSL indicates that it will maintain and enhance vegetative planting along public roadways. KSL also employs the following measures to control potential off-site noise: prohibit use of "jake brakes," require vegetative plantings, and annual noise monitoring inspections. A Noise Impact Assessment concluded the landfill is not significantly affecting noise levels at the nearest receptor sites. A Noise Study will be performed annually during the Phase III operations and any variations from the noise levels in the Noise Impact Assessment, attributable to KSL, will be included in the Annual Operations Report along with the details of the mitigation program instituted by KSL.

   DEP Determination of Remaining Impacts: The proposed project should not exacerbate the existing potential for off-site noise, but it will extend the operating life of the landfill and therefore will extend the duration of the potential harm. While KSL has proposed adequate mitigation, it is unlikely to provide complete elimination of noise; therefore, some potential harm will remain for the purpose of this environmental assessment.

6. **Vectors/Birds (E):** The attraction of vectors and birds is a potential harm of a landfill operation. Public comments indicate that there is a concern about large populations of birds visiting the landfill and surrounding community.

   KSL's Proposed Mitigation: KSL's vector controls include: compact and cover waste daily; limit the acceptance of wastewater sludge to certain times to limit attraction of insects; limit size of working face; maintain a compact working face to disrupt congregation of birds; use of decoys or noisemakers to limit attraction of birds; retaining outside vector control professionals as needed. KSL has executed an agreement with the U.S. Department of Agriculture (USDA), APHS Wildlife Services, PA to control the bird population at the landfill and plan assistance, regarding wildlife conflicts and management issues, to residents of communities surrounding KSL. KSL will continue to contract with the USDA for the duration of the site life of Phase III.

   DEP Determination of Remaining Impacts: KSL has proposed adequate mitigation measures to prevent nuisances from vectors. However, because the mitigation could fail to work as intended due to improper implementation or maintenance, some potential harm will remain for the purpose of this environmental assessment.

7. **Traffic (SE):** Active landfill operations result in more traffic, including unsafe and overweight vehicles, on the roadways.

   KSL's Proposed Mitigation: KSL will continue to implement its Transportation Compliance and Vehicle Safety Action Plan which incorporates six formal compliance checks per year on vehicles accessing the site in conjunction with State or local police. These compliance checks include: inspection of tarps, leaking loads, signage, fire extinguishers, daily logs, weight, presence of radioactive materials and contingency plans for residual waste haulers. KSL's Transportation Compliance and Vehicle Safety Action Plan also includes a notification and warning, delay the driver, and a 60-day ban from the site for overweight vehicles/repeat offenders. KSL has increased its efforts to communicate through written correspondence the penalties that KSL will enforce on its customers and drivers when their vehicles are repeatedly over the legal weight limits.

   DEP Determination of Remaining Impacts: Based on DEP's inspections and review of records, KSL's Transportation Compliance and Vehicle Safety Action Plan has generally been effective at reducing the number of unsafe vehicles that come to the site and ensuring the drivers are in compliance with applicable rules and regulations. However, because of the volume of trucks that utilize the site daily, there are still a large number of overweight vehicles coming to the site. The proposed expansion should not exacerbate the existing harms associated with traffic, but it will extend the duration of those harms by providing new disposal capacity to extend waste disposal operations in the area. Some harm will remain for the purpose of this environmental assessment.

8. **Dirt/Mud (E):** Tracking of dirt and mud off-site is a potential harm of a landfill operation. Public comment indicates that use of water trucks to wash the roads does not eliminate the problem.

   KSL's Proposed mitigation: Water trucks are used on interior roadways, transport vehicle transition areas and Dunham Drive. In 2015, KSL completed a bituminous pavement project in the vehicle hauling transition area. Also, a minor permit modification was approved in 2015 for a new site entrance and to expand the vehicle hauling transition and staging area. The paved transition area serves as an inspection location where all transport vehicles entering or exiting KSL, on which dirt and mud is observed, are directed to a location to be cleaned. KSL has acquired a new, more efficient sweeper truck for use in the bituminous areas of the site, on Dunham Drive and, upon a request from the Borough of Dunmore, on adjacent public streets used as an access roadway to KSL. Furthermore, KSL installed an industrial truck wash and paved the employee parking lot.

