United States Environmental Protection Agency Region VII POLLUTION REPORT

Date: Thursday, August 28, 2003 **From:** Dan Garvey, Eric Nold

Subject: Omaha Lead

Greater Omaha Area, Council Bluffs, Carter Lake, Greater Omaha Area, NE

Latitude: 41.1997000 Longitude: -95.9303000

POLREP No.: 7 Site #: NESFNO703481

Reporting Period: August 18-29, 2003 **D.O.** #:

Start Date:Response Authority:Mob Date:Response Type:Demob Date:NPL Status:Completion Date:Incident Category:

CERCLIS ID #: NESFN0703481 Contract #

RCRIS ID #:

Site Description

The Omaha Lead Site is located in the Omaha metropolitan area including Council Bluffs, and Carter Lake, Iowa. Specific boundaries of the site have not yet been defined because the sampling activities for the entire area of investigation are not complete.

Several businesses and manufacturing companies used or processed lead at their facilities in the Omaha metropolitan area. ASARCO Incorporated (ASARCO) operated a lead refinery at 500 Douglas St. in Omaha for over 100 years beginning in the 1870s. The operation of the refinery ceased in 1997. As a routine part of the refinery operation, lead particles were emitted into the atmosphere at the refinery. In addition, the Gould Inc. lead battery recycling plant located at 555 Farnam Street in Omaha was a secondary smelter of lead from discarded lead batteries, closing in 1982. The blast furnace used to smelt the lead at the Gould plant emitted lead particles into the air from that smelter.

In the fall of 1996, the Douglas County Health Department (DCHD) began an assessment of 179 homes located in eastern Omaha. The goal of the assessment was to identify all sources of lead poisoning in each residence. DCHD collected outdoor soil samples from 84 of the 179 residences. Twenty of the 84 exceeded the 400 mg/kg screening level for lead.

In the fall of 1998, DCHD began a more thorough assessment of soil lead contamination at selected residences in east Omaha. Several more residential yards were found to be lead contaminated.

DCHD performed air monitoring of the ambient air quality around the ASARCO lead refinery. In 1984 an air monitor was placed along Abbott Drive immediately north of ASARCO. In the 37 quarters of monitoring conducted at this location between 1984 and 1996, the 1.5 g/m3 air standard for lead was exceeded 19 times. A second air monitoring station was placed along the Missouri River front immediately south of ASARCO in 1990. The standard was exceeded 17 of the 23 quarters that monitoring was conducted at that station. In 1995, a third monitor was placed immediately northwest of ASARCO. This monitor exceeded the standard in all five quarters that monitoring was conducted at this location.

In May 1998, Mr. Frank Brown, President of the Omaha City Council, sent a letter to the United States Environmental Protection Agency (EPA) requesting the assistance of EPA in addressing problems with lead contamination in the Omaha area. EPA initiated a process to investigate the lead contamination using CERCLA authority.

EPA began sampling soil from child care facilities and selected residential properties in March 1999. Seventy-eight of the 364 licensed child care facilities tested have one or more non-foundation results greater than 400 mg/kg with a high concentration of 4,670 mg/kg. The locations of the 364 child care facilities are widely scattered over the Omaha metropolitan area (including Carter Lake, and Council Bluffs, Iowa). There are additional child care facilities that have not been sampled by the EPA. Efforts to sample these child care facilities are ongoing. Two hundred eighty-two residences with EBL were tested

resulting in 134 yards exceeding 400 mg/kg. Sampling at residences with EBL are ongoing. Five hundred sixty-nine of the first 1,422 private residences tested have one or more non-foundation soil analytical results greater than 400 mg/kg lead. The EPA is continuing to sample additional residential properties.

Current Activities

August 18-22, 2003

The priority of the week's activities included setting up the command post and staging areas at a new location 5600 South 10 Street, Omaha, Nebraska. A limited number of ERRs crew personnel mobilized to the site. Utilities were hooked up to the "old administration building" located at the Missouri River Treatment facility where all of the EPA activities are centralized. This new location is significant to the project since it is centrally located and was allowed to be utilized by EPA in a partnering relationship with the Omaha Public Works Department at a significant cost savings to EPA.

Protective barrier fencing was placed around staging areas and sandbags were placed on the concrete pad that will be used to stockpile the contaminated soil at the Missouri River treatment facility.

Other activities that occurred during the week included obtaining background air monitoring samples to be used as a baseline when additional air monitoring occurs during critical phases of the excavation. This all serves as a protective measure to the local community and the employees at the Missouri River Treatment facility.

Other EPA contractor personnel (START) scheduled appointments with the various day cares and EBL properties and videotaped and photographed the properties prior to the planned excavations. Also, access agreements were presented to each property owner and were signed.

OSC Garvey provided training classes to city personnel on Friday, August 22, 2003 concerning the Omaha Lead Site and specifically, EPA activities at the Missouri River Treatment Facility.

Aug. 25-29, 2003

Monday, August 25, 2003 was the first day of excavation during this phase of the clean up. The first property was located at 1125 South 31st Street. Approximately 80 cubic yards of lead contaminated soil was removed from this property. Due to the clean up goal of 400 ppm not being realized at the maximum excavation depth, 1,170 square feet of barrier fence was placed in the base of the excavated area as a warning to future users of the property.

The remainder of the week was dedicated to completing the above mentioned property and also the second (next)property located at 3922 North 25th Avenue.

The work crews left on Friday, August 29, 2003 to return home for the Labor Day Weekend.

The sod company (sub-contractor) is scheduled to begin installing the sod for completed properties next week.

Planned Removal Actions

Continued excavation is planned for the remainder of the 36 day care facilities and EBL properties.

Once the sod is applied to each property, EPA will water the completed properties for a 30 day period. At that time, EPA is asking each property owner to care for their individual yards beyond the 30 day time period.

Work activities are scheduled to commence at 12:00 P.M. September 2, 2003 after the holiday break.

For this phase of the project, the Loess Hills Regional Landfill operated by Iowa Waste Systems, Inc. located in Malvern, Iowa has been selected to accept the lead contaminated soil.

Close coordination has occurred with the Iowa Department of Natural Resources concerning the CERCLA Off-Site policy and also the landfill to determine the analytical testing that is required.

Also, Mr. Todd Davis, Nebraska Department of Environmental Quality has assisted the EPA in determining that all of the backfill soil that is used during this phase of the project does not come from the protected Council Bluffs, Loess Hills Area.

Next Steps

There are thousands of properties in the area that are currently being screened by an EPA contractor. A certain percentage of the properties that are above the stated action levels fall into specific categories such as homes with an elevated blood level child where the soil at the home is also above 400 ppm; will be provided to the current work crews to be have excavation immediately scheduled under the time-critical removal action(s).

Continued cooperation with the Omaha Public Works Department is on-going in order to use the Missouri River Treatment Facility at a significant cost savings to the Federal Government during the tenure of this removal action.

Key Issues

None

Disposition of Wastes

Waste Stream	Quantity	Manifest #	Disposal Facility
Lead contaminated	80 cubic	Has not been transported at this	Loess Hills Municipal
soil	yards	time	Landfill

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