# United States Environmental Protection Agency Region IV POLLUTION REPORT

**Date:** Monday, June 11, 2007 **From:** Matthew Huyser

To: Shane Hitchcock, USEPA Richard Ball, MSDEQ

Subject: Final POLREP

Hinds County Wood Preserving Learned-Oakley Road, Learned, MS

Latitude: 32.2056000 Longitude: -90.5481000

POLREP No.: 16 Site #: A4MH

**Reporting Period:** 11/06/2007 to 6/11/2007 **D.O.** #:

Start Date:11/7/2006Response Authority:CERCLAMob Date:11/6/2006Response Type:Time-CriticalDemob Date:5/31/2007NPL Status:Non NPLCompletion Date:6/11/2007Incident Category:Removal Action

CERCLIS ID #: MSD981467376 Contract #

RCRIS ID #:

### **Site Description**

The Hinds County Wood Preserving Company, Inc. (HCWP) began operations in the early 1960s and ceased operations around 1978. HCWP treated lumber with creosote in two pressure vessels. Remaining on-site as of 11/06/2006 were both pressure vessels (Tanks 2 and 6), three above-ground storage tanks (AST) (Tanks 1, 3, and 5), the facility boiler (Tank 4), and various pieces of equipment and treated lumber. The removal assessment determined 1) that each of the three ASTs contains some amount of material with a collective total of approximately 14,000 gallons, 2) each of the pressure vessels contains some amount of residual creosoting material and one was actively leaking, 3) seven drums of waste oil-water mixture were left on-site, 4) the boiler unit insulation contained asbestos while the pressure vessel's insulation did not, and 5) equipment contaminated with creosote remained on-site.

The site is drained by several ditches that converge at the northeast, adjacent to Learned Oakley Road, and flow via culverts into Bitter Creek on the east side of the road. The nearest residence is located 120 yards and uphill from the site. The resident maintains a groundwater well on the property, but the house has been connected to a municipal water supply.

An area of approximately 1.5 acres was cleared of brush and vegetation in order to access the site to conduct the removal.

Two pieces of mercury containing equipment were removed from the building and stored in an overpack drum on-site. Seven drums of waste oil and wastewater were staged on-site also. The drums were sampled for disposal. The four drums containing wastewater were condensed into three drums. The three drums of wastewater, three drums of waste oil, and drum with the mercury containing equipment were transported off-site by EQ Industrial Services for disposal at the EQ facility in Detroit, Michigan.

The building that housed the treatment area, Tank 4, and equipment was torn down and disposed of in a C&D landfill. Asbestos insulation surrounding Tank 4 was removed by a subcontractor and Tank 4 was decontaminated, disassembled and sent off-site for recycling. Various amounts of uncontaminated scrap metal found around the building was collected in a stockpile and later sent off-site for recycling at the Can Man recycling company in Jackson, Mississippi.

Spent liquid from Tanks 2 and 6 were pumped off into Tank 3, which was found to contain similar liquid wastes, for later disposal. Sludge removed from Tanks 2 and 6 were solidified with soils that were excavated from the site. Tanks 2 and 6 were then decontaminated, disassembled, and sent off-site for recycling.

Water found in tanks 1 and 5 was sampled and found to be nonhazardous and suitable for discharge to a

local POTW. The Vicksburg POTW located 22 miles away agreed to receive approximately 15,000 gallons of water from these tanks. During the holiday demobilization between December and January, rainwater collected on the site and pooled in the processing area. This water was sampled, found to be nonhazardous and suitable for discharge to a POTW. The Vicksburg POTW accepted approximately 22,000 gallons of rainwater from the site over a 2 day period.

Approximately 2000 gallons of liquid waste was pumped from Tank 3 and transported off-site for fuels blending. Sludge from Tank 3 were removed and solidified with soils excavated from the site. Tank 3 was then decontaminated, disassembled, and sent off-site for recycling.

Surface and subsurface soil samples were taken around the processing area in an attempt to delineate the extent of contamination. Visible staining of subsurface soils was observed that allowed the boundary of contamination to be determined and analytical results confirmed the boundary and depth for excavation.

