

First Quarter 2001

The AOC became effective March 2, 2001. Exide submitted the Draft Step 1 Environmental Sampling Work Plan for EPA's review. EPA had several comments on the work plan. Exide is currently revising the work plan in response to EPA's comments. Although the work plan requires some revisions, EPA has approved the first step of the soil sampling event.

Exide began the investigation in mid-April. The first step entails collecting approximately 90 discrete supplemental soil samples in Laureldale Borough and Muhlenberg Township to refine the boundaries of the study area. To properly oversee the work, EPA collected split soil samples with Exide at various locations to ensure the validity of the soil results.

The soil samples were analyzed and soil lead concentration values were inserted into a geostatistical model (Kriging) to identify areas that are not likely to exceed 400 parts per million (ppm) for lead in soil. This defined the extent of contamination (i.e., study area).

Second Quarter 2001

EPA approved the Step 1 Environmental Sampling Work Plan. The Work Plan entails two phases of soil sampling. The first phase is to refine the boundaries of the study area. The second phase is to determine the average lead concentration in soil for each property within the study area.

During the month of April and early May, Exide collected approximately 90 soil samples in Laureldale Borough and Muhlenberg Township to refine the boundaries of the study area. The soil samples were analyzed and soil lead results were used to identify areas that are not likely to exceed 400 parts per million (ppm) for lead in soil. This defined the extent of the study area.

Properties within the study area received a letter from Exide asking permission to conduct soil sampling. Residents that have agreed to the soil sampling have had their property sampled or will be sampled shortly. The purpose of the soil sampling is to determine the average lead concentration for each property. It is expected that the property soil sampling will be completed by the end of the summer. Property owners will receive the results of the soil sampling in the fall.

EPA, PADEP and Exide investigated [Bernhart Park](#) during the month of June. The assessment consists of soil, sediment and surface water sampling. EPA is currently reviewing the results of the sampling. EPA will present the findings of the assessment at the public meeting in November 2001.

Exide submitted the Step 2 Environmental and Human Health Sampling Work Plan, which is a follow-up to the Step 1 Work Plan. The Step 2 Work Plan consists of the environmental sampling (i.e., soil, dust, and tap water sampling and paint screening), the

blood lead study, and site-specific risk assessment. The environmental sampling and blood lead study will focus on the most vulnerable residents (e.g., children under the age of 84 months, and pregnant women). The data will be incorporated in the site-specific risk assessment to determine the cleanup levels for lead in soil. EPA is currently reviewing the Step 2 Work Plan.

Third Quarter 2001

EPA has received and is currently reviewing the Bernhart Park Assessment Report. Exide continues to conduct soil sampling of properties within the study area. So far, approximately 350 properties have been sampled. The results of the soil sampling will be mailed to the property owners in the fall. In addition to Bernhart Park, the review of the Step 2 Work Plan is ongoing. EPA anticipates that a public meeting will be scheduled in November to present the progress of the investigation and to answer questions.

Fourth Quarter 2001

A public meeting was held on November 27, 2001 at the Muhlenberg High School, Reading, Pennsylvania, to present the progress of the Exide Investigation. The meeting was attended by approximately 100 people, including representatives of EPA, PADEP, the local government, and citizens. EPA presented the progress of the investigation. The presentation is summarized below and in the [Public Meeting Fact Sheet Handout and Map](#).

Soil Sampling of Individual Properties

Approximately 450 properties were sampled, which equate to about 10,000 sample locations. The results of the soil sampling were used to determine the average soil lead concentration for each property. The soil results were sent to the property owners in November and December. Based on the soil results, the 450 properties were grouped into three distinct categories. These categories are defined below:

1. Properties that do not require cleanups:

These properties contain an average soil lead concentration of 500 mg/kg or less, which meet the Pennsylvania Department of Environmental Protection (PADEP) Statewide Health Standard. The properties do not require soil cleanup and are not subject to further evaluation. This determination completes Exide's investigation on these properties. One hundred six properties do not require cleanups. .

2. Properties that require cleanups:

These properties contain average soil lead concentration of 1200 mg/kg or greater, a level that EPA has determined requires cleanup to ensure long term protection for children. Forty-seven properties were determined to have soil lead concentrations above 1200 mg/kg. Thirty-seven out of the forty-four properties will be cleaned up in spring 2002. The remaining seven properties, which are either vacant, do not have children residing on

the property, or do not pose a high frequency of exposure, will be addressed in subsequent cleanups. Because of the difficulties associated with soil excavation and the low frequency of soil exposure during the winter months, Exide will implement the soil cleanup in spring 2002. Exide will contact the property owners in advance before any work begins.

3. Properties that will be retained and reevaluated:

These properties contain an average soil lead concentration between 500 mg/kg and 1200 mg/kg. The levels do not present an immediate problem. These properties will be retained and reevaluated for the second phase study next year. The second phase study will determine the site-specific cleanup level. The properties will be reevaluated based on this cleanup level. Properties with soil lead concentration below the site-specific cleanup level do not pose a health risk and therefore, will not require soil cleanups. Properties with soil lead concentration above the site-specific cleanup level will require soil cleanups.

Expansion of Study Area

The original study area was expanded to fully define the extent of soil lead contamination. The expansion of the study area can be viewed in the [Public Meeting Fact Sheet Handout and Map](#) webpage. The expansion includes soil sampling of an additional 150 properties. The property owners were contacted by Exide in October. The properties were sampled in November or will be sampled shortly. The results of the soil sampling will be mailed to the property owners in February 2002.

Bernhart Park Assessment

In addition to soil sampling of the individual properties, EPA, PADEP and Exide assessed Bernhart Park this past summer. This assessment entailed soil, sediment, and surface water sampling. Lead levels detected in sediment and surface water in the reservoir do not pose a human health risk and therefore, the reservoir do not require cleanup. EPA has identified ground areas in the park that will require remediation. EPA is currently working with Exide and the City of Reading to develop a proposal to cleanup these areas. Our goal is to begin the soil cleanup at the park in spring 2002 with the anticipation of reopening park in the summer of 2002.

Ongoing and Future Activities

As we look ahead to the future, we anticipate the following goals will be completed in the upcoming years:

- Complete the delineation of the study area by December 2001.
- Cleanup 37 properties in spring 2002 with the 7 properties to follow.
- Cleanup Bernhart Park and reopen the park for recreational use in summer 2002.
- Collect data for the second phase study in summer 2002 to determine the site-specific cleanup level.
- Complete the second phase study in spring 2003.
- Reevaluate properties with soil lead concentrations greater than 500 mg/kg but less than 1200 mg/kg. Commence cleanups of properties with soil lead concentrations above the site-specific cleanup level in spring 2003.