

# Assessment of Bernhart Park

On June 18, 2001, Exide in collaboration with EPA and the Pennsylvania Department of Protection (PADEP) conducted soil, reservoir sediment and surface water sampling at Bernhart Park.

The following is a summary of the Bernhart Park Investigation:

- The sampling consisted of surface water, sediment and soil samples.
- EPA in collaboration with PADEP conducted split sampling with Exide.
- Surface water was analyzed for total and dissolved lead. The range of lead levels detected in the reservoir is <1.5 ug/L to 15.9 ug/L with an average lead concentration of < 2 ug/L.
- Sediment lead concentrations are between 197mg/kg -470 mg/kg with an average lead concentration of 298 mg/kg for the entire reservoir.
- Lead levels detected in surface water and sediment do not pose a human health risk.
- Soil lead concentrations detected are between 201 mg/kg to 4844 mg/kg.
- Predominant elevated soil lead levels are detected along Spring Valley Road, the wooded hillside and the islands.
- Soil remediation will be required for specific areas of the park. The human health and ecological risk assessments will determine which areas will require cleanup.

In 2007, EPA approved a comprehensive risk assessment that was conducted to evaluate the soil lead exposure risks in the community. The risk assessment determined that 650 mg/kg was a protective soil lead level for the residential properties in Laureldale Borough and Muhlenberg Township. The 650 mg/kg cleanup level will be applied to the open flat areas where residents mostly frequent. These areas will be cleaned up to at least 650 mg/kg of lead in soil.

Because of the terrain and infrequent use of the wooded hillside areas, the islands, and the patch of land near the dam by young children, a different set of parameters have been evaluated for potential human health risks. This evaluation is presented in the [Final Draft Human Health Risk Assessment for the Northwest Portion of Bernhart Park](#). In addition to the human health risk assessment, Exide is currently evaluating the ecological risk assessment at the park. EPA anticipates that the ecological risk assessment will be completed by mid-May. These two risk assessments will be used to determine an appropriate cleanup level that will be applied to the park. EPA will work with the City of Reading and Exide to put together a proposal to clean up the park in Summer 2008 with the anticipation of re-opening the park in early Fall of 2008.