

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
REEF Environmental - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IV

Subject: POLREP #5
Stabilization and First Phase Demobilization Completed/Transition Continues
REEF Environmental

Sylacauga, AL
Latitude: 33.1888040 Longitude: -86.2640480

To:
From: Tim Neal, OSC
Date: 10/9/2012
Reporting Period: 10/08/2012 - 10/09/2012

1. Introduction

1.1 Background

Site Number:	Contract Number:
D.O. Number:	Action Memo Date:
Response Authority: CERCLA	Response Type: Emergency
Response Lead: EPA	Incident Category: Removal Action
NPL Status: Non NPL	Operable Unit:
Mobilization Date: 10/2/2012	Start Date: 10/2/2012
Demob Date:	Completion Date:
CERCLIS ID:	RCRIS ID:
ERNS No.:	State Notification:
FPN#:	Reimbursable Account #:

1.1.1 Incident Category

Emergency Response

1.1.2 Site Description

The Reef LLC facility in Sylacauga, Alabama was a centralized waste treatment facility. The facility planned on accepting waste water and oily waste from other industries for treatment and discharge to the Sylacauga waste water treatment plant. Shortly after the first waste deliveries began, reports indicate that numerous odor complaints were received by the local and state government. Within the past few years, the facility has filed for bankruptcy. The State has taken various actions and had limited success in getting the wastes at the Site to be properly disposed. On October 1, 2012, after receiving information that totes were being removed from the facility and numerous odor complaints, Alabama Department of Environmental Management (ADEM) personnel investigated the Site. ADEM personnel could not make entry into the facility but did observe an oily sheen in a stream near the facility as well as a large bulge in the tarp covering the Biological Treatment Basin at the facility. Later in the day on October 1, ADEM requested assistance from the Environmental Protection Agency to assess the Site and to assist with implementation of emergency stabilization measures. On the morning of October 2, 2012, OSCs Francendese and Harper were mobilized from Birmingham, Alabama to meet with ADEM and assess the situation. Upon initial assessment, OSC Francendese secured the Site and ceased removal of on-site totes by private party contractors. In addition, he verbally notified the PRPs of potential hazards which included the accumulation of hazardous substances (including hydrogen sulfide) under the tarps/liners covering the basins. While the PRP provided verbal access, he indicated that he was not able to perform the necessary stabilization actions required by EPA. OSC Francendese requested the dispatch of the on call responder. EPA OSC Neal was dispatched to the scene. Assessment activities continued throughout the day and evening of October 2, 2012.

1.1.2.1 Location

71 Twin Street, Sylacauga, AL

1.1.2.2 Description of Threat

The abandoned facility has several priority issues that will be addressed under a phased approach. This emergency response action is primarily addressing the trapped gases that exist under the 3 million gallon biological reactor tarp/liner. An additional basin called the equalization basin exists that is also holds approximately 3 million gallons. Trapped gases exist under this liner and will be addressed under this phase of the emergency response action. The trapped gases total approximately 175,000 cubic feet and evidence indicates elevated levels of volatile organics and hydrogen sulfide. This facility exists within 1000 feet of a residential neighborhood.

Additional threats exist in the form of an oily sheen release to the nearby creek as well as abandoned chemicals onsite.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

The initial assessment identified the trapped gases under the tarp/liner as well as the oily sheen being released to the creek. The rotten egg odor was later identified to be both elevated volatile organics and hydrogen sulfide. Subsequent site walkthru identified abandoned hazardous substances at the facility both on the facility grounds proper and within the lab.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

The facility is an abandoned former waste treatment facility that was referred to the EPA ERRB by ADEM. Subsequent assessments identified unstable conditions relating to accumulating gases (organic and hydrogen sulfide) under the tarp/liner. Additional assessments identified an oily sheen being released from the facility as well as abandoned hazardous chemicals both on the facility grounds and in the onsite facility lab.

2.1.2 Response Actions to Date

10/2/2012

EPA OSCs (Lead OSC Neal and supporting OSCs, Francendese, Harper and Ball) mobilized to assess the site and assume the lead OSC role. START and ERRS were also mobilized.

An initial exclusion zone was established at the fence line.

OSCs conducted initial Level B entry to collect air monitor data. MultiRae, TVA 1000 photoionization detector and flame ionization detector (PID/FID) Electronic Personnel Dosimeter (EPD), HCN monotox sensor and CH4 monitor were used to assess ambient and local air conditions.

Initial air monitoring results are follows:

- Biological Treatment Basin (approx 3 million gallon)
 - FID - sustained reading at surface of approximately 60 ppm and background in the breathing zone.
 - H2S - sustained reading of 10 - 20 ppm at the surface and 10 ppm in the breathing zone.
- Pump Station (approx 1000 gallons)
 - FID - sustained readings of 60 ppm total volatile organics at the surface with max of 2000 ppm and approx 50 ppm in the breathing zone.
 - Hydrogen sulfide (H2S) - sustained readings of 20 ppm with max of 125 ppm at the surface and 10 ppm in the breathing zone.
- No other parameters were detected.
- Air monitoring results outside the immediate area of the basins and within the property boundaries were at background.
- Air monitoring results outside the fenceline and at the closest residence were at background.

