

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



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IV

Subject: POLREP #7
Final POLREP
Royster Guano
B4W2
Columbia, SC
Latitude: 33.9782104 Longitude: -81.0094103

To: Matt Taylor, EPA R4
Jonathan McInnis, SC DHEC
Ken Taylor, SC DHEC
Moe Baddourah, Columbia

From: Richard Jardine, OSC

Date: 12/21/2012

Reporting Period: 14DEC12 to 21DEC12

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:	12/21/2012	Completion Date:	12/21/2012
CERCLIS ID:		RCRIS ID:	
ERNS No.:		State Notification:	August 2012
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. Initially the adjacent industrial property was also included in the scope of this removal action. However, a recent initiative by the property owners of the adjacent industrial property owned/managed by TVK properties indicates that their property will be cleaned up under the SC DHEC Volunteer Program.

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 has been strong but is decreasing.

2.1.2 Response Actions to Date - During this reporting period, EPA loaded contaminated soil for disposal, continued with removal of contaminated soil from properties, and returned properties to preexisting conditions. Specific removal activity per individual properties is listed below.

78 Easy - install sod.
79 Easy - install sod, install shed, return miscellaneous property to yard and shed.
80 Easy - install sod and fencing.
81 Easy - install sod and fencing,
82 Easy - install sod in back yard and fencing.
83 Easy - install sod in back yard, return miscellaneous property.
84 Easy - install sod in back yard.
85 Easy - complete excavation and backfill, pour concrete driveway, handicap ramp, and front walkway, install landscape block wall, install sod and fence.
1041 Howe - complete excavation, install sod.
1045 Howe - complete excavation and backfill, install rip rap, seed and landscape fabric.
1049 Howe - final grade of topsoil, install shed, return miscellaneous property, install sod.
Site Office Area - dress up field, sod or seed bare areas, replace fencing, and install silt fence along perimeter.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs) - The preliminary PRP search is completed. The full PRP search is ongoing.

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	debris	180 cyd roll-off			Richland County LF
non-haz soil	soil	1500 tons			Richland County LF

2.2 Planning Section

2.2.1 Anticipated Activities - EPA has completed this project. Minor punch list items may be identified by residents in the coming weeks.

2.2.1.1 Planned Response Activities - None.

2.2.1.2 Next Steps - None.

2.2.2 Issues - the current owner of property adjacent to the residential properties along Easy Street has expressed a willingness to conduct a removal action of contaminated soil on his property. DHEC and the owner are discussing DHECs oversight role for that action.

2.3 Logistics Section

No information available at this time.

2.4 Finance Section

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
ERRS - Cleanup Contractor	\$750,000.00	\$510,000.00	\$240,000.00	32.00%
TAT/START	\$79,000.00	\$57,000.00	\$22,000.00	27.85%
Intramural Costs				
USEPA - Direct	\$0.00	\$50,000.00	(\$50,000.00)	0.00%
Total Site Costs	\$829,000.00	\$617,000.00	\$212,000.00	25.57%

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this

report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Other Command Staff

No information available at this time.

3. Participating Entities

No information available at this time.

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.

POLREP #7 Last Updated 1/9/2013