

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Royster Guano - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IV

Subject: POLREP #3
Progress
Royster Guano
B4W2
Columbia, SC
Latitude: 33.9782104 Longitude: -81.0094103

To:
From: Richard Jardine, OSC
Date: 11/14/2012
Reporting Period: 06NOV12 to 14NOV12

1. Introduction

1.1 Background

Site Number:	B4W2	Contract Number:	EP-S4-07-03
D.O. Number:	0131	Action Memo Date:	9/25/2012
Response Authority:	CERCLA	Response Type:	Time-Critical
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	10/23/2012	Start Date:	10/24/2012
Demob Date:		Completion Date:	
CERCLIS ID:		RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category - Time-Critical Removal Action

1.1.2 Site Description - residential detached single family units in metropolitan setting. Prior to development into a residential community, the land was occupied by what appears to be a pond, as identified by old aerial photography. Across Commerce Drive to the south was the former Royster-Guano phosphate facility which processed ore into super phosphate for agricultural use. The facility operated from approximately 1910 to 1935. The process involved heating and reducing the ore using nitric then sulfuric acid. The arsenic is a process by-product/waste from the ore itself. The lead is from the lead-lined vault into which the sulfuric was introduced. Upon removing the process material from the sulfuric bath, arsenic and lead leached from the processed material. The residential community was developed about 10 years after the plant ceased operation.

1.1.2.1 Location - the former Royster Guano facility was located at 2095 Commerce Drive, Columbia, SC, but this action only involves certain residential properties on Easy Street and Howe Street and adjacent property currently owned/managed by TVK properties.

1.1.2.2 Description of Threat - potential chronic toxicity via inhalation and/or ingestion from lead and arsenic-contaminated soil

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results - The levels of lead and arsenic detected in the shallow surface soil by the early DHEC screening varied from background to well above 27,000 ppm for lead and 11,000 ppm for arsenic, depending upon sample location. The highest values were not on the residential properties but rather close to the former phosphate operation. EPA screening values on the residential properties yielded results that were highly variable from approximately background to 3,000 ppm for lead. Of the 51 parcels in this development, all but 3 were screened or sampled. Most properties had no lead or arsenic above the Region 4 Removal Management Levels. Approximately 11 properties had significant lead and/or arsenic contamination from surface to a depth of 2 feet or below. Two properties had no surface contamination but did exhibit lead and arsenic at 24 inches deep; however, this removal action only addresses that contamination occurring in the top 12 inches.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative - A combined EPA/DHEC sampling expedition collected field information in early August 2012. Lab analyses were received in late August. Several individual face-to-face and public meetings were convened to advise community members as information was gleaned. Media involvement continues with

weekly reporting.

2.1.2 Response Actions to Date - During this reporting period, EPA continued to accomplish preparatory activities including removing fences, vegetation, personal items, outbuildings, and concrete work. In cases where a homeowner agreed, tree companies were hired to remove trees and grind stumps. These preparatory activities provide optimal access to conduct the excavation activity.

The activity accomplished per each property is listed below:

1029 Howe - installed topsoil backfill;

1049 Howe - completed excavation and began topsoil backfill. On 09NOV12 the home owner reversed their decision regarding the large tree in the backyard, and requested EPA remove the tree. During this reporting period, EPA removed the tree and excavated all roots and contaminated soil associated with the trees root system. This corner property will now be used to stage imported topsoil for the remainder of the project.

66 Easy - completed excavation;

82 Easy - completed excavation of front yard (back and side yard pending).

EPA also conducted loadout of approximately 160 tons of staged contaminated soil.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs) - this search is on-going

2.1.4 Progress Metrics

Waste Stream	Medium	Quantity	Manifest #	Treatment	Disposal
non-haz debris	debris	60 cyd roll-off			Richland County LF
non-haz soil	soil	160 tons			Richland County LF

2.2 Planning Section

2.2.1 Anticipated Activities - prior to a 6 day absense (including travel) to celebrate Thanksgiving, EPA intends to continue excavation of front yards along Easy Street, loadout and disposal of excavated soil, backfill all excavated areas with imported topsoil, and begin excavation along the retaining wall that separates industrial property from residential.

2.2.1.1 Planned Response Activities - after accomplishing the activities stated above, EPA will stabilize the site for our demobilization.

2.2.1.2 Next Steps - after the Holiday, EPA should begin the final excavation effort along the seven backyards along Easy Street.

2.2.2 Issues - a daylong rain event identified areas in the neighborhood where the runoff leaves the city streets and washes out yards in the neighborhood. The City has made a commitment to shore up these areas with valley gutters.

2.3 Logistics Section

No information available at this time.

2.4 Finance Section

No information available at this time.

2.5 Other Command Staff

No information available at this time.

3. Participating Entities

3.1 Unified Command

3.2 Cooperating Agencies - the City of Columbia and SC DHEC remain engaged in this removal action.

4. Personnel On Site

No information available at this time.

5. Definition of Terms

No information available at this time.

6. Additional sources of information

No information available at this time.

7. Situational Reference Materials

No information available at this time.