   DEP Determination of Remaining Impacts: KSL has proposed adequate mitigation measures to prevent mud from being tracked off-site. However, because the mitigation could fail to work as intended due to improper operation or maintenance or because of natural events, some potential harm will remain for the purpose of this environmental assessment.

9. **Uncompensated Losses to Local Government (SE):** More frequent paving of Dunham Drive and Tigue Street in Dunmore Borough due to traffic accessing the landfill is a potential harm.

   KSL's Proposed Mitigation: KSL will inspect Dunham Drive and Tigue Street annually and necessary repairs/improvements will be made in accordance with KSL's proposed Roadway Inspection Program.

   DEP Determination of Remaining Impacts: KSL has proposed adequate mitigation to address impacts to Dunham Drive and Tigue Street and no harm remains for the purpose of this environmental assessment.

10. **Runoff (E):** The release of sediment laden stormwater associated with the continued construction and operation of KSL is a potential harm.

    KSL's Proposed Mitigation: KSL will continue to design, install, and maintain Erosion & Sedimentation (E&S) controls in accordance with DEP Chapter 102 regulations. The Stormwater Management Plan was updated to address comments from the review on behalf of Throop and Dunmore Boroughs, to sequence the best management practices for the proposed project and to include measures for volume control.

    DEP Determination of Remaining Impacts: KSL has proposed adequate mitigation measures to address stormwater runoff. Specifically, DEP has reviewed KSL's Stormwater Management and Post Construction Stormwater Management plans and

determined that they are sufficient to mitigate stormwater runoff during the construction and after the construction that will occur as a result of the Phase III expansion. KSL's stormwater is also regulated under DEP's Clean Water Program. KSL maintains an active Industrial Stormwater Discharge Permit (PAG 502203). This permit contains effluent parameters, monitoring and other requirements. However, because the mitigation could fail to work as intended due to improper operation or maintenance or because of natural events, some potential harm will remain for the purpose of this environmental assessment.

11. **Air Quality (E):** Migration of air pollutants (particulate matter, methane, VOCs, HAPs, etc.) is a potential harm.

    KSL's Proposed Mitigation: KSL's proposed mitigation includes continued expansion of the landfill gas control system, final liner capping within one year of any pad or segments of any pad achieving final elevation, use of water trucks to control dust, enforce site speed limit, and to apply water to certain residual wastes or construction and demolition waste to minimize dust. KSL conducted dispersion modeling which demonstrated that there is minimal to no impact on the ground level concentrations of fugitive particulate matter emission and odor emissions associated with changing the elevation of the working face of the landfill. KSL has also proposed a comprehensive air monitoring program.

    DEP Determination of Remaining Impacts: KSL has submitted an Air Quality Plan Approval application. This application will be reviewed by DEP Air Quality staff to ensure compliance with applicable regulations. Obtaining this approval in addition to implementing the measures discussed above constitutes adequate mitigation; however, because mitigation could fail to work as intended due to improper operation or maintenance or because of natural events, some potential harm will remain for the purpose of this environmental assessment.

12. **Groundwater Impacts (E):** The potential for groundwater impacts is a potential harm of a landfill operation.

    KSL's Proposed Mitigation: The Phase III expansion will be a double-lined landfill that will contain waste and waste constituents within the landfill. KSL states that they have 6 upgradient and 27 downgradient monitoring wells that show that the liner system is effective at preventing release of contaminants into the groundwater. KSL will continue to pretreat leachate from the landfill prior to discharge to Pennsylvania American Water Scranton Wastewater (PAWSW) for final treatment. KSL has recently upgraded its leachate treatment plant which now has the capability to treat 250,000 gallons per day. If KSL chooses to move forward with the additional upgrades that have already been approved through a minor permit modification, the leachate treatment plant would be capable of treating a maximum of 350,000 gallons per day. However, currently PAWSW only allows KSL to discharge a maximum of 225,000 gallons per day. KSL would need to apply for a modification of its Industrial Wastewater Discharge permit with PAWSW to accommodate the additional flow. KSL

will promptly install its liner cap system in a phased approach which will aid in reducing the potential development of leachate.