Approximately 850 cubic yards of contaminated soil were excavated from the site taken directly below the process building and pressure vessels. The soil was separated into two stockpiles laid on plastic sheeting, and covered with plastic sheeting. Sludges from Tanks 2, 3, and 6 were solidified with the soil during excavation and stockpiling. Due to the location and known source of the contamination, the soil was classified as an F034 listed waste and samples were taken for disposal profiling. It was determined that the most cost-effective and time-effective method for treatment to meet RCRA UTS for F034 listed waste would be incineration. The soil was transported off-site by truck to three incinerators, located in Port Arthur and La Porte, Texas, and Elyria, Ohio.

All water used to decontaminate materials on-site was pumped to a rented frac tank. The total sum of approximately 18,000 gallons was determined to be nonhazardous, but contained trace amounts of pesticides and was deemed unsuitable for discharge to a POTW. The wastewater was transported offsite by Industrial Wastewater Services for treatment at the IWS facility in Mobile, Alabama. The frac tank was decontaminated by ERRS crews and transported off-site by Wade Servicess of Ellisville, Mississippi.

The excavated area was backfilled with clay and completed with a 6-inch layer of topsoil. Due to the summer weather conditions of the region, it was determined that the best time to seed the soil with grasses would be during the fall. Therefore plans are being made at this time to install a vegetative cover over the site via hydro-seeding between September and November of 2007.

### **Planned Removal Actions**

- Clearing of vegetation and trees to gain access to contaminated areas. (COMPLETE)
- Removal and bulking of contaminated wastes and/or hazardous substances from tanks and drums. (COMPLETE)
- Demolition and removal of tanks and removal contaminated materials such as abandoned equipment. (COMPLETE)
- Excavate and stockpile contaminated surface soil. (COMPLETE)
- Treat and dispose of contaminated soil. (COMPLETE)
- Collect and analyze confirmation samples from the excavated areas. (COMPLETE)
- Restore and backfill excavated areas with clean fill. (COMPLETE)
- Conduct additional sampling for waste profiling. (COMPLETE)
- Additional sampling to confirm extent and boundary of migrated contaminants. (COMPLETE)

### **Key Issues**

Poly-Aromatic Hydrocarbons (PAHs) were found in surface and subsurface soil samples taken on the site and in off-site locations at concentrations above EPA Region 9 Preliminary Remediation Goals (PRGs) for residential soils but below suggested Removal Action Levels (RALs). PAHs were found in surface soils up to ½ mile away from the site and found in surface and subsurface soils within the front yard of the residence on-site. The dispersal of PAHs may have occurred during operations when, as one resident of the town described, a thick black cloud would emit from the pressure vessel when it was opened and the cloud would fall over a large area. It is also known that the current front yard was previously a storage area for treated and untreated lumber. EPA Region 4 Techical Services Support team reviewed the data collected from the site and determined that "The combined risk for the entire on-site area does not exceed the 1E-04 excess risk level. This is likely an overestimate of the true risk due to the fact that a large portion of the property is wooded and the soil covered by vegetation, which would reduce the potential for direct contact and exposure to contaminants in surface soil. The largest contribution to total risk was from direct ingestion…" The findings of the sampling and data analysis have been explained fully to the property owner.

This site has been referred to the EPA Region 4 Remedial Site Evaluation Section for review, assessment,

and consideration of remedial activity.

## **Disposition of Wastes**

Approx. 190 cubic yards Contaminated soils impacted by F034 listed waste transported to incineration facility in La Porte, Texas

Approx. 495 cubic yards Contaminated soils impacted by F034 listed waste transported to incineration facility in Port Arthur, Texas

Approx. 165 cubic yards Contaminated soils impacted by F034 listed waste transported to incineration facility in Port Elyria, Ohio

Approx. 18,000 gallons Nonhazardous wastewater of 7-8 pH, <2% suspended solids, containing trace pesticides/herbicides transported to treatment facility in Mobile, Alabama

Approx. 22,000 gallons Rainwater transported to Publicly Owned Wastewater Treatment facility in Vicksburg, Mississippi

3 drums Waste Oil transported to disposal facility in Detroit, Michigan

3 drums Nonhazardous wastewater of 7-8 pH, <1% suspended solids transported to disposal facility in Detroit, Michigan

2 *Units* **Mercury-containing thermometer/gauge-type equipment** transported to disposal facility in Detroit, Michigan

112 Tons Recyclable Steel transported to recycling facility in Jackson, Mississippi

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