United States Environmental Protection Agency Region V POLLUTION REPORT

Date: Tuesday, September 29, 2009

From: James Augustyn, OSC

Subject: FINAL-FINAL POLREP (Supplemental Removal Activities)

DLH Plating Site

2801 Grand Avenue, Cleveland, OH

Latitude: 41.4847000 Longitude: -81.6281000

POLREP No.: Site #: 11 B5NO **Reporting Period:** 5/29/2009 - 9/30/2009 D.O. #: 31 **Start Date:** 11/11/2008 **Response Authority: CERCLA** Mob Date: 11/11/2008 **Response Type:** Time-Critical **Demob Date:** 9/30/2009 **NPL Status:** Non NPL **Completion Date:** 9/30/2009 **Incident Category:** Removal Action **CERCLIS ID #:** OHN 000510286 Contract # 68-S5-03-01

RCRIS ID #:

Site Description

See POLREP #1 for Site description.

Current Activities

Following the demolition of the roof and supporting walls of the frontage portion of the building along Evarts Street (former Rooms D, E, F, and L) in April 2009, the concrete slab remained intact . Electrochemical plating processes formerly conducted in this portion of the building used cadmium, chromium and cyanide solutions.

On May 29, 2009, the Northeast Ohio Regional Sewer District (NEORSD) observed and sampled a dark-brown liquid pooled on the ground on the south side of the Site building. Analytical results indicated that the liquid contained high levels of cyanide and heavy metal contaminants. U.S. EPA mobilized its Emergency and Rapid Response Services (ERRS) and Superfund Technical Assessment and Response Team (START) contractors to perform solidification and removal of the liquid and surrounding soil. During the cleanup activities, U.S. EPA and START observed what appeared to be the same darkbrown liquid on the ground surface between the exposed concrete slab of former Room L and Evarts Street. Liquid was observed seeping out of a weep hole in the remaining brick wall below the exposed foundation. U.S. EPA directed START to prepare a quality assurance project plan (QAPP) for sampling of the exposed concrete slab foundation, sub-slab soils, sub-slab water, and surface soil adjacent to Evarts Street to evaluate whether they contain cyanide and heavy metals at concentrations that exceed applicable regulatory limits and may pose a threat or potential threat to human health and the environment.

On July 2, 9, and 10, 2009, U.S. EPA, START, and the Ohio Environmental Protection Agency (Ohio EPA) performed extent of contamination sampling activities at the Site. On July 2, 2009, START used a hammer drill with a carbide bit to collect concrete cores from the exposed foundation.

On July 9, and 10, 2009, START used a concrete core drill with a diamond core bit to collect concrete cores. START completed 12 concrete cores within the footprint of former Room L and composited the cores into three samples. Ohio EPA used a hydraulically driven, direct-push soil core sampler (GeoProbe7) to collect subsurface soil samples from under the exposed foundation. Ohio EPA completed soil borings at each of the 12 locations to a maximum depth of 11 feet below ground surface (bgs). START collected a grab soil sample using disposable plastic scoops from each of the 4-foot intervals retrieved by OEPA. START used a peristaltic pump to collect a subsurface water sample from under the exposed foundation of former Room L from soil boring location L-01. START collected grab surface and near-surface soil samples from five locations in a grassy area between Evarts Street and the exposed foundation. START collected a grab soil sample using a shovel and disposable scoops from 0 to 6 inches bgs and 6 to 12 inches bgs in all five locations. START collected 5-point composite surface soil samples from three locations in an overgrown area east of Room M to a maximum depth of 6 inches bgs.

Overall, the sampling results indicated no Site contaminants in the concrete at levels exceeding hazardous

waste regulatory levels or the Ohio VAP Standards for commercial/industrial properties; a limited amount of Site contaminants in the on-site soil at levels exceeding the Ohio VAP Standards for commercial/industrial properties; a considerable amount of Site contaminants in the off-site soil (along Evarts Street) at levels exceeding the Ohio VAP Standards for residential properties; and a considerable amount of Site contaminants in the surface and subsurface water at levels exceeding hazardous waste regulatory levels and the Ohio Surface Water Quality Standards. U.S. EPA and START documented that contaminated surface water was migrating from the Site to Evarts Street. In doing so, the contaminated surface water resulted in the migration of Site contaminants to the soil along Evarts Street at concentrations exceeding the Ohio VAP Standards for residential properties.

On August 17, 2009, U.S. EPA OSC Jim Augustyn, START personnel, and ERRS Response Manager met at the Site to discuss interim remedial measures to prevent contaminated soil and water from migrating off the site onto Evarts Street.