Current Impacts Observed in MW-15A: Currently there are impacts seen in MW-15A, which is a well that monitors a low volume of drainage in the Dunmore #3 coal vein. The indicator parameters that are elevated in this well indicate that there was a release of leachate. Several investigative efforts and remedial measures have been taken by KSL since 2002 to find and arrest the source of the MW-15A elevated indicator parameters. The investigation led to the discovery of several potential sources of groundwater contamination, including cracks in the treatment plant's floor, overflows, a leachate outbreak, and finally, the lagoon liner integrity. Based on these findings, several corrective actions were taken. Specifically, the leachate lagoons were upgraded and completely relined, underground piping was converted to double-wall piping, cracks in the leachate treatment building floor were sealed and leachate is no longer discharged to floor drains leading back to the lagoons, the new leachate treatment building has a geomembrane liner under the concrete floor, and the leachate manhole was completely epoxied to seal any potential leaks. With these improvements, KSL has minimized the likelihood that a similar incident could occur.

While detected elevated leachate indicator parameters continue to exhibit decreasing trends in MW-15A, downgradient investigation wells continue to show elevated leachate indicator parameters and nitrate above background levels. In January of 2017, two additional wells were constructed downgradient of MW-15A (MW-46D and MW-47D). Both wells showed elevated levels of leachate indicator parameters and nitrate above the MCL in the shallower well, MW-46D. As required by the PA Environmental Hearing Board's November 8, 2017 Adjudication on KSL's permit renewal, KSL submitted a groundwater assessment plan that addresses the groundwater degradation detected in MW-15A dated December 14, 2017. This assessment plan involved the construction of two additional monitoring wells further downgradient from MW-15A (MW-49D and MW-50D). The shallower well (MW-49D) shows nitrate levels below the MCL since October 2018. To mitigate these leachate indicator parameters and nitrate, KSL continues to pump groundwater, including from MW-15A and MW-46D to the leachate lagoons. Groundwater monitoring and pumping will continue and any need for further assessment to delineate the extent of the impacts will be evaluated.

Excess Leachate Generation: Over the past few years, events involving a leachate conveyance system manhole overflow, the need to add temporary leachate storage and the need to haul leachate off site to be treated has made it apparent that KSL has an issue with either excess leachate generation or stormwater infiltration into the leachate conveyance system. These excess flows increase the potential for the facility to have overflows and other incidents related to the leachate conveyance system which could then potentially lead to groundwater impacts. In an attempt to minimize stormwater infiltration's effect on leachate flows, KSL has performed numerous stormwater infiltration mitigation projects. KSL modified its temporary

geosynthetic capping installation in Phase II to greatly reduce the amount of stormwater entering the leachate collection system during precipitation events. KSL has also conducted some projects in the Keystone/Dunmore area to reduce stormwater infiltration. Also, KSL recently received approval from DEP to reconfigure the leachate conveyance piping for the Tabor Landfill. This will enable KSL to isolate leachate flows from this landfill to better determine if Tabor needs to be further evaluated for any stormwater infiltration mitigation projects. KSL is currently continuing its investigation of additional potential sources of stormwater infiltration. Although KSL has made progress, based on a review of recent flow amounts, it is apparent KSL continues to have an issue with either excessive leachate generation and/or infiltration into the leachate conveyance system. KSL continues to have current flow amounts not only higher than what was predicted for the current landfill, but also higher than what was predicted as a maximum peak flow for the proposed Phase III expansion.

Furthermore, KSL has recently had to transport leachate to an offsite treatment facility to compensate for excessive volumes of stored leachate. Because of the recent upgrades KSL has made to the leachate treatment plant, the need to haul leachate has been reduced as KSL has increased its ability to treat leachate from 150,000 gallons per day to 250,000 gallons per day. However, because KSL continues to have high flows, it is reasonable to assume it may have to haul leachate again in the future. This would result in additional truck traffic and associated harms related to traffic in general and spills or releases of leachate as a result of tanker truck accidents in particular.

