

U.S. ENVIRONMENTAL PROTECTION AGENCY  
POLLUTION/SITUATION REPORT  
Former W&J Lanyon Zinc Works - Removal Polrep  
Initial and Final Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region VII

**Subject:** POLREP #1  
First and Final  
Former W&J Lanyon Zinc Works  
A7X6  
Pittsburg, KS  
Latitude: 37.4111857 Longitude: -94.7172562

**To:** Dave Williams, SUPR ERNB

**From:** Todd Campbell, OSC

**Date:** 6/2/2014

**Reporting Period:** 11/19/12 - 03/28/14

## 1. Introduction

### 1.1 Background

<b>Site Number:</b>	A7X6	<b>Contract Number:</b>	
<b>D.O. Number:</b>		<b>Action Memo Date:</b>	11/15/2012
<b>Response Authority:</b>	CERCLA	<b>Response Type:</b>	PRP Oversight
<b>Response Lead:</b>	EPA	<b>Incident Category:</b>	Removal Action
<b>NPL Status:</b>	Non NPL	<b>Operable Unit:</b>	
<b>Mobilization Date:</b>	11/16/2012	<b>Start Date:</b>	11/15/2012
<b>Demob Date:</b>	8/29/2013	<b>Completion Date:</b>	3/28/2014
<b>CERCLIS ID:</b>		<b>RCRIS ID:</b>	
<b>ERNS No.:</b>		<b>State Notification:</b>	
<b>FPN#:</b>		<b>Reimbursable Account #:</b>	

#### 1.1.1 Incident Category

Potentially Responsible Party (PRP) Lead Removal Action with Enforcement Action

#### 1.1.2 Site Description

Smelting operations began in Pittsburg in the late 1870's and continued on and off through World War I. There were a total of eight different smelting facilities known to be located within Pittsburg at various times. The Kansas Department of Health and Environment (KDHE) has documented the existence of nearly 30 former smelter sites in southeast Kansas alone. Some have been previously remediated by the U.S. Environmental Protection Agency, while others remain in various stages of assessment and cleanup. The Pittsburg Zinc Site consisted of residential yards with high concentrations of lead contamination from zinc smelting operations associated with three former smelter sites (Robert Lanyon, S.H. Lanyon, and W&J Lanyon), collectively referred to as the former Pittsburg Zinc Smelters. The Pittsburg Zinc Site has previously been the subject of numerous KDHE assessment efforts conducted between 1987 and 2008.

KDHE referred the Mission Clay Products (MCP) site to the EPA in October 2010, for a removal based on the results of a Removal Site Evaluation (RSE) KDHE completed in 2006. In the spring of 2009, the EPA conducted a field screening at the site and confirmed the presence of elevated lead levels in the soils at MCP where the former W&J Lanyon Zinc Works was sited. In the fall of 2010, the EPA conducted a formal RSE at the facility that included screening the entire property for lead, mercury toxicity testing on several piles of waste material, sediment assessment for metals contamination, one bulk asbestos sample and a subsurface investigation of the former drum storage area using a magnetometer to reveal ferrous anomalies below ground surface.

##### 1.1.2.1 Location

MCP is located at 800, 824 and 826 East 4<sup>th</sup> Street in Pittsburg, Crawford County, Kansas. The site is in Section 29, Township 30 South, Range 25 East. The geographic coordinates of the site are: 37.40665 degrees north latitude and 94.69277 degrees west longitude. MCP consists of multiple buildings spread out over approximately 60 acres within the center of Pittsburg. It sits amidst a mixed-use area with businesses and rail to the west, residential properties to the south and west and Schlanger Park to the North. MCP Industries is still actively producing pipe, clay products and industrial polymer products at the site.

According to the EPA potentially responsible party (PRP) search report, Mission Clay Products has operated a clay products manufacturing facility at the site since 1987. They underwent a name change in 1990 when Mission Clay Products became MCP Industries, Inc., but remained under the same ownership.

**1.1.2.2 Description of Threat**

The primary contaminants of concern at this site are heavy metals. Lead was documented at the site of the former W&J Lanyon Smelter location in the late 1980s by KDHE assessment and has continued to remain as evidenced by several site investigations over the last 25 years, most recently in December 2010 when the EPA completed the most recent RSE. During this assessment, the EPA discovered lead concentrations in excess of site-specific action levels at 5 of the 182 grid cells sampled. In addition, mercury was found in the soil, sediments and waste rubber gasket materials at the site. One of the three composite rubber samples failed TCLP and three of the four sediment samples collected during the EPA RSE contained mercury at a level that exceeded the 1.0 ppm level of concern noted by EPA regional ecological risk assessors.

