

## REGIONAL DECISION TEAM (RDT) SITE PRIORITIZATION FORM

Meeting Date: 06/28/2011

Site Name: Mission Clay Products (MCP)

Site Location: 800, 824, and 826 E. 4<sup>th</sup> Street(s) Pittsburg, Crawford County, Kansas

CERCLIS ID: KSN000706199

SSID#: A7X6

**Statement of Purpose / Issues to be discussed or Decision wanted:** Selection of site specific non-residential cleanup level for lead at the MCP site.

### 1. Nature and Extent of Contamination:

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 1980's by KDHE. The contamination continues to remain as evidenced by several site investigations over the last 25 years, most recently in December 2010 when EPA completed a RSE. During this assessment, EPA discovered lead concentrations in excess of site specific action levels at five (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.

Analytical results from samples collected by EPA and KDHE indicate that hazardous substances have been released into the environment at the MCP site. Both lead and mercury have been found at the MCP site at levels that can pose a threat to both human health and the environment. Lead has been documented on site at levels in excess of 1200 mg/kg, the site specific action level calculated by an EPA R7 toxicologist (see #3 below). Mercury has been documented in samples collected from waste on site that fails RCRA TCLP characteristics and at levels in the sediment above ecological risk assessment levels of concerns (>1 ppm).

### 2. Site/Contaminant Stability

Lead has been detected in surface soils above the proposed Removal Action Level (RAL) of 1200 ppm. Lead in soils may migrate via airborne dusts, surface runoff, percolation into ground water, construction activity, by children transporting soils/dusts into their homes after playing in the affected areas, and by pedestrian foot traffic.

Mercury has been documented in site wastes on the ground surface, in surface soils, and in sediments collected from site drainage areas. Given the fact that the mercury has shown the ability to leach from the solid matrix from where it was sampled then it is certainly possible that it is migrating into the soils and then to the sediments via surface runoff and erosion.

The climate in southeast Kansas consists of strong weather events with periods of high winds and rain associated with tornados, severe thunderstorms, ice storms, and snow events, all of which can contribute to significant erosional events capable of moving contaminants from the site into drainage areas and downstream. In addition, precipitation events can also result in vertical migration of heavy metal contaminants into ground waters via percolation through the substrata.

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### 3. Public/Human Health Exposures/Risks

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.

EPA Toxicologist, Mike Beringer, has drafted a Memorandum, dated 7/1/11, outlining proposed PRGs for the MCP site outlining various exposure scenarios for the RDT to consider prior to selecting a site specific action level at the MCP site (see attached). The exposure scenario that was selected was the construction worker scenario due to the fact that heavy equipment is used on site to move materials with regularity, which can and does disturb surface and subsurface soils, as evidenced by the fact that slag material appears to have been pushed into piles, along with miscellaneous solid waste material at the site.

### 4. Ecological Risks

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 ecological risk assessors per EPA toxicologist Mike Berringer.

### 5. Known State/Public Concerns or Issues

The selection of a site specific action level at MCP is important to both the City of Pittsburg and the State of Kansas, as their plan is to apply the selected MCP action level to state clean-up plan (VCP) clean-ups on adjacent properties under the direction of KDHE.

### 6. Removal Actions

#### Option 1

Excavate all cells with composite surface soil lead concentrations greater than 1200 ppm down to a level below 550 mg/Kg, or to a depth equaling two feet. If lead levels at two feet are below 1200 ppm then excavation is considered sufficient. If a level of 1200 or less cannot be achieved at a depth of two feet, then excavation will continue until levels at the bottom of the excavation are below 1200 ppm. Backfill will consist of soils with a lead level shown to be below 240 ppm lead. No future use or institutional controls would be required if either of these conditions are met.

#### Option 2

Cap all cells with composite surface soil lead concentrations greater than 1200 mg/Kg with a minimum of 12 inches of clean material (soil lead levels less than 240 ppm) and maintain integrity of the cap via a negotiated institutional control (IC) with either KDHE or City of Pittsburgh. In addition, future use controls would be implemented to ensure that periodic inspections were conducted to verify that institutional controls remain effective.

**\* RDT Decision:**


- 1) **Selected a PRG of 1200 mg/Kg lead with institutional controls/EUCs unless soil lead levels are excavated to a point where they are below 550 ppm. Give PRP 30 days to negotiate and sign an AOC. If consensual agreement is not reached within the specified amount of time, then EPA will issue an Unilateral Order (UAO) to MCP outlining the cleanup options proposed by the Regional Decision Team and asking MCP to choose a clean-up option and conduct a clean-up per the option selected.**
- 2) **If MCP does not comply with said order within the time frames specified in the order, then EPA will proceed with a fund lead removal action per option #1 listed above. Cost recovery would follow any EPA lead activities.**

**RDT Members Present:**

**Ken Buchholz, Gene Gunn, Janice Kroone, Cecilia Tapia, Mike Beringer, Craig Smith, Pradip L. Dalal, Mary Peterson, Stan Walker, DeAndre Singletary, Maureen Kraft, and Todd Campbell**

**Date: 6.28.11**

**Signature:**

 **6.4.11**

\* If consensus cannot be reached in the RDT session, then action items will be established, i.e., collect additional information necessary in making a decision. Upon completion of the action items the Project Manager can request that the RDT reconvene to make a decision. It is the site manager's responsibility to share the RDT decision with the state and to place the RDT decision or RDT action items in the official site file in the Superfund Records Center.