Leachate Generation from the Keystone/Dunmore Area: There is a potential for unknown waste constituents to cause groundwater contamination with the compaction of the waste and construction of Phase III on top of the unlined Keystone/Dunmore area. To address leachate from the waste in the Keystone/Dunmore area, KSL will utilize mine drainage interceptor wells to collect and treat mine drainage before leaving the property. KSL commissioned a subsurface investigation of the moisture in the waste in the Keystone/Dunmore landfill area using the sonic vibratory technique. Overall, the results of KSL's investigation indicated that saturated conditions are not prevalent within the disturbed material beneath Keystone/Dunmore. In addition, KSL will cap the waste in place by constructing the Phase III liner system over top of the Keystone/Dunmore area. Observations of saturation in the disturbed material appear to be isolated and not continuous across the Keystone/Dunmore landfill area. KSL will continue to monitor the boreholes that were drilled as part of the investigation through 2019 to evaluate changes from ongoing capping repairs and installation of a check valve in one of the manholes. KSL has shown that the presence of liquids in the Keystone/Dunmore landfill area is minimal and that expulsion of leachate from the waste should not be an issue.

DEP Determination of Remaining Impacts: Controls and groundwater monitoring systems are design features required by regulation. There will always be a potential

harm associated with their failure to work as intended or because of improper operation or maintenance. The impacts and investigation associated with MW-15A show that KSL has some history of controls and mitigation failing to work, resulting in groundwater impacts. KSL has made several improvements that have greatly improved the mitigation measures taken to address the groundwater impact in this area and recent groundwater monitoring data is indicating that the improvements made to the leachate lagoons has mitigated the primary contributing cause of the groundwater degradation described above. Recent MW-15A sample results indicate a downward trend of the leachate indicator analytes, although downgradient investigation wells (MW-46D and MW-49D) continue to show elevated leachate indicator parameters and nitrate above background levels. However, KSL's history of groundwater degradation in MW-15A is still considered when evaluating the potential likelihood of this harm to occur in the future.

Because current leachate flows at the site regularly exceed the HELP model calculated maximum flow for both the existing site and what was calculated for the proposed Phase III expansion, it is clear these models as run did not fully and accurately predict leachate generation at the site. During 2018 and 2019, DEP's Northeast Region experienced weather extremes (excessively wet weather and temperature fluctuations, etc.) and it is possible that these weather extremes will continue or worsen in the future. Excessive leachate flows due to stormwater infiltration increase the potential for the facility to have overflows and other incidents related to the leachate conveyance system, which could then potentially lead to groundwater impacts. Furthermore, KSL will potentially need to haul leachate in the future resulting in harms associated with additional truck traffic and spills or releases of leachate as a result of tanker truck accidents.

Despite the improvements KSL has made, potential harm for groundwater impacts will remain for the purpose of this environmental assessment.

13. **Fire Risk (E):** The risk of fires and subsurface reactions is a potential harm of a landfill operation.

KSL's Proposed mitigation: All waste is immediately and properly covered at the end of each working day. The active working area is properly graded to eliminate ponding of water. Water level monitoring is conducted semi-annually to monitor for perched water inside of the waste mass and, if water is located, it is pumped out to the leachate treatment system. The gas collection system is monitored on a daily basis and each gas extraction well is monitored on a monthly basis. In the event combustion is determined to be active in the waste mass, KSL will immediately implement a Fire Suppression Plan.

DEP Determination of Remaining Impacts: KSL has proposed adequate mitigation to prevent fires and subsurface reactions and has proposed adequate measures KSL would employ should a fire or reaction occur at the landfill. KSL has had four subsurface fire incidents (2009, 2011, 2014 and 2015) in its recent history. These incidents were determined to be caused by gas wells rather than a waste stream that was disposed of.

DEP believes KSL responded appropriately to the fires that have occurred at the landfill. Because the risk of fires and subsurface reactions cannot be eliminated entirely, some potential harm will remain for the purpose of this environmental assessment.