The following remedial measures were discussed: remove the exposed concrete slab, excavate the subsurface soil that exists beneath the slab, grade the area to slope towards the elevation of the existing sidewalk, add a 6 inch layer of clean topsoil in the graded area, and seed the area to stabilize the new site grade. ERRS will also remove a 6 foot wide section of degraded asphalt pavement along the southern side of Evarts Street to the top of the underlying brick and repave the area. ERRS will excavate the soil located between Evarts Street and the sidewalk to a depth of 12 inches below the sidewalk grade, backfill the excavated area with clean topsoil, and seed the area. Finally, ERRS will replaced portions of the sidewalk along the property boundary that have cracked and buckled as a result of site activities.

On August 18, 2009, ERRS mobilized to the Site and commenced breaking up and removing the exposed concrete slab. ERRS staged the concrete on Site. By the end of the work day, all of the concrete slab had been broken up and the western third of the concrete slab had been removed and stock piled.

On August 19, 2009, ERRS continued removing the exposed concrete slab. ERRS also removed approximately $\frac{1}{4}$ of the foundation wall leading up to the concrete slab, near the northeast corner of the Site.

On August 20, 2009, ERRS completed removing and staging the exposed concrete slab and began excavating the sub-slab soil. ERRS excavated a 6 foot wide excavation to the same elevation as the top of the sidewalk along Evarts Street. During excavation operations near the central portion of the excavation area, ERRS encountered a 6-inch diameter PVC pipe, which filled a portion of the excavation with liquid that was contained within the pipe. ERRS pumped the liquid from the excavation to a sump inside the building.

On August 21, 2009, ERRS arrived at the Site to find that a severe storm event that occurred the previous night had filled the excavation. ERRS pumped the liquid from the excavation to a sump inside the building. As the liquid was removed from the excavation, ERRS graded the side of the excavation to allow the saturated soil to dry over the upcoming weekend.

On August 24, 2009 START personnel arrived onsite and met with U.S. EPA OSC and ERRS about site operations. Due to rainfall over the weekend, the site excavation has been flooded with water. ERRS is currently dewatering the site. ERRS has also begun removal of the top 6 inches of soil between the former building foundation and sidewalk and between the sidewalk and street curb. START personnel provided photographic and written documentation as needed.

On August 25, 2009, ERRS continued site dewatering operations and the removal of soil between the former building foundation and sidewalk. ERRS also discovered and capped six PVC drain pipes that were discharging water into the excavation.

On August 26, 2009, ERRS continued site dewatering operations. ERRS initiated operations to place concrete debris into the eastern half of the excavation in order to stabilize the excavation bottom and reduce the ability of rainfall to collect in the excavation. ERRS has also ordered two truckloads of lime to be delivered to assist in drying out the remaining soil in the excavation.

On August 27, 2009, ERRS completed dewatering operations and continued placing concrete debris in the bottom of the eastern half of the excavation. ERRS has scheduled trucks to arrive onsite tomorrow to initiate the removal of the stockpiled soil for offsite disposal. The stockpile soil will be disposed of at Waste Management's American landfill.

On August 28, 2009, ERRS informed START personnel that 8 truckloads of stockpiled soil have been removed from the site for offsite disposal to Waste Management's landfill. ERRS also completed placing

concrete debris into the eastern half of excavation in order to stabilize the bottom of the excavation. ERRS has scheduled to have clean fill dirt delivered to the site, starting on August 31, 2009 for use in capping the exposed excavation soil and for providing a proper site grade.

On August 31, 2009 START personnel arrived onsite and met with U.S. EPA OSC and ERRS concerning site operations. ERRS had contracted with Waste Management to bring on site 14 tractor trailers throughout the day to be loaded with stockpiled soil for offsite disposal at Waste Management's landfill. ERRS had also started to accept seven truckloads of clean soil in order to start backfilling and grading the excavation. By the end of the day, all stockpiled soil had been removed from the project site. START personnel provided photographic and written documentation as needed.

On September 2, 2009, START personnel arrived on site and met with ERRS to check the status of site activities. ERRS has been interviewing contractors in order to receive price quotes to replace and repave a portion of Evarts Road that had been previously damaged by earlier plating activities. ERRS was also soliciting price quotes for hydro-seeding the project site, once backfill operations were completed. ERRS received the remaining truckloads of clean soil for backfilling the excavation and grading the project site.

