U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
SMT Drum Site - Removal Polrep
Final Removal Polrep

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region VII

Subject: **POLREP #3**
Final Pollution Report
SMT Drum Site
B746
Poplar Bluff, MO
Latitude: 36.7675770 Longitude: -90.3271470

To:
From: Heath Smith, OSC
Date: 4/10/2013
Reporting Period: August 2012 through March 2013

1. Introduction

1.1 Background

Site Number:	B746	**Contract Number:**	EPR70712
D.O. Number:	130	**Action Memo Date:**	4/26/2012
Response Authority:	CERCLA	**Response Type:**	Time-Critical
Response Lead:	EPA	**Incident Category:**	Removal Action
NPL Status:	Non NPL	**Operable Unit:**	00
Mobilization Date:	4/30/2012	**Start Date:**	4/30/2012
Demob Date:	2/15/2013	**Completion Date:**	2/15/2013
CERCLIS ID:	MON000706413	**RCRIS ID:**	
ERNS No.:		**State Notification:**	MDNR
FPN#:		**Reimbursable Account #:**	

1.1.1 Incident Category

CERCLA incident category: Inactive Production Facility

1.1.2 Site Description

Southern Machine and Tool Company (SMT) is a former machine and tool company that produced machined parts and special machinery, and performed tooling for manufacturing companies. SMT grew from a small company that began operation in 1964. Over 100 employees worked at SMT when the company declared bankruptcy and shut its doors in 2002. Approximately 616 containers of liquid waste were abandoned on site by the company.

1.1.2.1 Location

The SMT Drum Site (SMT) is located at 2721 Highway B, Poplar Bluff, Butler County, Missouri. The coordinates, centered on the administrative building at the Site, are latitude 36.767577N, longitude 090.327147W. Per county records, the Site occupies 14.4 acres. It is bounded along the eastern border by the Poplar Bluff Municipal Airport and to the south by Missouri Highway B. The north and west boundaries of the Site adjoin agricultural land and residential lots. Elevation of the area is approximately 325 feet above sea level with little relief, typical of the southeastern lowlands of Missouri that fall within the Mississippi embayment (a.k.a. the Missouri Bootheel).

1.1.2.2 Description of Threat

A hazardous substance release has occurred at the Site. Unsecured drums have been identified to contain hazardous substances as defined by CERCLA, specifically, drums containing waste listed in 40 CFR §302.4 and 40 CFR §261 (trichloroethylene or TCE) and waste defined by 40 CFR §261.22 (corrosive acids and bases). These waste substances were generated at SMT while the facility was in operation and were abandoned on the site. Waste in drums at the Site has leaked onto the ground, visually evident by staining, sheening, emulsified material, and solid precipitate. The Site is located near residential properties. Contaminants have the potential to migrate to the ground and off site.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

On March 16, 2012, the EPA and the Missouri Department of Natural Resources (MDNR) responded to the SMT facility due to a citizen's complaint that leaking drums were present. At that time, Ms. Sue Fisher of

Poplar Bluff owned the property. On March 16, Ms. Fisher met the EPA and MDNR at the Site and consented to an inspection of the property. The EPA On-Scene Coordinator (OSC) observed drums labeled as herbicides, sodium cyanide, mineral spirits, metal-working fluid concentrate, solvent, and flammable liquid. Many drums were not labeled or labels were inaccessible during the inspection. Drums were observed to be toppled over, bulging and leaking. Sheds that once protected the drums had fallen creating additional hazards and greater threat of releases. Emulsified oil was observed on the ground.

SMT was registered in June of 1991 as a generator of D001 (Ignitable) hazardous waste. MDNR reports the company never submitted details of any waste disposal activity. Due to inactivity, the permit was deactivated in January, 2003 by MDNR. According to Sue Fisher, the company operated at 2721 Highway B from 1983 through 2002 when the company declared bankruptcy. The company was first created in 1968. Mr. Ted J. Fisher (deceased) was the president and owner. Ms. Sue Fisher, wife of Ted J. Fisher, was listed as the company vice-president and secretary.

On March 26, 2012, the EPA returned to the Site to inspect the manufacturing building and perform field screening on accessible containers. Field screening and laboratory results confirmed that CERCLA hazardous substances had been abandoned at the Site. Wastes were identified that meet the hazardous waste characteristic of corrosivity. Laboratory samples confirmed the presence of concentrated trichloroethylene (TCE) as well as trace amounts of tetrachloroethene (PCE), and cis-1,2-dichloroethene (1,2 DCE).

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

The initial pollution report details events that occurred in early May, 2012. Pollution Report #2 details events that occurred through August 2012.

2.1.2 Response Actions to Date

Follow-up Sampling

As reported in Pollution Report #2, the EPA mobilized to the Site on July 31, 2013, to conduct a sampling event following removal of all bulk waste containers. The EPA selected sampling locations based on potential worst-case scenarios.

Results of prior screening and analyses (in April, 2012) had identified drums on the Site that contained trace amounts of the following Volatile Organic Compounds (VOCs): acetone, methylene chloride, 1,2-dichloroethene (1,2-DCE), 1,1,1-trichlorethane, benzene, trichloroethylene (TCE), 4-methyl-2-pentanone, toluene, tetrachloroethylene (PCE), ethylbenzene and total xylenes.

Analyses of subsurface sampling conducted during the July, 2013 event identified elevated levels of the following VOCs: 1,1,1-trichlorethane, PCE, 1,1-dichlorethane, 1,1-dichlorethene and TCE.

