U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
American Creosote 2015 ER - Removal Polrep

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IV

Subject: **POLREP #6**
Continuation of Removal Action
American Creosote 2015 ER
04F2
Louisville, MS
Latitude: 33.1102457 Longitude: -89.0620619

To:
From: Benjamin Franco, FOSC
Date: 3/17/2016
Reporting Period: March 17, 2016 through January 4, 2016

1. Introduction

1.1 Background

Site Number:	04F2	**Contract Number:**	EP-S4-07-02
D.O. Number:	0133	**Action Memo Date:**	9/16/2015
Response Authority:	CERCLA	**Response Type:**	Time-Critical
Response Lead:	EPA	**Incident Category:**	Removal Action
NPL Status:	NPL	**Operable Unit:**	
Mobilization Date:	10/19/2015	**Start Date:**	4/27/2015
Demob Date:		**Completion Date:**	
CERCLIS ID:	MSD0004006995	**RCRIS ID:**	
ERNS No.:	1114738	**State Notification:**	04/26/2015
FPN#:		**Reimbursable Account #:**	

1.1.1 Incident Category

The incident is an emergency response to establish containment and collection measures for a creosote release to Hughes creek located at the American Creosote Works NPL Site, Louisville, Mississippi.

1.1.2 Site Description

The U S Environmental Protection Agency (EPA) Superfund Remedial program contacted the EPA Emergency Response, Removal, and Prevention Branch (ERRPB) regarding an ongoing seep of creosote into Hughes creek at the American Creosote Works NPL Site, Louisville, Winston, Co., MS. The EPA Remedial program is completing an extensive phase of the remedial action which included the construction of a creosote waste containment cell and slurry wall. Shortly after completion of the cell, a creosote seep was observed entering a creek adjacent to the cell. It is suspected that creosote in a former creek bed that lies outside the containment cell is the cause of the creosote seeping into Hughes creek.

1.1.2.1 Location

The seep is located at the bridge at Baremore Street and Hughes creek just west of the intersection of Baremore Street and Railroad Avenue, Louisville, MS.

1.1.2.2 Description of Threat

Creosote is a mixture of numerous hazardous substances, primarily poly aromatic hydrocarbons (PAHs), that pose a threat to human health and ecological receptors. The creosote release is impacting surface water and sediments in Hughes creek. The various hazardous substances that make up creosote are being carried downstream resulting in offsite contamination.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

Upon arriving at the Site on April 27, 2015, the On-Scene Coordinator observed significant creosote sheening on the surface waters of Hughes creek. Dark liquid and dark liquid "bubbles", suspected to be creosote, were noted in the sediments of the creek.

During the initial emergency response, CMC and their subcontracted support, Complete Environmental, placed absorbent soft boom, absorbent snare, and a hard boom at the seep location to collect and contain the creosote seeping from the area where the rock lined creek and the creek surface meet. Complete

Environmental has been tasked to periodically monitor and maintain the absorbents and boom. Impacted absorbents will be changed out on an as needed basis. Contaminated material will be placed in a roll off staged at the Site until disposal is arranged.

CMC and their sub contractor continue to replace soft boom, absorbent snare at the seep location and along several point on Hughes Creek. CMC's continue to periodically monitor and maintain the absorbents and boom.

On May 27, 2015, OSC Franco met with OSC Spurlin, CMC and discussed possible removal alternatives. The cold rolled steel sheet piling was discussed as the leading option.

EPA reviewed 2014 boring data developed by the Army Corps of Engineers (ACOE) and noticed that additional boring locations were needed to further characterize subsurface creosote contamination.

During July 28 through July, 30, 2015, the OSC and EPA's Superfund Technical Assessment and Response Team (START) contractor conducted an additional 21 soil borings. A total of 15 soil borings were taken using a direct push technology rig and at a range of 14 to 31.5 feet below ground surface. An additional 6 soil borings were obtained using a sonic drill rig at a depth of 40 feet below surface. These new boring locations were taken in a north and northwestern directions from the ACOE boring locations. Of 21 borings, ten boring locations had evidence of creosote free-product and were located as an average 12-16 feet below surface. OSC tasked START to produce a three dimensional model representation of the below surface plume that included all soil boring taking in the area. The total free product calculated is approximately 7,037 cubic yards.

An Action Memo was approved on September 16, 2015, for a fund lead time critical removal action and $2 million dollar exemption. The OSC decided to install sheet piling in the area.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

The EPA Emergency Response& Remediation Services (ERRS) contractor, CMC Environmental Services (CMC), mobilized to the Site on April 27, 2015. On-Scene Coordinator Spurlin met CMC at the Site.