On September 3, 2009, START personnel observed ERRS conducting final grading and site dressing activities in preparation for hydro-seeding operations. ERRS was also continuing to receive price quotes for hydro-seeding the site. ERRS planned to award this work this afternoon and have the site hydro-seeded tomorrow.

On September 4, 2009, ERRS cleaned their excavation equipment in preparation for demobilizing the equipment from the site. The hydro-seeding contractor arrived on site and hydro-seeded the entire backfilled area on the project site. The contractor also hydro-seeded the tree lawn area between the sidewalk and Evarts Road.

On September 22, 2009, START personnel met ERRS on site to observe the asphalt and concrete replacement activity planned for today. The contractor representative selected for this asphalt and concrete replacement work arrived onsite without equipment and laborers and stated that he could not complete the work today due to potential inclement weather. The ERRS contractor manager reminded the asphalt contractor representative that their company had continually delayed the repaving work and requested that the work be completed today. The asphalt contractor replied that they would be unable to initiate the work as requested by the ERRS. As a result, ERRS released this asphalt contractor from his contract and selected the next lowest bidder, Holland Paving Company to complete the asphalt and concrete replacement activity. Holland Paving responded by scheduling this work for September 24th.

On September 24, 2009, START personnel and ERRS oversaw Holland Paving removing and replacing a 1000 foot section the damaged asphalt from Evarts Road. Two lifts of asphalt material was applied, compacted and seal-coated as required by the U.S. EPA on-scene coordinator.

On September 30, 2009, Holland Paving returned to the project site to set forms, and pour concrete to replace sections of the public sidewalk damaged during earlier plating operations. Holland Paving will arrive back on site early next week to remove the forms from the project site, once the concrete has set.

Planned Removal Actions

No further removal actions are anticipated at this time

Key Issues

Property owner stated another local business was interested in obtaining the property. U.S. EPA currently has a CERCLA Lien in place on the property.

Disposition of Wastes

Total to Date:

Bulk Liquids

80,540 gallons of Hazardous Waste Liquids N.O.S. D006, D007 (Chromium, Cadmium) have been transported to Vickery for disposal.

23,750 gallons of Hazardous Waste Liquids D006, D007, F006 (Chromium, Cadmium, Cyanide) have been transported to Vickery for disposal.

20,850 gallons of Waste Chromic Acid Solution D002, D004, D006, D007 have been transported to

Vickery for disposal.

18,526 gallons of Waste Corrosive Liquid, Basic, Inorganic N.O.S. have been transported to Vickery for disposal.

Bulk Solids

375 cubic yards of Hazardous Waste Solid D006, D007, F006, F007 (Chromium, Cadmium) have been transported to Envirite of Ohio, Inc. for disposal.

68 cubic yards of Hazardous Waste Solid D003, D006, F006, F007 (Chromium, Cadmium) have been transported to Envirite of Ohio, Inc. for sampling, laboratory analysis and disposal.

560 cubic yards of RCRA empty containers and debris have been transported to American Landfill for disposal.

648.49 tons of demolition debris have been transported to American Landfill for disposal.

Bulk Soil Disposal

601.42 tons of contaminated soil (Declassified - unspecified PMT, categorized as special waste) have been transported to American Landfill for disposal.

Drums

50 gallons of Hazardous Waste Liquids (Cyanides, Chromium) have been transported to Environmental Enterprises, Inc. for disposal.

400 pounds of Hazardous Waste Solids (Metal Hydroxide) have been transported to Environmental Enterprises, Inc. for disposal.

3,500 pounds of Hazardous Waste Liquids (Sodium Hydroxide) have been transported to Environmental Enterprises, Inc. for disposal.

750 gallons of Hazardous Waste Liquids (Chromic Acid, Sulfuric Acid) have been transported to Environmental Enterprises, Inc. for disposal.

400 gallons of Hazardous Waste Liquids (Cyanides, Chromium) have been transported to Environmental Enterprises, Inc. for disposal.

2,500 pounds of Hazardous Waste Liquids (Sodium Hydroxide) have been transported to Environmental Enterprises, Inc. for disposal.

200 gallons of Non-Regulated Material

Lab Packs

700 pounds of RQ Waste Paint Related Material have been transported to Environmental Enterprises, Inc. for disposal.

300 pounds of RQ Waste Corrosive Liquid, Acid, Inorganic (Sulfuric Acid) have been transported to Environmental Enterprises, Inc. for disposal.

100 pounds of RQ Waste Corrosive Liquid, Basic, Inorganic (Barium Hydroxide) have been transported to Environmental Enterprises, Inc. for disposal.

