

**DHSS Review of Air Monitoring Data from the Bridgeton Landfill Area
February 13 – March 15, 2013**

The Department of Health and Senior Services (DHSS) has reviewed the air quality screening data from the Department of Natural Resources (DNR) for the Bridgeton Landfill for the period of February 13 through March 15, 2013. DHSS previously recommended long-term air monitoring, which DNR provided with this screening data. The air monitoring was carried out continuously, 24 hours a day, at three monitoring locations near the landfill.

DHSS reviewed the levels of carbon monoxide (CO), total volatile organic compounds (VOCs), hydrogen sulfide and sulfur dioxide (SO₂). The average CO, VOC and SO₂ levels were not identified at concentrations of health concern.

In the case of hydrogen sulfide, the screening data identified a potential public health concern that warranted further evaluation. For a combined total of three to four hours, on the afternoons of February 14, 23 and 24, average concentrations of hydrogen sulfide at the air monitoring location near Hussmann Corporation (12999 St. Charles Rock Road) exceeded a health-based comparison value for short term exposures (1 to 14 days) but were not in excess of public health protection guidelines for exposures lasting less than 24 hours. Although it is not possible to draw definitive conclusions from this screening data, DHSS deems that additional monitoring or other actions are warranted.

Exposure to elevated levels of hydrogen sulfide can cause headache, irritation to eyes, nose or throat, and may cause difficulty breathing especially for persons with asthma or other chronic respiratory conditions. In fact, any intense odors can have public health effects on both quality of life and well-being, particularly for sensitive individuals. Symptoms generally associated with offensive odors typically disappear once the odors dissipate.

DNR will continue increased air sampling, as recommended by DHSS, to allow for more definite conclusions to be drawn regarding any potential health risks of public exposure to chemicals in the landfill gases.

During periods of objectionable odor, sensitive individuals and persons with chronic respiratory diseases should limit time spent outdoors and seek medical advice for any acute symptoms.