

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



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IV

Subject: POLREP #2
Progress
Royster Guano
B4W2
Columbia, SC
Latitude: 33.9782104 Longitude: -81.0094103

To:
From: Richard Jardine, OSC
Date: 11/6/2012
Reporting Period: 23OCT12 to 06NOV12

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 #:	

NOTE: POLREP No 1 was developed as a Removal Site Evaluation POLREP and can be found in the 'documents' section of the Royster Guano website at www.epaosc.org

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.

2.1.2 Response Actions to Date - During this reporting period, EPA, ERRS contractor WRS-Compass, and START consultant TetraTech mobilized to begin site preparation and soil excavation. Site preparation included speaking with each affected home owner regarding many specific removal details of their respective properties, establishing a field office and appropriate subcontracts, constructing a cell for staging excavated soil, and removing property items, debris, fencing, and vegetation from the yards. Excavation was completed on 1029 Howe Street. Excavation has begun on 1049 Howe Street.

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

2.1.4 Progress Metrics

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>
non-haz debris		30 cyd roll-off			Richland County LF
non-haz soil	soil	130 cyd			

2.2 Planning Section

2.2.1 Anticipated Activities - continue excavation at 1049 Howe Street

2.2.1.1 Planned Response Activities - from 1049 Howe move to 66 Easy Street.

2.2.1.2 Next Steps - targeted tree removal, backfill excavated areas, continue with excavation schedule

2.2.2 Issues - purchase of backfill was delayed due to unavailability of lab analysis of borrow material. The lab selected for analyses is located in New Jersey and was flooded during Hurricane Sandy. EPA collected new samples for analysis late last week and specified rapid turn around.

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.