

**United States Environmental Protection Agency
Region VII
POLLUTION REPORT**

Date: Saturday, November 16, 2002

From: Dan Garvey, Eric Nold

Subject: Initial

Omaha Lead

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

Latitude: 41.1997000

Longitude: -95.9303000

POLREP No.:	1	Site #:	NESFNO703481
Reporting Period:		D.O. #:	
Start Date:		Response Authority:	CERCLA
Mob Date:		Response Type:	Time-Critical
Demob Date:		NPL Status:	
Completion Date:		Incident Category:	Removal Action
CERCLIS ID #:	NESFN0703481	Contract #:	
RCRIS ID #:			

Site Description

Site Location

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 been defined because the sampling activities for the entire area of investigation are not complete. The map included as Attachment 1 shows the approximate area of the site.

Description of threat

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 Street 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.

Lead is a hazardous substance as defined by Section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and is listed at 40 C.F.R. Part 302.4. Sampling and analysis has confirmed that the levels of lead in surface soils are high in several residential and child care facility locations. The lead levels at these locations are high enough to pose a threat to children playing in the yards. During the initial round of soil testing, 78 child care facilities and 134 residences having children with elevated blood lead (EBL) results were found to have non-foundation soil concentrations greater than 400 mg/kg with a high concentration of 16,300 mg/kg.

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.

Preliminary Assessment Results

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 Abbot Drive immediately north of ASARCO. In the 37 quarters of monitoring conducted at this location between 1984 and 1996, the 1.5 µg/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.

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

September 8-12, 2003

This was the 4th week of this phase of the removal action. Because set up and mobilization were completed prior to this week, all activities were focused on excavation and restoration of residential yards. Rain on Tuesday resulted in cessation of site work immediately after noon. Rain also slowed progress on Wednesday. Sod, which was anticipated for this week, was also delayed by the wet weather. Thus far, no sod has been laid at any of the residences. The following chart provides a synopsis of site activities for the week and project totals. No issues (e.g., complaints or obvious damage) were resultant of this weeks efforts.

Next Steps

Soil excavation at residential yards will continue until the original list of 30 child care facilities are completed. A report by START summarizing all site activities will be completed after the last of the 30 child care facilities has been sodded.

Key Issues

An appropriate property to establish a command post and staging yard has yet to be found. The temporary staging area that is being rented is not a preferred property for a long- term project.

response.epa.gov/omahalead