Additional actions:

- OSCs conducted an additional entry to collect samples for hazardous categorization as well as waste profiling.
- Liquid and sludge samples will be sent for 24 hours turn around analysis.

OSC Neal also conducted a scoping meeting with ERRS based on air monitoring data collected.

10/3/2012

The following actions were conducted:

1. Continuous, 24 hour, perimeter air monitoring was established using AreaRaes and MultiRaes coupled with the VIPER telemetry system to generate real time remote air monitoring. The perimeter was established around the two basins of concern to monitor primarily for VOCs and hydrogen sulfide. Periodic air monitoring was also established in the nearby community.
2. IC coordinated with various participating agencies concerning the threats and potential actions being considered.
3. Operational tactics were evaluated with the ERRS contractor and acquisition of resources were initiated to safely access the trapped gases and treat them thru a mobilized scrubber.

10/4/2012

The following actions were conducted:

1. VIPER perimeter monitoring was maintained. Periodic air monitoring was also established in the nearby community.
2. Lab results for the sludges indicate elevated disulfides, hydrocarbons and BTEXs.
3. Operations continued as the site was prepped for the acquired scrubber as it was en route. These actions included:
 - Setup of water suppression system to act as a protective tactic during gas treatment. The water suppression system has access to a sequestering agent to mitigate any unintentional releases of hydrogen sulfide. The delivery system was tested and also acted to reduce the growing pressure and size of the bulge by cooling the tarp. Elevated atmospheric temperatures had increased the rate of the exothermic reaction.

- Preparation and execution of methods to safely access the gases either thru the existing pipeworks of the scrubber which is in disrepair or thru a PVC 'under the tarp/liner' access system.
- Soft boom was placed in the creek at effective locations to minimize the effect of the ongoing oily discharge.
- Staging and setup area for arrival of the mobile scrubber which was temporarily delayed in transport.
- Upon arrival late in the afternoon, the mobile scrubber was staged and hooked up to necessary power sources.

10/05/2012

1. VIPER perimeter monitoring was maintained. Periodic air monitoring was also established in the nearby community.
2. Operations continued till approximately midnight to mitigate the buldge in the biological treatment basin. Approximately 165,000 cubic feet of gases (hydrogen sulfide and organic vapors, including BTEXs) were successfully treated via the mobile scrubber supported by water suppression activities.
3. An inventory of the additional hazardous substances was completed.
4. EPA and ADEM continued coordination and outreach with local media outlets and the EMA community.

10/06/2012 thru 10/7/2012

1. VIPER perimeter monitoring was maintained. Periodic air monitoring was also established in the nearby community.
2. Operations for the 6th and 7th were as follows:

- Remaining buldges in tarps/liners for both the equalization basin and the biological treatment basin were processed via fire suppression rain curtain with sequestering agent to minimize hydrogen sulfide migration. This operation was assisted via long reach excavator tarp/liner manipulation.
- Tarps/liners in both basins were gathered via long reach to appropriate locations along the inner edge of the ponds for removal in later stages. The tarps were left in the ponds to prevent liner contamination and allows residual contaminant drainage.
- Hydrated lime stabilization and mixing was initiated in both ponds on the evening of the 6th. The intent of this operation was to increase the pH in both ponds to short circuit the hydrogen sulfide gaseous releases.
- Hydrated lime stabilization continued throughout the day on the 7th. The equalization basin received approximately 75 tons. The biological basin received approximately 50 tons.
- Overflow containment measures were constructed in the low spot of the adjacent road to the basins to mitigate and capture potential oil releases from the basins thus preventing discharge to the storm sewer.

10/08/2012 thru 10/09/2012

1. VIPER perimeter monitoring was discontinued after completion of basin stabilization by early afternoon of the 8th.
2. Operations for the 8th were as follows:

- Final application and mixing of approximately 25 tons of lime was completed by early on the afternoon of the 8th.
- Both basins were stabilized at an approximate pH of 10.
- Power panel shutdown was completed at all relevant buildings including aeration, discharge stations, sludge press and laboratory.
- Decontamination and demobilization of equipment and contractor personnel began during the afternoon of the 8th.

3. OSCs Neal, Francendese and Ball demobed during the afternoon of the 8th and facility gate was secured.

4. Remaining equipment was demobilized on the morning of the 9th.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs) PRP is Reef Environmental

OSC Francendese contacted the PRP by phone and outlined the immediate site activities that need to be addressed. The REEF representative stated that they do not have the resources to perform the work. REEF gave verbal access to EPA to address EPA's concerns on site.

2.1.4 Progress Metrics

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>

2.2 Planning Section

2.2.1 Anticipated

Continue coordination with State and Local officials.

2.2.1.1 Planned Response Activities

The current response actions are meant to address the prioritized threats presented by the basins. Upcoming phases will address the closeout of the basins as well as treatment and or disposal of the abandoned hazardous chemicals.

2.2.1.2 Next Steps

CIC Brown conducted neighborhood outreach providing EPA based factsheets on the 9th.

OSC Andrews is in coordination with current site management to seamlessly initiate next phases.

2.2.2 Issues

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

EPA
ADEM

3.2 Cooperating Agencies

City of Sylacauga
Talladega County EMA
Alabama EMA

4. Personnel On Site

EPA - 4
START - 2
ERRS - 10
ADEM - 1

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.