14. **Discharge of Treated Leachate to the Lackawanna River (E):** KSL discharges its treated leachate to the sewer lines that convey wastewater to the PAWSW facility. These lines are a combined sewer system. Most of the time, combined sewer systems transport all of their wastewater to a sewage treatment plant, where it is treated and then discharged to a water body. During periods of heavy rainfall or snowmelt, however, the wastewater volume in a combined sewer system can exceed the capacity of the sewer system or treatment plant. For this reason, combined sewer systems are designed to overflow occasionally and discharge excess wastewater directly to nearby streams, rivers, or other water bodies. As such, there is the potential for treated leachate to discharge to the Lackawanna River.

    KSL's Proposed Mitigation: A protocol is in place, that upon notification of a severe rain event or major equipment failure in the sewer system facilities, KSL will terminate the treated wastewater discharge to the system and instead recirculate the discharge to the onsite storage lagoons. KSL's new wastewater treatment plant has a process capacity of 40% in excess of the predicted leachate volume and the existing treatment plant will be rehabilitated and serve as a standby processing facility.

    DEP Determination of Remaining Impacts: The Industrial Wastewater Discharge permit issued to KSL by PAWSW on March 31, 2017 contains a condition that in order to reduce flow and combined sewer overflows through the collection system during periods of heavy rainfall or snowmelt, KSL shall be required either via verbal or written notice to voluntarily reduce wastewater flow for an agreed period of time. Although KSL has proposed adequate mitigation there is still a potential for treated leachate to discharge to the Lackawanna River through the combined sewer system; therefore, some potential harm will remain for the purpose of this environmental assessment.

15. **Subsidence Potential (E):** Most of the proposed Phase III disposal area is underlain by deep coal mines. There is potential that remaining mine passages could collapse, causing a subsidence that could affect the integrity of the liner or other systems at the landfill.

    KSL's Proposed Mitigation: The subsidence potential for portions of the KSL site that were permitted after 1990 has already been defined. This potential has already been fully defined and mitigated in some areas of the proposed Phase III area in the Logan, Tabor, and parts of the Phase II disposal area by measures taken during the construction of these areas. KSL provided the results of a geologic investigation for the areas that had not previously been subjected to a study or mitigation to define the potential for mine subsidence and proposed mitigation measures. Significant voids (voids with heights greater than one foot) within 70 feet of the proposed Phase III liner subgrade will be filled and grouted to address open voids that remain.

DEP Determination of Remaining Impacts: KSL has submitted an appropriate geologic investigation and has proposed adequate mitigation measures to address the maximum subsidence that could potentially occur in the future and the effect of that subsidence on the integrity of the facility. This geologic investigation ensures that any potential subsidence will not endanger or lessen the ability of KSL to operate in a manner consistent with environmental regulations and will not cause the proposed operation to endanger the environment or public health, safety, or welfare. No harm remains for the purpose of this environmental assessment.

BENEFITS

(E) = Environmental, (SE) = Social & Economic

1. **Continuation of Recycling and Cleanup Programs (SE):** KSL provides service for recycling and area cleanups, including providing free disposal for litter and debris collected by the community and volunteer groups as part of the Great American Cleanup program.

   DEP Evaluation of Benefit: DEP believes that the recycling and cleanup program is a Social and Economic benefit because KSL is providing access to free disposal. Because this is a service that the local community would not continue to receive without the Phase III expansion, this is a Social and Economic benefit for the life of the project.

2. **Goods and Services (SE):** KSL will purchase fuel/oil/lubricants; machinery, equipment, services, rentals and maintenance; and miscellaneous goods and services from local/regional vendors to support the continued operation of the landfill. KSL estimates that it will purchase a total of $53,489,710 of fuel, oils and lubricants from local and regional vendors over the initial 10-year permit of Phase III, and $248,727,152 over the life of the expansion. KSL estimates that it would expend $119,912,870 over the initial 10-year permit of Phase III and $557,594,846 over the life of the expansion on machinery, equipment, services, rentals and maintenance. The economic benefits associated with miscellaneous goods and services over the life of the Phase III expansion is $367,767,999. KSL classified the economic data into five zones in relation to the proximity to the landfill. The majority of the benefits are to the communities within 25 miles of the landfill.