2.1.2 Response Actions to Date

March 14, 2016 Week

- ERRS continues to remove and stockpile the clean overburden and excavate and treat subsurface creosote in the following areas: Half of H18, H19, H20, I19, I20, J18, J19, J20.
- A total of approximately 667 yd^3 of overburden material were excavated and stockpiled during this week.
- A total of approximately 667 yd^3 of creosote material were excavated, treated and placed back inside of the excavated grids. The creosote in this area did not have free liquid. All open grids were backfilled and compacted.
- ERRS will demobilize for a break from March 18th through March 28th, 2016. Site will start on March 29th.
- Private security will be on Site.

March 7, 2016 Week

- No work on March 11 and 12, 2016, due to heavy rains and site flooding.
- ERRS continues to remove and stockpile the clean overburden and excavate and treat subsurface creosote in the following areas: M20, U23, K20, L20, M20, Half of F18, Half of E18, E19.
- A total of approximately 1,036 yd^3 of overburden material were excavated and stockpiled during this week.
- A total of approximately 1,036 yd^3 of creosote material were excavated, treated and placed inside of the sheet pile area during this week.

February 29, 2016 Week

- No work on March 3, 2016, due to heavy rains.
- ERRS continues to remove and stockpile the clean overburden and excavate and treat subsurface creosote in the following areas: N21, O23, P23, Q23, R23 Half of R24, S24, T24, U24 and Half of U25.
- A total of approximately 1,148 yd^3 of overburden material were excavated and stockpiled during this week.
- A total of approximately 1,148 yd^3 of creosote material were excavated, treated and placed inside of the sheet pile area during this week.

February 22, 2016 Week

- No work on February 22, 23 and 24, 2016 due to heavy rains.
- ERRS continues to remove and stockpile the clean overburden and excavate and treat subsurface creosote in the following areas: M22, M21, N21, N22 and N23.
- A total of approximately 740 yd^3 of overburden material were excavated and stockpiled during this week.
- A total of approximately 740 yd^3 of creosote material were excavated, treated and placed inside of

the sheet pile area during this week.

February 15, 2016 Week

- No work on February 15, 2016 due to heavy rain.
- ERRS continues to remove and stockpile the clean overburden and excavate and treat subsurface creosote in the following areas: G20, G21, G19, F20, E20, Half of G18, H21, E21, and Half of F21.
- A total of approximately 1,184 yd^3 of overburden material were excavated and stockpiled during this week.
- A total of approximately 1,214 yd^3 of creosote material were excavated, treated and placed inside of the sheet pile area during this week.
- ERRS backfilled all open grids to minimize water runoff management, due rains that were approaching starting on February 22, 2016.

February 10, 2016 Week

- ERRS continues to remove and stockpile the clean overburden and excavate and treat subsurface creosote in the following areas: J21, I21, J20, I20, H20, H21.
- A total of approximately 740 yd^3 of overburden material were excavated and stockpiled during this week.
- A total of approximately 740 yd^3 of creosote material were excavated, treated and placed inside of the sheet pile area during this week.
- Excavation operations were curtailed due to rain on January 15,2016. ERRS backfilled all open grids to minimize water runoff management.

February 1, 2016 Week

- ERRS continues to remove and stockpile the clean overburden and excavate and treat subsurface creosote outside of the sheet pile wall in the following areas: D22, E22, F22, K21, L21.
- A total of approximately 2,400 yd^3 of overburden material were excavated and stockpiled during this week.
- A total of approximately 444 yd^3 of creosote material were excavated, treated and placed inside of the sheet pile area during this week.

January 25, 2016 Week

- ERRS continues to remove and stockpile clean overburden from inside and outside the sheet pile.
- A total of approximately 530 yd^3 of overburden material were excavated and stockpiled during this week.

January 18, 2016 Week

- OSC Franco made the decision to move excavation outside of the sheet pile area. Areas identified by USACOE and USEPA boring data will be excavated and stabilized with Portland Cement. Soil that have heavy creosote stains or free liquids that were stabilized with Portland will be moved inside the sheet pile wall.
- ERRS removed and stockpiled the clean overburden from inside the sheet pile area to increase the storage capacity
- A total of approximately 2,850 yd^3 of overburden material were excavated and stockpiled during this week.

January 11 Week

- ERRS continued to excavate, stabilize, and backfill soil inside the sheet pile wall.
- Excavation proceeded north along the inside of the sheet pile wall (T26 area).
- A total of approximately 1,910 yd^3 of material were excavated during this week.

January 4, 2016 Week

- ERRS continued to excavate, stabilize, and backfill soil inside the sheet pile wall.
- Excavation proceeded north along the inside of the sheet pile wall (V27 to V28, W27 to W28, U27 to U28).
- A total of approximately 1,510 yd^3 of material were excavated during this week.

December 19, 2015 -January 3, 2016 no site activity due to Holiday break.