75 pounds of RQ Waste Flammable Liquids have been transported to Environmental Enterprises, Inc. for disposal.

400 pounds of RQ Waste Toxic Solids, Inorganic (Cadmium) have been transported to Environmental Enterprises, Inc. for disposal.

10 pounds of Waste Oxidizing Solids (Sodium Nitrite) have been transported to Environmental Enterprises, Inc. for disposal.

one (1) pound of RQ Waste Arsenic Trioxide has been transported to Environmental Enterprises, Inc. for

disposal.

five (5) pounds of Waste Toxic Solids, Organic have been transported to Environmental Enterprises, Inc. for disposal.

two (2) pounds of RQ Waste Sodium Sulfide have been transported to Environmental Enterprises, Inc. for disposal.

one (1) pound of RQ Waste Meacuaic Nitrate has been transported to Environmental Enterprises, Inc. for disposal.

100 pounds of Waste Stannic Chloride have been transported to Environmental Enterprises, Inc. for disposal.

300 pounds of Waste Ammonium Hydrogen Difluoride have been transported to Environmental Enterprises, Inc. for disposal.

50 pounds of Non-Regulated Material have been transported to Environmental Enterprises, Inc. for disposal.

200 pounds of Waste Toxic Solids, Inorganic (Copper Sulfate) have been transported to Environmental Enterprises, Inc. for disposal.

300 pounds of Waste Corrosive Solids, Basic, Inorganic (Sodium Metabisulfate) have been transported to Environmental Enterprises, Inc. for disposal.

400 pounds of RQ Waste Flammable Liquids (Isopropyl Alcohol) have been transported to Environmental Enterprises, Inc. for disposal.

one (1) pound of radioactive solids (Thorium Nitrate) has been transported to Environmental Enterprises, Inc. for disposal.

Demolition debris

Approximately 650 tons of demolition debris was transported to American Landfill

Miscellaneous

24 mercury containing items transported to Bowling Green State University for recycling.

Waste Stream	Quantity	Manifest #	Disposal Facility
Declassified - Unspecified PMT cat. is Sp. Waste	41.53 tons	338384	American Landfill
Declassified - Unspecified PMT cat. is Sp. Waste	41.4	338387	American Landfill
Declassified - Unspecified PMT cat. is Sp. Waste	42.88	338386	American Landfill
Declassified - Unspecified PMT cat. is Sp. Waste	32.51	338388	American Landfill
Declassified - Unspecified PMT cat. is Sp. Waste	46.69	338385	American Landfill
Declassified - Unspecified PMT cat. is Sp. Waste	28.87	338389	American Landfill
Declassified - Unspecified PMT cat. is Sp. Waste	19.09	338390	American Landfill
Declassified - Unspecified PMT cat. is Sp. Waste	14.45	338391	American Landfill
Declassified - Unspecified PMT cat. is Sp. Waste	16.32	338392	American Landfill
Declassified - Unspecified PMT cat. is Sp. Waste	19.92	338393	American Landfill
Declassified - Unspecified PMT cat. is Sp. Waste	21.12	338394	American Landfill
Declassified - Unspecified PMT cat. is Sp. Waste	20.94	338395	American Landfill
Declassified - Unspecified PMT cat. is Sp. Waste	20.98	338396	American Landfill
Declassified - Unspecified PMT cat. is Sp. Waste	27.39	338397	American Landfill
Declassified - Unspecified PMT cat. is Sp. Waste	14.52	338398	American Landfill
Declassified - Unspecified PMT cat. is Sp. Waste	21.03	338399	American Landfill
Declassified - Unspecified PMT cat. is Sp. Waste	20.73	338400	American Landfill
Declassified - Unspecified PMT cat. is Sp. Waste	22.26	338401	American Landfill

Declassified - Unspecified PMT cat. is Sp. Waste	20.01	338402	American Landfill
Declassified - Unspecified PMT cat. is Sp. Waste	20.28	338403	American Landfill
Declassified - Unspecified PMT cat. is Sp. Waste	15.78	338406	American Landfill
Declassified - Unspecified PMT cat. is Sp. Waste	17.76	338405	American Landfill
Declassified - Unspecified PMT cat. is Sp. Waste	19.59	338404	American Landfill
Declassified - Unspecified PMT cat. is Sp. Waste	18.09	338408	American Landfill
Declassified - Unspecified PMT cat. is Sp. Waste	17.28	338407	American Landfill

response.epa.gov/DLHPlating