   DEP Evaluation of Benefit: While the total amount is uncertain because KSL is not necessarily spending the same amount each year, the historical amounts can be used as an estimate and the purchasing of goods and services from local vendors is a Social and Economic benefit of for the life of the project.

3. **Continued Employment (SE):** The landfill will provide 145 jobs to address the administrative, operational, construction and maintenance aspects associated with the operation of Phase III.

DEP Evaluation of Benefit: The continued employment of 145 full time workers is a Social and Economic benefit for the life of the project.

4. **PA Disposal Fees (SE):** KSL currently pays the Commonwealth of Pennsylvania the following waste disposal fees: $4/ton for the PA Growing Greener Fund, $2/ton for the PA Recycling Fee, and $0.25/ton for the PA Post Closure Fund. Approval of the Phase III permit modification will result in a minimum of 10 years of payments into those funds.

   DEP review: All fees identified by KSL are mandated by law. Because the amount of fees paid is dependent on the volume of waste received, this amount is uncertain. These fees will be considered to be a Social and Economic benefit for all of Pennsylvania for the life of the project.

5. **Tax Revenue (SE):** KSL estimated the property tax revenue for the Phase III expansion is approximately $6,927,605.

   DEP Evaluation of Benefit: The increased tax revenue associated with the Phase III expansion is considered a Social and Economic benefit for the life of the project.

6. **Participation in the PA DOT Adopt a Highway Program (SE)**: KSL provides crews to collect litter that is dispersed along a portion of US Route 6 between the Tigue St. and Marshwood Road exits. The litter collected by KSL personnel includes material that was released from waste transport vehicles accessing KSL, but also includes waste released by all other vehicles that utilized that section of U.S. Route 6.

   DEP Evaluation of Benefit: The section of highway identified is that most likely to be impacted by litter from KSL itself and therefore part of this can be considered mitigation by KSL. However, not all of the litter would be from the landfill; therefore, picking up this additional litter along the adopted highway is considered a benefit for the life of the project.

7. **Benefits from Host Agreements (SE):** KSL has an agreement in place to pay Throop Borough $2.02 per ton for waste placed in the KSL site. Based on 2013 waste totals the host fee paid to Throop amounted to $3,797,404. Additionally, Throop is not charged for waste that it collects and conveys to the KSL site. In 2013, that was 2,287 tons, or worth $125,785. KSL also pays Throop $90,000 per year for the purpose of "facilitating the safe and efficient management of solid waste generated within the borough." KSL must accept all waste from Throop as long as the site is permitted and in operation. At 2013 rates, KSL estimates the value during the first 10 years to be $40,131,890, and $178,586,911 over the life of Phase III.

   Under KSL's current agreement with Dunmore Borough, KSL pays $1.51 per ton for waste placed in the KSL site. KSL will increase the host fee by $.01 per ton on each December 1 for the life of the landfill. The benefit is estimated to be $29,426,485 for the first 10 years. Dunmore will not be charged for waste generated in the Borough,

estimated at $300,685/year and KSL shall reserve space for its waste for the active operational DEP permitted site life. The estimated total benefit to Dunmore over the first 10 years is $32,433,335, and $160,582,890 over the life of Phase III.

DEP Evaluation of Benefit: The host fees are based on tonnages and are paid on a quarterly basis and there is no guaranteed minimum amount. KSL reserves capacity for Dunmore and Throop and does not charge the host municipalities for waste generated in the Borough. These fees and free waste disposal are considered to be a Social and Economic benefit for the life of the Phase III expansion.

BALANCING OF HARMS AND BENEFITS

The regulations require that the benefits of the project to the public clearly outweigh the known and potential harms. The harms and benefits were evaluated individually and collectively taking into account duration, intensity, frequency, who will be affected, sensitivity of the receptor, whether the harm or benefit is known or potential, public comment, input from other agencies, and DEP's knowledge and experience related to KSL's past performance and compliance history. The following discussion summarizes this evaluation.