Lead is a heavy metal and has been listed as a hazardous substance pursuant to section 102 of CERCLA, 42 U.S.C. § 9602 and 40 CFR § 302.4, the National Contingency Plan (NCP). Children playing in and around contaminated areas have the highest potential to be exposed to lead contamination. Children are more vulnerable to lead poisoning than adults. For children, lead can damage the central nervous system, kidneys and reproductive system. At higher levels it can cause comas, convulsions and death. Even low levels of lead are harmful and are associated with decreased intelligence, impaired neurobehavioral development, decreased stature and growth, impaired hearing acuity and possibly high blood pressure. Lead is classified by the EPA as a probable human carcinogen and is a cumulative toxicant. A significant amount of lead that enters the body is stored in the bone for many years and can be considered an irreversible health effect.

Human exposure is primarily limited to site workers and more minimally to trespassers at the site. The EPA toxicologists ran several Adult Lead Methodology exposure models that looked at incorporated site-specific bioavailability data and potential exposures to child-bearing female construction workers and juvenile trespassers that either have or have the ability to access the site for either business or recreational purposes. As a result, the EPA has selected a site-specific action level of 1,200 mg/kg lead for the site.

**1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results**

During the December 2010, RSE assessment, the EPA discovered lead concentrations in excess of site-specific action levels at 5 of the 182 grid cells sampled. In addition, mercury was found in the soil, sediments and waste rubber gasket materials at the site. One of the three composite rubber samples failed TCLP and three of the four sediment samples collected during the EPA's RSE contained mercury at a level that exceeded the 1.0 ppm level of concern noted by EPA ecological risk assessors.

**2. Current Activities**

**2.1 Operations Section**

**2.1.1 Narrative**

MCP Industries elected to enter into an Administrative Order on Consent (AOC) and negotiated a settlement that involved the installation of a 12 inch cap and an additional 12 inch cover over those areas on the site that exhibited soil lead levels in excess of site specific actions. These actions began in October 2012, with clearing of vegetation and the removal of items in the lay down yard and completed the following summer with final drainage controls as specified by KDHE in their initial Environmental Use Control/Long-Term Care Agreement (EUC/LTCA) inspection.

**2.1.2 Operations Section**

MCP capped and covered all grid cells on their property that exceeded the residential site specific action level of 550 ppm lead in soil. This was done by placing virgin clay over the areas of concern and compacting it to a thickness of 12 inches. An additional 12 inch layer of compacted vitrified crushed clay pipe was added to protect the cap and prevent erosion of the underlying clay cap. Each grid node was marked with a concrete marker notifying future users not to dig and to contact Pittsburg Public Works prior to conducting on-site activities.

**2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)**

MCP Industries is the current owner of the property and are therefore the only viable PRP identified. MCP entered into an AOC with EPA R7 on September 28, 2012. The AOC was then signed by the Superfund Division Director on November 15, 2012. Upon verification of completion of the required work activities and subsequent EUC/LTCA inspection by KDHE, EPA issued MCP a notice of completion releasing them from the order on March 28, 2014.

**2.1.4 Progress Metrics**

Lead containing soils were capped in place to minimize the the threat of exposure from bodily contact, as a result no waste was disposed of by the PRP.

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>

--	--	--	--	--	--	--

## **2.2 Planning Section**

### **2.2.1 Anticipated Activities**

All site activities have been completed. Future site activities will fall under the authority of KDHE and the signed EUC/LTCA between KDHE and MCP.

#### **2.2.1.1 Planned Response Activities**

No further response actions anticipated.

#### **2.2.1.2 Next Steps**

No additional steps are anticipated at this time.

### **2.2.2 Issues**

Any additional issues will more than likely be related to long-term care and maintenance of the cap or future use and redevelopment of the site and will be under the purview of KDHE and the City of Pittsburgh.

## **2.3 Logistics Section**

No additional logistical issues anticipated at this time.

## **2.4 Finance Section**

### **2.4.1 Narrative**

This was a PRP lead cleanup and all cost recovery specified under the AOC has occurred at this time.

## **2.5 Other Command Staff**

### **2.5.1 Safety Officer**

No additional site work is anticipated at this time; therefore, there is no need for a safety officer.

### **2.5.2 Liaison Officer**

OSC will continue to function as the liaison between the EPA, KDHE and the City of Pittsburgh.

### **2.5.3 Information Officer**

No additional effort site work anticipated at this time; no need for Information Officer.

## **3. Participating Entities**

### **3.1 Unified Command**

N/A

### **3.2 Cooperating Agencies**

KDHE  
City of Pittsburgh

## **4. Personnel On Site**

OSC provided limited on-site guidance/oversight and EPA had people on-site several times during the removal action. Field work is complete at this time and no additional site support is anticipated.

## **5. Definition of Terms**

n/a

## **6. Additional sources of information**

### **6.1 Internet location of additional information/report**

SDMS and OSC.net

### **6.2 Reporting Schedule**

This is the final Pollution Report (POLREP) for the site.

## **7. Situational Reference Materials**

n/a