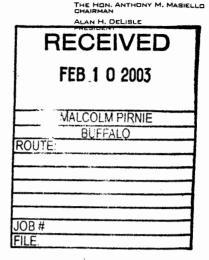
February 6, 2003

David Locey NY State Dept. of Environmental Conservation 270 Michigan Avenue Buffalo, NY 14203-2999

Re: Hanna Furnace Site TCLP Lead Investigation Sampling Results

Dear Dave:



The purpose of this letter is to present the results of additional characterization of the Filter Cake/Flue Ash (FC/FA) Area on Subparcel 4 the Hanna Furnace Site in Buffalo, New York. DDI contracted with Malcolm Pirnie, Inc. to perform this characterization effort in response to sampling conducted by the USEPA in 2001 that revealed an elevated Toxicity Characteristic Leaching Procedure (TCLP) lead concentration in sample US-FA-03 (i.e., 14.7 mg/L). The test pit program described below was designed to delineate the area impacted by elevated TCLP lead concentrations in sample US-FA-03.

Two sets of four test pits (MP-TP-1 through MP-TP-8) were excavated to assess the extent of elevated lead concentrations in the FC/FA material surrounding sample location US-FA-03. Figure 1 shows the test pit locations. The first four test pits were completed approximately 20 feet from sample US-FA-03 location. The second set of test pits were completed approximately 20 feet out from the first borings and approximately 40 feet from sample location US-FA-03. Because a tree was located approximately 35 feet to the west of sample US-FA-03, the western test pits were placed at a 15-foot spacing rather than a 20-foot spacing.

The test pits were excavated using a backhoe provided and operated by a drilling subcontractor. The backhoe was decontaminated prior to the initiation of excavation activities and between test pit locations. A geologist screened the material removed from the excavations using a PID and described the material and other observations on the attached field logs.

One sample was collected from each test pit for analysis of TCLP lead based on photoionization detector screening results and visual and olfactory observations. In addition, a blind duplicate sample was collected from MP-TP-4. For delineation purposes, the four samples collected from the first set of test pits (MP-TP-1 through MP-TP-4) were analyzed first. The sampling plan included the analysis of some or all of the samples from the second set of test pits if any of the analytical results from the first set of test pits indicated that TCLP lead concentrations were above the Maximum Concentration of Contaminants for the Toxicity Characteristics for lead (5.0 mg/L). Because all TCLP lead concentrations in the first set of test pit samples were below 5.0 mg/L, no samples collected from the second set of test pits were analyzed.

As shown in the attached table, the detected TCLP lead concentrations ranged from 0.0498 to 2.78 mg/L, below the USEPA Maximum Concentrations for the Toxicity Characteristic of 5.0 mg/L. In addition, the USEPA also collected three other samples in 2001 from the FC/FA Area, and the TCLP lead concentrations in those samples ranged from 0.209 to 1.56 mg/L, below the USEPA Maximum Concentrations for the Toxicity Characteristic of 5.0 mg/L. Therefore, it does not appear that lead concentrations are elevated throughout the entire FC/FA Area but are limited to the area of sample location US-FA-03. This conclusion is further supported by analytical results of groundwater samples collected from MW-103 in Subparcel 4 and MW-306 in Subparcel 3. Lead was detected in only one of three samples collected from the two wells, but was not detected in the filtered portion of that sample. Therefore, the lead concentration was due to suspended solids in the groundwater sample. The groundwater quality data indicate that lead is not leaching into the groundwater. Consequently, no further TCLP testing of the Filter Cake/Flue Ash Area is considered necessary.

To limit access to the area near sample US-FA-03 until a plan to remove the lead-contaminated material can be developed, the immediate portion of the FC/FA Area that surrounds sample location US-FA-03 will be fenced. It is anticipated that approximately 320 linear feet (an approximately 80-foot square area) of fencing will be installed in February 2003.

If you have any questions regarding this matter, please contact me.

Very truly yours,

Peter Cammarata

Senior Executive Vice President

## **Enclosures**

cc:

J. Heffron (DDI)

K. McManus (MPI)

M. Smith (ECIDA)

M. Tytka (Parsons)

MALCOLM PIRNIE

## TABLE 1

## SUMMARY OF TCLP LEAD ANALYTICAL RESULTS TEST PIT SAMPLES HANNA FURNACE SITE

Sample ID	TP-1	TP-2	TP-3	TP-4	Blind Duplicate (TP-4)	MCCTC <sup>2</sup>
Lead	0.0498	1.88	2.78	0.761	1.95	5.0

Notes:

<sup>1.</sup> TCLP - Toxicity Characteristic Leaching Procedure

<sup>2.</sup> USEPA Maximum Concentration of Contaminants for the Toxicity Characteristic

