

## **DHSS Review of Air Sample Data from the June 17-18 Polyurethane Foam (PUF) Sampling Methods at Bridgeton Landfill**

The Missouri Department of Health and Senior Services (DHSS) has reviewed the air sample data from the June 17-18 sampling event at Bridgeton Landfill. Samples were collected from one on-site location and from one location upwind and one location downwind of the landfill for laboratory determination of concentrations of dioxins/furans and polynuclear aromatic hydrocarbons (PAHs). DHSS reviewed the data for evaluation of potential public health concerns of short-term health effects.

### Dioxins/Furans

Dioxins and furans were detected on-site, upwind, and downwind of the landfill; however, all concentrations were below levels of public health concern.

- Due to the absence of health-based screening levels for acute exposures, data were compared to a chronic screening level for dioxins/furans using the standard approach for evaluating human health risks from dioxin-like compounds. This provides a very health protective evaluation.
- Of the 17 dioxins and furans sampled for, 3 were detected in the downwind sampling location; however, these concentrations were low and did not exceed available health-based screening levels (for chronic exposure).

### PAHs

PAHs were detected on-site, upwind, and downwind of the landfill; however, the concentrations were low and are not expected to pose a public health risk.

- Of the 19 PAHs sampled for, 8 were detected in the downwind sampling location; however, these concentrations were low and did not exceed available health-based screening levels for acute exposure. Some of the specific compounds detected do not have health-based screening levels available; however, only very low concentrations were detected and these detections are not expected to pose a public health risk.