

### Key Message

- Keystone Landfill submitted an application to DEP to expand the current landfill in March 2014.
- The Pennsylvania Department of Health (PAOH) and colleagues from Pennsylvania Department of Environmental Protection (DEP) are working collaboratively to develop a health impact study.
- PAOH, under a cooperative agreement with our federal partner from the Agency for Toxic Substances and Disease Registry (ATSDR) project, is evaluating possible public health issues related to the Keystone Landfill.
- The Bureau of Epidemiology has reviewed existing environmental and health information and is currently in the process of reviewing new environmental sampling data in collaboration with the Pennsylvania Department of Environmental Protection.

### Status Report

- In March 2014 the Keystone landfill in Dunmore applied for an expansion plan to Pennsylvania Department of Environmental Protection.
- In January 2015 the community, legislative and PADEP requested PAOH, in partnership with ATSDR evaluate the potential public health risk at the Keystone Landfill.
- In March 2015 PAOH and ATSDR toured the Keystone landfill and began review of air sampling data and sub-surface groundwater and soil vapor investigations.
- In April 2015 PADEP, PAOH and ATSDR hosted a community open house at the Throop Community Civic Center. The Open House was to give residents a chance to ask questions and stay informed.
- In May 2015 PADEP collected Landfill gas to assess the potential health risks from vapor.
- In June 2015 PADEP, PAOH and ATSDR met with the Friends of Lackawanna and the Lackawanna County Medical Society.

- As an initial screening procedure to determine the presence of airborne chemicals, air monitoring was conducted by PADEP using a mobile analytical unit (MAU) at six locations on three occasions: April 2015, June 2015 and March 2016.
- Following the review of these MAU air monitoring data along with a review of recent KSL gas analytical data and literature on common landfill gas chemicals, PADOH, ATSDR, and PADEP selected chemicals for more rigorous sampling using summa cannisters and charcoal tubes over an extended time period.
- From January to April 2016, PADEP conducted 24-hour ambient air sampling events (i.e., every third day for three months) at three discrete sampling locations in close proximity to the landfill. Each of these three air sampling locations were between one and one and a half miles (1.0 and 1.5 miles) from the working face of the landfill, which is located on the far eastern portion of property.
- A total of 90 samples were taken and 29 valid data sets for each sampling location were evaluated. Samples were analyzed for 75 volatile organic compounds (VOCs), 20 reduced sulfur compounds (RSCs), 3 carbonyls/aldehydes compounds (acetaldehyde, formaldehyde, and acrolein), ammonia, methanol, methylamine, and triethylamine.
- The PADOH and ATSDR are currently in the process of reviewing the extensive data collected by PADEP, and will provide their public health evaluation in a health consultation document, expected to be published in early 2017.
- The main purpose of this health consultation will be to (1) determine if exposure to ambient air surrounding the landfill poses a public health risk to the community who live near the landfill area, and (2) summarize the most recent cancer incidence rate data for the population living near the landfill.

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## Q&A

### **Q: What is the department doing about the landfills potential health impacts?**

A: The department will be completing an environmental exposure study. The study will analyze primarily air data to determine if there are any health impacts associated with this landfill. We will be working with DEP to collect and receive this data.

### **Q: Is the department working with DEP?**

A: Yes, we have been coordinating with DEP since this concern arose.

**Q: Does the department believe there are health risks?**

A: Until the environmental exposure study is complete we cannot confirm if there are direct health risks associated with the Keystone Landfill.

**Q: When will the department health study be completed?**

A: In order to complete a scientifically sound study, we will need to gather the proper data, analyze this data, and make determinations. To do this, the department will follow established best practices from Centers for Disease Control and Prevention (CDC)/Agency for Toxic Substances and Disease Registry (ATSDR). Once our determinations are made, we will have the information verified by our federal partners and produce a final report. It can take approximately a year to complete all work. Once the final report is verified it will be shared with the legislature and the public.

**Additional Information:**

- The evaluation of environmental data is essential for the development of recommendations to protect the public health and to alleviate unwarranted fear for concerned citizens who reside near active landfill.
- The Department of Health's Division of Environmental Epidemiology (DEHE) is responsible for evaluating environmental sampling data, collected by regulatory agencies such as Department of Environmental Protection (DEP) and Environmental Protection Agency (EPA), to adequately respond to community health concerns.
- The guidelines developed by our federal partner the Agency for Toxic Substances and Disease Registry (ATSDR) are the national standard to properly evaluate/review health exposure data. DEHE has a cooperative agreement with ATSDR since 1989 and follow these guidelines developed by ATSDR.