Based on the discussion of harms above, DEP has determined that the following known or potential harms are related to the proposed Phase III expansion:

Known Environmental Harms:	**Known Social and Economic Harms:**
	Visual Impacts
	Traffic
Potential Environmental Harms:	**Potential Social and Economic Harms:**
Odors	
Litter	
Noise	
Vectors/Birds	
Dirt/Mud	
Runoff	
Air Quality	
Groundwater Impacts	
Fire Risk	
Discharge of Treated Leachate to River	

To eliminate any harm to property values, KSL has committed to implementing a Property Value Protection Plan; and to mitigate impacts to Dunham Drive and Tigue Street, KSL will implement a Roadway Inspection Program.

Through the design and operational controls utilized at its existing facility, KSL has been largely successful in mitigating many of the harms associated with odors, litter, noise, unsafe vehicles, fires, runoff, and air quality. This indicates that KSL should be successful in mitigating the harms from the proposed project to the same extent. KSL's effective mitigation is expected to limit the duration and frequency of any occurrences. The intensity of the harm is also impacted by the effectiveness of KSL's controls in reacting and responding to the incident. Based on past experience, KSL's design, operational controls, and responsiveness should result in only infrequent occurrences of harms related to odors, litter, noise, unsafe vehicles, fires, runoff, and air quality. These controls should also minimize the severity, or intensity, of any such occurrence. DEP is committed to oversight and monitoring of these controls and KSL's operations.

Similarly, due to the public's concerns with health effects, particularly related to air quality, the recommendations of the 2019 PADOH and ATSDR Health Consultation Report will be implemented to ensure air quality impacts are mitigated adequately. Specifically, DEP will

oversee landfill activities, enforce landfill permit regulations and ensure that KSL is implementing a comprehensive air monitoring program and enhanced onsite underground gas migration monitoring. This monitoring will help to further limit the potential frequency and duration of any air quality related harms.

KSL has recently increased mitigation for vectors by contracting with USDA Wildlife Services, and increased mitigation for dirt/mud by installing a truck wash. These mitigation measures are expected to limit the number of occurrences of harms related to vectors and dirt/mud, and these controls should also minimize the severity, or intensity, of any such occurrence.

While the project does not propose to increase the waste acceptance rates for the landfill and therefore does not increase traffic; the proposed expansion will extend the duration of harms related to traffic by increasing the operating life of the landfill. Despite mitigation efforts, because of the volume of trucks that utilize the site daily, traffic impacts of varying magnitudes regularly occur. The local community frequently deals with impacts of truck traffic ranging from overweight vehicles, to nuisance type incidents and even occasional accidents, and the proposed project would extend the risk of those incidents over the life of the project.

Visual impacts are a known harm of the proposed Phase III expansion project. Public comment has indicated that this a particularly important concern within the community. KSL's original proposal included an increase in overall height of the landfill by approximately 165 feet above the current permitted height. In response to these public concerns, KSL revised its application to reduce the maximum proposed elevation to be equal to the currently permitted maximum elevation of 1,585 feet above sea level. While this reduction in overall height made a significant difference in some of the visual impacts, it did not completely mitigate the impacts of the proposed expansion compared to the current permit limits and visual impacts. The redesign and lowering of the maximum proposed height will create a much larger horizontal profile than that which currently exists and will bring landfill operations much closer to residents. Beyond visual impacts of the completed project, the visibility of active construction, disposal activity and temporary capped areas can also negatively impact surrounding communities. KSL is proposing to reduce visibility of active landfill operations by working inside the valley between existing disposal areas, which will shield the active landfill operations from view for some periods of time; however, the duration of the project is significant and at times there will be visual impacts associated with active landfill operations.

