

## **DHSS Review of Air Sample Data from the Bridgeton Landfill Area, January 21, 2016**

The Department of Health and Senior Services (DHSS) has reviewed air sample data collected for the Department of Natural Resources (DNR) near Bridgeton Landfill on January 21, 2016. Samples were collected at one location upwind of the landfill and two locations downwind of the landfill for laboratory determination of concentrations of volatile organic compounds (VOCs). DHSS has reviewed this data for evaluation of potential public health concerns of short-term health effects.

### VOCs

Downwind of the landfill, 10 VOCs were detected in ambient air in concentrations that generally exceeded concentrations detected upwind from the landfill. Downwind VOC concentrations ranged from 0.16 parts per billion (ppb) to 6.1 ppb and did not exceed health-based screening levels for acute exposure, except for one benzene concentration of 1.1 ppb. This one 4-hour sample slightly exceeded the most conservative available guideline for acute exposure of 1 ppb. It should be noted that this acute screening level is actually protective for repeated 8-hour exposures and the concentration detected does not exceed other available acute screening levels for benzene. Additionally, the other downwind sample did not show a concentration of benzene above an acute screening level and benzene was also not detected in nearby locations during the routine monitoring with the benzene meter on the same day. Therefore, it is unlikely that this brief benzene detection posed a public health concern.