

United States Environmental Protection Agency
Region IV
POLLUTION REPORT

Date: Thursday, February 26, 2009

From: Leslie Sims

Subject: Removal Site Evaluation
Warrior Rosin Spill
3049 Warrior Rd, Tuscaloosa, AL
Latitude: 33.2481000
Longitude: -87.4867000

POLREP No.:	3 Site #:	
Reporting Period:	D.O. #:	
Start Date:	Response Authority:	CERCLA/OPA
Mob Date:	Response Type:	Time-Critical
Demob Date:	NPL Status:	Non NPL
Completion Date:	Incident Category:	Removal Assessment
CERCLIS ID #:	Contract #	
RCRIS ID #:	Reimbursable Account #	
FPN#		

Site Description

BACKGROUND

The Warrior Rosin Site is located at 3100 Warrior Road in Tuscaloosa, Tuscaloosa County, Alabama. The site is a seven acre property surrounded by a mixture of commercial and industrial properties. The site is located slightly east of Warrior Road on the south side of Black Warrior River and is comprised of two dilapidated buildings, a main process and storage building, a smaller process building, and several above-ground storage tanks (AST). The nearest residential area is located approximately 0.5 miles south of the site.

The site is currently owned by Robert Larue; however county tax records indicate that from the 1920s to 1944 the property was owned by Central Iron and Coal. The property was subsequently owned and operated by Tennessee Iron and Coal from 1944 to 1960. From the early 1960s until 1973, the property was owned by National Southern Production Company then by Freese Chemical Company for a short time in 1973. From 1974 to 1975 the property was owned by Yoshitomi Pharmaceutical Company and from 1976 to 1978 by Falleck Chemical Corporation. The site was acquired by Diamond Shamrock Agricultural Chemicals Inc., in 1980. Current tax maps indicate that the property was owned by Warrior Asphalt as recently as 2007.

File information indicates that Alabama Binder Company operated a tall oil manufacturing company on this site between the years of 1945 to 1965. The tall oil, a viscous black pitch-like substance, was deposited into two unlined lagoons on site. Four seeps were observed flowing from the ponds down the embankment toward the Warrior River. The main building on site contains fifty two 55-gallon drums. Some of the drums contained powdered materials, were labeled as Caustic Soda, and were exposed or leaking their contents. Twelve above ground storage tanks are located near the main building. The content of the tanks is unknown.

EMERGENCY RESPONSE

On July 15, 2008, OSC Les Simms responded to a release of tall oil from one of the lagoons. The tall oil had migrated down slope and pooled in an area adjacent to the railroad track. A culvert runs under this section of the railroad track. Evidence of previous releases of tall oil were noted along a section of property downhill from this culvert. OSC Simms collected samples of the tall oil and the lab analysis revealed the presence of benzene at 3,700 ppm, cyclohexane at 7,700 ppm, and a pH of 1.7. The Potentially Responsible Party hired a contractor to begin cleanup operations.

OSC Simms returned to the Site on August 5, 2008 to attend a planning meeting between the State, PRP,

and the stakeholders. The purpose of this meeting was the discussion of ongoing operations and projected goals/expectations in regard to the cleanup. A Notice of Federal Interest was issued to the PRP. Their response actions were limited to excavating the tall oil released from the lagoons and stockpiling the tall oil in an area adjacent to the lagoon. No actions were taken to prevent further release of tall oil from the lagoons.

Current Activities

REMOVAL SITE EVALUATION

EPA's Emergency Response and Removal Branch and the Alabama Department of Environmental Management conducted a removal assessment of the site on February 18, 2009. A reconnaissance of the site revealed that the tall oil which had migrated to the railroad track had been excavated and stockpiled near one of the existing lagoons. No action had been taken by the PRP to mitigate further release of tall oil from the lagoons. Consequently the tall oil was observed seeping out of the lagoon embankment at four locations. A reconnaissance of the areas downgradient of the tall oil seeps indicated a total absence of vegetation beginning at the seeps and continuing along an over land flow pathway terminating at the Warrior River.

For this evaluation, the data generated during the Emergency Response on July 15, 2008, was utilized to assess the site conditions. This data was reviewed and the maximum detected concentrations were compared to the Remedial Action Levels (RAL). The Removal Action Levels (RAL) were determined by converting the Regional Screening Levels (RSL) to risk-based concentrations appropriate for time-critical removal actions. The derived RALs are based upon a residential human health risk of 1×10^{-4} for carcinogens and a Hazard Index of 3 for non-carcinogens.

The concentration of Benzene on site (3,700 ppm) exceeds the RAL for residential (113 ppm) and industrial (626 ppm) exposures. The combined volume of the two lagoons is estimated at 1,800 cubic yards.

Planned Removal Actions

RECOMMENDATION

Benzene is a hazardous substance as defined by section 101(14) of the CERCLA and RCRA characteristic definitions. CERCLA contaminants, if release from the site, have the capability of presenting a potential hazard to the general public. The threat comes primarily from human exposure to hazardous substance in the soil (i.e. trespassers) as well as a potential for surface or air migration. Direct contact, ingestion, and inhalation of benzene are the primary pathways of exposure.

Site conditions meet the requirements for initiating a time-critical removal action according to criteria listed in Section 300.415 (b)(2) of the NCP:

- Section 300.415 (b)(2)(i): "Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants." Benzene was detected within the tall oil being released from the lagoon. Direct contact, ingestion, and inhalation of this hazardous substance are the primary pathways of exposure. The site is bounded to the northwest by the Warrior River, to the southwest by Warrior Road, and to the east by a commercial property. Access to the waste material on site is not restricted. A residential area is located within 0.5 miles of the site across Warrior Road.
- Section 300.415 (b)(2)(iii): "Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers that may pose a threat of release." The tall oil at this site which contains Benzene is presently seeping out of the lagoons and migrating off the property toward the Warrior River. The drums within the building have corroded and are releasing their contents.
- Section 300.415 (b)(2)(iv): "High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate." Sample analysis shows that Benzene detected within the tall oil exceed the RAL for Benzene and pose a threat for surface migration through runoff.
- Section 300.415 (b)(2)(vii): "The availability of other appropriate federal or state response mechanisms to respond to the release." There are no other federal or state agencies available to respond to this release.

Due to the threat and/or future threat to human health from the hazardous substance, the Site achieves removal eligibility base on some or all of the removal criteria in 40 CFR 300.415(b)(2).

