



# **Keystone Sanitary Landfill Health Consultation**

he Keystone Sanitary Landfill is a municipal solid waste collection site within the Dunmore and Throop boroughs of Lackawanna County, PA and is one of the largest active landfills in the state.

In February 2015, the Pennsylvania Department of Health (DOH) received re quests from the Pennsylvania Department of Environmental Protection (DEP), a

Pennsylvania state representative and a non-profit community-based organization to evaluate the air quality surrounding the landfill. DOH conducted the environmental health study in coordination with the Agency for Toxic Substances and Disease Registry (ATSDR) and DEP.

The agencies prepared a Health Consultation document to explain the study and its findings. The document is currently available in draft form on DOH's website (<a href="www.health.pa.gov">www.health.pa.gov</a> on the Environmental Health page), and is open for public comment until **February 14, 2018**.

# How was the air quality evaluated?

DEP conducted ambient air sampling at three locations near the landfill over a three-month period.

- Mid Valley High School (0.75 miles from the landfill)
- A point approximately 400 feet from the landfill's administrative office
- Sherwood Park (0.5 miles from the landfill)



#### **KEY FINDINGS**

- **Long-term exposure** to all chemicals at the levels detected in the ambient air near the landfill is **not expected** to cause cancer or harmful non-cancer health effects.
- Short-term exposure to methylamine, ammonia, acetaldehyde and hydrogen sulfide could have caused acute health effects such as nose, throat and eye irritation.
- Long-term exposure to the levels of particulate matter (PM<sub>2.5</sub>) detected is not expected to cause chronic adverse health effects. Peak, short-term concentrations were detected that could cause acute health effects such as airway irritation and asthma exacerbation.
- There is not enough data to asses current and future potential exposures from subsurface vapor migration from the landfill to residences.
- The **rate for newly diagnosed cases of all cancers** (combined) and the rates for breast cancer, melanoma, non-Hodgkin's lymphoma and prostate cancer for all six zip codes (combined) surrounding the landfill were significantly **lower** than the state rate. The laryngeal cancer rate in the combined zip code area was significantly **higher** compared to the state rate. There is limited information supporting the link between laryngeal cancer and environmental contamination from landfills.

#### **COMMUNITY CONCERNS**

The community's primary concerns related to the landfill are:

- exposure to noise, odors, dust and toxic chemicals
- illness and disease such as cancer, birth defects, liver problems, respiratory illnesses, nosebleeds and headaches
- landfill leachate water potentially mixing into storm water
- Remember to keep doors and windows closed on days when wind and landfill odors are strong to limit potential odor-related health effects.

# What will the agencies be doing next?

DOH and ATSDR will:

- **solicit public comments** on the draft Keystone Sanitary Landfill Health Consultation document until February 14, 2018;
- hold an open house to explain the findings to members of the community after the document is finalized; and
- address public comments and additional concerns in the final health consultation document.

DOH and ATSDR will, upon request, continue to assist DEP with the evaluation of environmental data from the landfill and surrounding communities.

### What kinds of waste are in the Keystone Sanitary Landfill?



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In addition to waste from within Pennsylvania, the landfill receives waste from New York, New Jersey and Connecticut.



## What are common odor-related symptoms?

- eye, nose, and throat irritation
- headache
- nausea
- hoarseness of voice
- sore throat
- couah
- chest tightness
- nasal congestion
- palpitations
- shortness of breath
- stress
- drowsiness
- alterations in mood

Odor-related symptoms usually resolve when the odor diminishes

If you have any questions about the information in this fact sheet or would like to request an electronic copy of the Keystone Sanitary Landfill Health Consultation document by DOH/ATSDR, please contact:

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For more information about landfills and public health, please visit: http://www.atsdr.cdc.gov/HAC/landfill/html/intro.html.