



The Missouri Department of Health and Senior Services (DHSS) and the Agency for Toxic Substances and Disease Registry (ATSDR) have released a public health consultation that evaluates potential public health impacts of breathing chemical and odor emissions from Bridgeton Landfill. The health consultation was written at the request of community members and the St. Louis County Department of Public Health, following the start of a subsurface smoldering event (SSE) at the landfill. This fact sheet highlights the findings of the health consultation, which is currently available for public comment.

Public Comment Version
DHSS Public Health Consultation: Key Findings

- **In the past, breathing sulfur-based compounds (including hydrogen sulfide and other reduced sulfur compounds) in the air near the landfill may have aggravated existing respiratory and cardiopulmonary conditions, caused breathing effects such as chest tightness or difficulty breathing, or increased the risk of respiratory infection. Children, elderly adults, and people with chronic respiratory conditions such as asthma would have been at greater risk.**
- **In the past, odors from the landfill may have caused headache, nausea, or fatigue. Repeated exposure to odors may have increased stress and/or impaired mood.**
- **Currently, breathing sulfur-based compounds in the air is unlikely to harm people's health. Since completion of corrective actions at the landfill in 2013-2014, fugitive emissions from the landfill have decreased significantly.**
- **Breathing other chemicals (non-sulfur based) that have been detected in the air is not expected to harm people's health.**
- **Current cancer risks from breathing volatile organic compounds (VOCs) near the landfill are similar to those in other urban environments in the United States.**

Bridgeton Sanitary Landfill is a solid waste landfill located within the boundaries of West Lake Landfill near St. Louis, Missouri. In December 2010, Republic Services reported evidence of subsurface smoldering in the southern portion of the landfill. As the SSE intensified and the production of leachate significantly increased, odor emissions from the landfill also increased. In 2012, the Missouri Department of Natural Resources (DNR) began receiving increased odor complaints from the community.

From early 2013 through the summer of 2018, DNR has conducted air monitoring and air sampling near the landfill perimeter for evaluation of landfill gas and odor emissions. DNR and the United States Environmental Protection Agency (EPA) have also conducted air monitoring and sampling to characterize ambient air quality in the Bridgeton area.

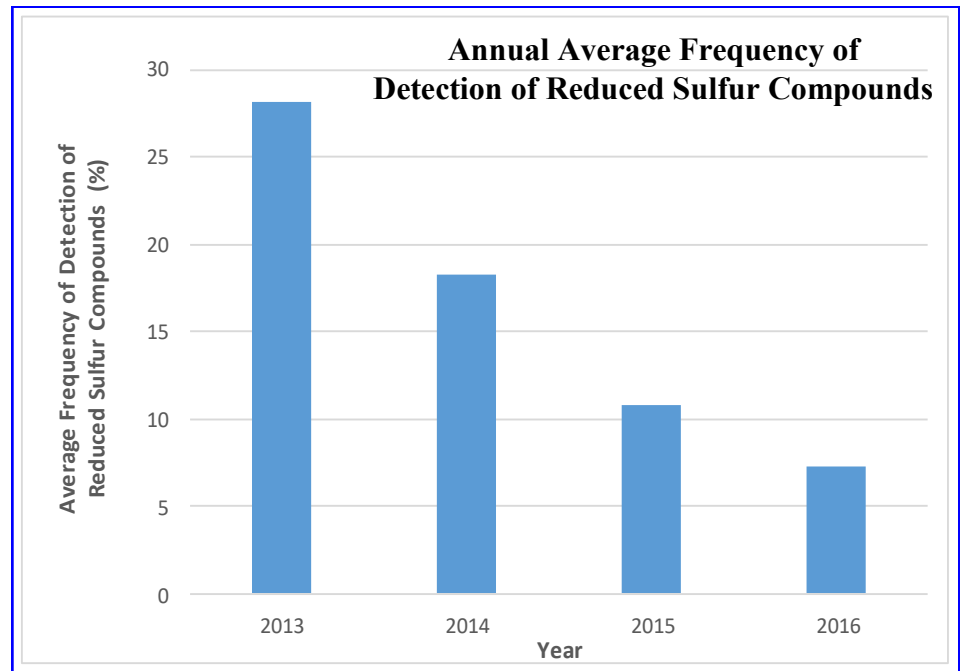
DHSS evaluated four years of data (2013-2016) collected by DNR and EPA to assess the potential public health impacts of breathing chemicals and odors in air near the landfill.

DHSS did not evaluate radiological data. A separate public health consultation on radiation associated with West Lake Landfill was written by ATSDR in 2015.

Downward Trend:

The chart to the right shows a downward trend in the average number of times reduced sulfur compounds were detected in ambient air near the landfill. From 2013 to 2016, the average frequency of detection decreased by 74%.

Blue Bar = Annual frequency of detection at all three AreaRAE monitoring locations. These monitors are located within 1/2 mile from the landfill.



DHSS Recommends:

- During periods of objectionable odor, stay indoors as much as possible and avoid outdoor exercise. Children, elderly adults, and people with chronic breathing conditions are especially affected by odors and sulfur-based compounds that can cause those odors.
- Seek immediate medical advice for any acute respiratory symptoms such as difficulty breathing. Offensive odors may cause changes in breathing or trigger an asthma attack.
- Seek medical advice for any persistent symptoms that do not go away when the odors diminish, including symptoms associated with stress.

Next Steps:

- DHSS can review any additional sampling data collected by responsible parties as they become available or as appropriate.
- DHSS will coordinate with DNR and other agencies to address community health concerns and questions as they arise by providing health professional and community education as requested.

To Submit Comments or For More Information:

The public comment period goes through **November 20, 2018**. The public comment version of the Bridgeton Landfill Health Consultation is located at <http://health.mo.gov/bridgeton>.

Written comments

- **Online:** Email to BridgetonComments@health.mo.gov
- **Postal Mail:** Lorena Locke, Bureau of Environmental Epidemiology, Missouri Department of Health and Senior Services, P.O. Box 570, Jefferson City, MO 65102 **Mailed comments must be postmarked by November 20, 2018.**

To submit an odor concern, see the Missouri Department of Natural Resources (DNR) website at <http://dnr.mo.gov/bridgeton/>.