The potential for water quality impacts will persist beyond the cessation of active landfill disposal operations. KSL has struggled in the past to completely mitigate water quality impacts, as indicated by the groundwater degradation that occurred in and around MW-15A. KSL completed numerous projects to eliminate or minimize the potential impact the leachate lagoons, leachate conveyance lines, and the leachate treatment plant could have on groundwater in the area around MW-15A. Recent MW-15A sample results indicate a downward trend of the leachate indicator analytes, although downgradient investigation wells (MW-46D and MW-49D) continue to show elevated leachate indicator parameters and nitrate above background levels. Operational and engineered controls implemented by KSL have

likely minimized the potential number, duration and intensity of similar issues to occur moving forward. KSL has also had excessive leachate generation rates, particularly during storm events over the past few years. These excess flows during storm events increase the potential for the facility to have overflows and other incidents related to the leachate conveyance system which could then potentially lead to groundwater impacts. KSL has evaluated potential sources of stormwater infiltration in several places at the facility. As a result, infiltration in some areas has been eliminated or reduced. KSL is currently still continuing its investigation of additional potential sources of stormwater infiltration, including a recent minor modification to its permit to isolate leachate flow from the Tabor landfill. Although KSL has made progress to isolate and mitigate areas of concern, KSL continues to have an issue with either excessive leachate generation and/or stormwater infiltration into the leachate conveyance system. KSL's current and proposed additional efforts to isolate and mitigate excessive leachate generation are expected to limit the number, duration and intensity of future excessive leachate flow occurrences. Water quality impacts remain a potential harm of the Phase III expansion.

Based on the discussion of the benefits above, the Department has determined that the following known or potential benefits are related to the proposed Phase III expansion:

Known Environmental Benefits:	**Known Social and Economic Benefits:**
	Recycling and Cleanup Programs
	Goods and Services
	Continued Employment
	PA Disposal Fees
	Tax Revenue
	PADOT Adopt A Highway Program
	Host Agreements

There are significant social/economic benefits to the local community in the form of host fees, with additional benefits arising from the purchase of goods and services, direct employment, tax revenue and free waste and recycling services. These benefits directly impact the local community and that impact can be very significant as far the Boroughs' revenue and jobs. The host fees amount to a significant portion of the Boroughs' operating revenue. The landfill provides approximately 145 jobs and has significant operating expenditures. DEP received numerous letters in support of KSL's expansion proposal from local businesses and a petition signed by friends and families in support of the landfill employees that will maintain employment as a result of continued operation of the landfill. The social/economic benefits will continue for the duration of the Phase III expansion.

The remaining accepted benefits of the project are being considered; however, they are considered to be limited in scope. The Recycling and Cleanup program and PADOT Adopt A Highway Program are limited both in frequency and intensity, but they will occur for the active life of the project. PA Disposal Fees are mandated and dependent on the volume of waste received. They are significant in dollar amount over the life of the project; however, because they are state fees, they do not directly benefit the impacted host communities. KSL identified additional benefits; however, DEP determined they either have not been adequately

defined, are not benefits to be attributed to the proposed project, or are more appropriately considered to be mitigation rather than benefits.

DEP considered the harms and benefits individually and collectively when balancing the harms against the benefits. DEP considered the identified environmental harms and their mitigation measures. The host fees are a significant social/economic benefit to the local community. The known social/economic harms are expected to be minimized. The potential harms are not likely to occur or, should they occur, would be infrequent or of low intensity or short duration, as long as the proposed mitigation measures are implemented properly. With the exception of the increase in visual impacts, all of the harms associated with the proposed Phase III expansion are already associated with the existing landfill operation, albeit these harms would be extended in duration over the life of Phase III. DEP's experience based on inspections and oversight is that KSL generally operates in compliance and has effective mitigation measures in place to control harms such as dust, vectors, litter, and odors. KSL's past mitigation efforts have, at times, not fully mitigated water quality impacts; however, the implementation of enhanced operational and engineered measures is expected to further improve mitigation of water quality impacts in the future.

Based on the information provided during the Phase I/EAP review pursuant to 25 Pa. Code § 271.127, DEP has determined that KSL has demonstrated that the benefits to the public from the project clearly outweigh the known and potential harms. Following its Phase II/technical review, which includes further consideration of whether the project will cause unreasonable degradation and diminution of the environment, DEP may act to deny, approve or approve with condition the permit for KSL's Phase III expansion.