The EPA also tested the ground for metals, Total Petroleum Hydrocarbon – Diesel Range Organics (TPH-DRO) and Total Petroleum Hydrocarbon – Oil Range Organics (TPH-ORO). Results of this sampling event are available in a Removal Site Evaluation and Removal Summary Report dated February 1, 2013.

The EPA conducted a limited removal of contaminated soil from the locations where drums were stored.

Soil Removal

The EPA mobilized crews to the site on January 22, 2013, to remove contaminated soil. Crews excavated soil in six locations to depths down to 24 inches below ground surface (bgs). Soil was staged on plastic sheeting until disposal options could be arranged. Prior to temporarily demobilizing, the EPA covered the soil piles with plastic.

On February 14, 2013, the EPA re-mobilized to the site to remove stockpiles of contaminated soil generated during the prior activity. Large “mud mats” (large timbers of wood approximately 30 feet long bolted together to distribute weight of heavy vehicles) were used to span a ditch along the access route to the site to reinforce an old bridge. Clean fill was transported in from a dirt source in Washington County, Missouri. As approved, the contaminated material was transported to a Subtitle "D" landfill in Washington County, Missouri, for disposal. Clean fill was then used to fill excavated areas.

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

A PRP investigation is ongoing.

2.1.4 Progress Metrics

Waste Stream	*Medium*	*Quantity*	*Manifest #*	*Treatment*	*Disposal*
Contaminated Soil	Soil	62 Tons		N/A	Subtitle "D" Landfill

2.2 Planning Section

2.2.1 Anticipated Activities

The planned removal action is complete. No further removal actions are anticipated at this time.

2.2.1.1 Planned Response Activities

No further activities are planned.

2.2.1.2 Next Steps

The site has been referred back to MDNR.

2.2.2 Issues

On March 22, 2013, the Butler County Collector's Office transmitted a Collector's Deed for Taxes on the SMT Drum Site property to the EPA. According to the document, the SMT Drum Site property had been purchased on March 12, 2013, by a Mr. Jesse Mondy for the sum of one dollar, thus releaving Ms. Sue Fisher of property ownership.

Follow-up sampling identified the following potential issues:

Groundwater

Elevated concentrations of TCE were detected in one groundwater sample taken from 37-40 feet bgs. TCE was detected at a concentration of 1.8 micrograms/Liter (µg/L) which exceeds the Removal Screening Level (RSL) for tap water of 0.44 µg/L, but does not exceed the Maximum Contaminant Level (MCL) of 5.0 µg/L. The sample was collected directly below one of the former drum storage locations.

Metals were identified in concentrations that exceed RSLs and MCLs in groundwater samples from two locations. Specifically, arsenic and lead were detected. It should be noted that both contaminants were detected in the background sample taken upgradient of the Site as well. In addition, the background sample contained cadmium in excess of RSLs and MCLs. One of the locations was a former drum storage area. The other was a downgradient sample collected south of the facility and associated drum storage areas.

This information has been provided to MDNR.

Subsurface Soil

Concentrations of VOCs elevated above background levels were detected below the surface where drums had been stored. Although detected, concentrations did not exceed either the Missouri Risk-Based Corrective Action Levels (for clay soil) or the EPA Regional Screening Levels for industrial soil. The heavily saturated soil was removed during the limited soil excavation; however, it is possible that low levels of VOCs are still present beyond excavation depths.

This information has been provided to MDNR.

2.3 Logistics Section

Due to the small size of the crew and scope of the response, the Logistics Section was not staffed.

2.4 Finance Section

No information available at this time.

2.5 Other Command Staff

2.5.1 Safety Officer

No safety issues to report.

2.5.2 Liaison Officer

A liaison officer was not required.

2.5.3 Information Officer

The EPA Office of Public Affairs performed Information Officer duties.

3. Participating Entities

3.1 Unified Command

The EPA is the lead agency and coordinated with MDNR.

3.2 Cooperating Agencies

The EPA
Missouri Department of Natural Resources (MDNR)

4. Personnel On Site

All crews have demobilized from the site.

While active, the crew consisted of an OSC, START Project Manager, ERRS Response Manager and ERRS labor crew of 3.

5. Definition of Terms

1,2 DCE	1,2-Dichloroethene
ATSDR	Agency for Toxic Substances and Disease Registry
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
EPA	Environmental Protection Agency
ERRS	Emergency & Rapid Response Services Contract
MDHSS	Missouri Department of Health and Senior Services
MDNR	Missouri Department of Natural Resources
mg/L	milligrams per Liter
mg/kg	milligrams per kilogram
NCP	National Contingency Plan
ng/m^3	nanograms per cubic meter
NPL	National Priorities List
OSC	On-Scene Coordinator
OSHA	Occupational Safety and Health Administration
OU	Operable Unit
Polrep	Pollution Report
PCE	Tetrachloroethene
PPE	Personal Protective Equipment
PPM	Parts Per Million
PRP	Potentially Responsible Party
RCRA	Resource Conservation and Recovery Act
Sitrep	Situation Report
SMT	Southern Machine and Tool Company
START	Superfund Technical Assessment and Response Team
TCE	Trichloroethylene
TCLP	Toxicity Characteristic Leaching Procedure
yd^3	Cubic Yard

6. Additional sources of information

6.1 Internet location of additional information/report

www.epaosc.org/smtdrum

6.2 Reporting Schedule

The removal action is complete.

7. Situational Reference Materials

http://www.epaosc.org/sites/7805/files/Figure%202%20Sample%20Location%20Map.pdf