December 14, 2015 Week

- ERRS continued to excavate, stabilize, and backfill soil inside the sheet pile wall.
- Excavation proceeded north along the inside of the sheet pile wall.
- A total of approximately 990 yd^3 of material were excavated during this week.
- All personnel demobilized from site by December 18 for the Christmas break.

December 7, 2015 Week

- ERRS continued to excavate, stabilize, and backfill soil inside the sheet pile wall.

- Excavation proceeded north along the inside of the sheet pile wall.
- Approximately 1290 yd^3 of material were excavated during this week.

November 30, 2015 Week

- ERRS began excavating soil inside the sheet pile. Clean and creosote stained soils were segregated during excavation.
- Excavation began in the southwest corner of the sheet pile isolated area.
- The southern end of the area within the sheet pile was backfilled with unstained overburden in order to create a barrier between Hughes Creek and contaminated sediment.
- A total of approximately 555 yds^3 were excavated during this week

November 23, 2015 Week

- No site work due to Thanksgiving and personnel will mobilize to the Site on November 30, 2015.

November 16, 2015 Week

- ERRS continued installing sheet pile moving north eastern direction and turning into the slurry wall. A total of 338 feet of sheet pile was installed and was completed on November 19, 2015.
- A total of 176 pairs (approximately 728.9 horizontal feet) installed for the sheet pile wall (containment) .
- A total of 5 pairs (approximately 20.8 horizontal feet) installed for the headwall located along Hughes Creek near the concrete wall adjacent to the north side of Baremore Street.
- Over the evening of November 17, 2015, heavy rainfall caused damage to our temporary bridge. No site activities were conducted on November 18, 2015 until waters receded in the area. The bridge was rebuilt on November 19, 2015.
- ERRS has finished using the Mobile Ram and has arranged for the pick up by the vendor.
- START continues to update Geoplatform with daily sheet pile installation progress.
- All personnel demobilized from Site by November 20, 2015 for the Thanksgiving break.

November 9, 2015 Week

- ERRS repositioned the Mobile Ram and installed sheet pile along the seepage area parallel to Baremore St and the culvert. A total of 121 feet were installed and the sheets went 8.5 feet into the hardpan for an approximate average total depth of 20 feet. The sheet pile has stopped the creosote from seeping onto Hughes Creek.
- ERRS removed stained rip rap and soil from the seepage area and placed it inside the sheet piled area.
- ERRS replaced absorbent boom in Hughes Creek.
- ERRS repositioned swamp pads to where they initially started and will start installing sheet piling in a north east direction.
- START continues to update Geoplatform with daily sheet pile installation progress.

November 2, 2015 Week

- EPA was not on-site due to a mandatory Branch meeting at the Regional Office. Two USCG Gulf Strike Team personnel were on Site and provided Federal presence and health and safety monitoring.
- On November 2, 2015, ERRS contractor received training on how to operate the Mobile Ram vibratory hammer from a Hammer and Steel representative.
- ERRS started installing sheet piling and was able to install approximately 271 feet of sheet piling.
- ERRS installed a coffer dam on Hughes Creek and used a pump to lower the stream flow in the seepage area.
- ERRS repositioned swamp pads and prepared a platform in preparation to next week's activities.
- START mapped temporary bridge, temporary coffer dam, and extent of the week's sheet pile installation on GeoPlatform.

October 26, 2015 Week

- ERRS continued to receive sheet piling
- ERRS installed temporary bridge across Hughes Creek and began installing access pathway using swamp pads to facilitate installation of sheet pile wall.
- START mapped intermittent tributary from onsite pond to confluence with Hughes Cree and currently existing pathway of Hughes Creek (flow was re-routed during remedial action) upstream to its confluence with the unnamed tributary.

October 19, 2015 Week

- ERRS mobilized equipment and personnel to the Site. Started setting up temporary office space and conducting site support actions.
- ERRS started receiving, offloading and staging XZ90 sheet pile. The sheet pile is cold rolled steel and were ordered in 40 foot lengths.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

There are no current potential responsible parties for the Site.

2.1.4 Progress Metrics

Waste Stream	*Medium*	*Quantity*	*Manifest #*	*Treatment*	*Disposal*

2.2 Planning Section

2.2.1 Anticipated Activities

2.2.1.1 Planned Response Activities

Continue to excavate areas containing subsurface creosote identified by USEPA and USACOE boring data. Excavation will also be guided visually by inspecting excavation walls for creosote seams. Creosote seams have been observed between 10 to 20 feet below surface.

Once excavation is completed, the area will be graded to move water run off in a northern direction and a liner will be installed to reduce hydraulic pressure.

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

4. Personnel On Site

OSC: 2

START: 1

PM: 1

Foreman: 0

Field Clerk: 1

Operators: 6

Laborer: 0

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.