

United States Environmental Protection Agency
Region IV
POLLUTION REPORT

Date: Wednesday, June 7, 2006

From: Terrence Byrd

Subject: Final POLREP

Caraleigh Phosphate and Fertilizer Works
1600-1750 block of Wheeler Road, Raleigh, NC
Latitude: 35.7583000
Longitude: -78.6608000

POLREP No.:	2	Site #:	A4FS
Reporting Period:		D.O. #:	0040
Start Date:	3/13/2006	Response Authority:	CERCLA
Mob Date:	3/13/2006	Response Type:	Time-Critical
Demob Date:	6/6/2006	NPL Status:	Non NPL
Completion Date:	6/6/2006	Incident Category:	Removal Action
CERCLIS ID #:	NCN000407686	Contract #	68-S4-02-05
RCRIS ID #:			

Site Description

The Caraleigh Phosphate and Fertilizer Works (the Site) is located in Raleigh, NC. Caraleigh Phosphate was incorporated in 1891 and manufactured fertilizers products. In 1892, the facility burned down and sulfuric acid was released from the warehouse and leached into the city's water supply. Based on historical data, the acid caused a significant fish kill. The facility was rebuilt and used lead-lined acid chambers from 1901 through 1914. The Site is bordered by a gas station, manufacturer/recycler, and a fast-food restaurant to the west and a city sewer easement to the east. An unnamed tributary of Walnut Creek is also to the east of the Site.

On July 27, 2004, EPA and SEDS conducted a removal assessment at the Site. Analytical results were found as high as 34,000 ppm for lead and 2,800 ppm for arsenic. The levels of lead and arsenic in surface soils exceeded the action levels in industrial areas.

Current Activities

EPA's Emergency and Rapid Services contractor, Kemron, excavated approximately 4,500 tons of soil throughout the Site. The site was delineated by EPA's Superfund Technical Assessment and Response Team (START) contractor, TetraTech Inc. Delineation was determined by taking surface in-situ XRF readings. The ERRS contractor was tasked to remove all soil that was found to have an average concentration of lead greater than 1000ppm and arsenic above 160ppm. Because the Site is in a commercial zoning area and future usage includes developing a portion of it to build a greenway, the OSC made the determination to excavate the entire delineated area to a depth of two feet and backfill with a cap of a depth of no less than 24 inches of clean soil in order to mitigate the threat of direct contact with hazardous materials. After excavation, in-situ lead and arsenic samples were taken at depth and the sample locations were identified via GPS coordinates. The coordinates were recorded in the official Site log and will be used to map the locations in the final report. The lead and arsenic contaminated soil was treated on-site in order to stabilize the contaminants below TCLP standards. Once this was accomplished, the soil was disposed of in a CERCLA approved landfill in accordance with the off-site rule.

Planned Removal Actions

There are no planned removal actions by the OSC at this time.

Key Issues

EPA and NCDENR have been in constant communication with local officials in the city of Raleigh and their contractors regarding the construction of the local greenway. EPA and NCDENR are working to make sure that no workers will come into contact with any contaminated material as they construct the walking path along the sewer easement in the rear of the Site.

Disposition of Wastes

Approximately 4500 tons of Lead and Arsenic contaminated soil was excavated. The soil was treated

with a 5% wt. vol concentration of binding agent to prevent leaching of the contaminants. It was then shipped via truck to an approved landfill for disposal as a non-hazardous solid waste.

Waste Stream	Quantity	Manifest #	Disposal Facility
Lead and Arsenic Contaminated Soil.	4500 tons		Upper Piedmont Landfill 9650 Oxford Road, Rougemont, NC 27572

response.epa.gov/Caraleigh