

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Opossum Creek Drum Site - Removal Polrep
Initial Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region V

Subject: POLREP #1
INITIAL POLREP
Opossum Creek Drum Site
C5Q1
Moraine, OH
Latitude: 39.6880300 Longitude: -84.2728610

To: Mike Rafati, EPA 5
Gwen Gilboy, Contact

From: Steven Renninger, On-Scene Coordinator

Date: 5/6/2013

Reporting Period: April 29 through May 6, 2013

1. Introduction

1.1 Background

Site Number:	C5Q1	Contract Number:	EP-S5-08-02
D.O. Number:	30281.0123	Action Memo Date:	2/5/2013
Response Authority:	CERCLA	Response Type:	Time-Critical
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	4/29/2013	Start Date:	4/29/2013
Demob Date:		Completion Date:	
CERCLIS ID:	OHN000510858	RCRIS ID:	
ERNS No.:		State Notification:	Ohio EPA notified
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

Time-Critical Removal Action

1.1.2 Site Description

Historic records indicate that the Site is a former dump in the 1960s-70s began receiving and burying 55-gallon drums and containers in an area next to Opossum Creek.

On November 2, 2012, Public Health – Dayton Montgomery County (PHDMC) issued a Notice of Violation letter to the owner of the property. The letter summarizes the findings of an inspection conducted at the property on October 25, 2012, by PHDMC, the Ohio Environmental Protection Agency (OEPA), Montgomery County Sheriff (MCS), Liberty Tires, and Rumpke. The October 25, 2012, inspection was a follow-up to a previous inspection conducted on June 22, 2012. The purpose of the investigation was to determine if the property still was in violation of Ohio's Solid Waste Regulations as detailed in a guidance letter mailed to the property owner on June 18, 2012. The October 2012 inspection documented thousands of scrap tires dumped on the ground and burnt scrap tires and miscellaneous solid waste scattered throughout the property. The inspection also documented numerous barrels containing various colored substances believed to be ink or paint.

In an MCS incident report (Incident Report No. 12-10524) dated October 25, 2012, an MCS representative inspected the property and documented the conditions summarized below.

- Approximately 80,000 scrap tires were observed at various locations throughout the property.
- Approximately 100 metal drums containing dye, ink, or paint from a printing company were observed.
- All of the metal drums displayed signs of corrosion.
- The colored substance, believed to be paint, was visible on the ground and in Opossum Creek at multiple locations.
- Several burn piles were observed throughout the property. In these areas, scrap tires had been burned and their rims removed. OEPA determined that burning had been conducted recently in these areas.
- Trespassing was occurring at the Site.

In late November 2012, representatives from the OEPA, PHDMC, and MCS conducted a site inspection of the Site. Hundreds of partially buried and disintegrating drums and containers containing dried ink waste was observed on the property owned by Lois Gilboy (Parcel J442041150004 and 005) and potentially on properties owned by the Forgotten Breed Motorcycle Club (Parcels J442041150009 and J442041150012). Multi-colored ink waste was observed mixed with on-site soil and within the abandoned and partially buried drums and containers. Some ink waste material was observed in direct contact with Opossum Creek. OEPA personnel used a Thermo Scientific Niton XL3t XRF meter to conduct field screening of the multi-colored ink waste for heavy metals. XRF readings indicated lead and arsenic at concentrations as high as 173,200 and 11,700 parts per million (ppm), respectively. OEPA XRF readings indicated total lead at concentrations exceeding EPA's residential lead Removal Management Level (RML) of 400 ppm in 11 solid waste samples.

1.1.2.1 Location

The Site is located at 4101 Soldiers Home West Carrollton Road in Moraine, Montgomery County, Ohio (zip code 45342) in a mixed residential and commercial area. The Site's geographical coordinates are 39° 41' 17.9952" North latitude and -84° 16' 25.5072" West longitude. The Site is bordered to the north by a former dump; to the west and south by Opossum Creek, with residential and wooded areas beyond; and to the east by commercial and residential areas, with wooded areas beyond. Opossum Creek discharges into the Great Miami River.

Commercial businesses are located within 500 feet east of the Site, and the closest residences are located within 300 feet west of the Site and immediately east of the Site. The Site encompasses an area of approximately 5-10 acres. Visible hazardous waste drums and containers are partially buried. Some partially buried drums and containers have been observed next to and within Opossum Creek.

1.1.2.2 Description of Threat

On December 3 and 5, 2012, respectively, EPA OSC Steve Renninger obtained signed agreements from Ms. Gilboy (property owner) and the Forgotten Breed Motorcycle Club to allow EPA access to the properties to conduct site reconnaissance and site assessment activities.

On December 5, 2012, EPA, START, and OEPA conducted a site investigation. A Ludlum Model 19 Micro-R radiation meter was used to screen gamma radiation levels during the site reconnaissance. No radiation levels exceeded background readings taken from areas outside the Site.

During the site investigation, EPA observed hundreds of buried and partially buried and corroded drums and about 50 5-gallon containers at the former dump as well as thousands of tires east of the drum burial area. Some corroded drums and containers had released their contents onto the ground. Most of the drums were next to or within 100 feet of Opossum Creek. Multi-colored, dried ink solid waste was observed within and around the partially buried drums. The Site is unoccupied and unfenced, and evidence of frequent trespassing was observed throughout the Site.

EPA START used a Thermo Scientific Niton XL3t XRF meter to field screen the dried ink waste for heavy metals. START XRF readings indicated total lead in 12 solid waste and surficial soil samples at concentrations ranging from 423 to 88,200 ppm and total arsenic in 8 solid waste and surficial soil samples at concentrations ranging from 249 to 4,065 ppm. These results also exceed EPA's residential RMLs for total lead (400 ppm) and arsenic (22 ppm).

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

On December 12, 2012, EPA OSC Steve Renninger and START conducted an additional site investigation to document Site conditions and to evaluate the Site for a potential time-critical removal action. EPA collected 1 sludge/liquid waste sample and 10 solid waste samples from drums and surficial soil at the Site.

During the site investigation, EPA documented the presence of abandoned chemical wastes including buried and partially buried 55-gallon drums and on-site surface soil containing ignitable, heavy metal (lead and arsenic), and toxic hazardous wastes. Drums and containers were corroded, and some had released their contents onto the ground. Most of the drums were next to or within 100 feet of Opossum Creek.

EPA START used an XRF unit and documented total lead in 15 solid waste and surface soil samples at concentrations ranging from 425 to 233,756 ppm and total arsenic in 9 solid waste and surface soil samples at concentrations ranging from 102 to 15,637 ppm. These results exceed EPA's residential RMLs for lead and arsenic.

The analytical results for waste sample S-2 collected during the site investigation had a burn rate of 3.8 mm/s and a flashpoint of 130 °F. According to 40 CFR 261.21, this sample satisfies the criterion for hazardous waste characteristic for ignitability (D001). In addition, the arsenic analytical result for surficial soil and ink solids Sample S-9 (39 mg/kg) and the lead analytical results for surficial soil and ink solids Samples S-9 (5,100 mg/kg) and S-10 (5,600 mg/kg) exceeded EPA's residential RMLs of 22 and 400 mg/kg for arsenic and lead, respectively. TCLP lead analytical results for dried ink solid waste samples S-1 (16 mg/L) and S-7 (24 mg/L) and surficial soil and ink solids samples S-5 (8.2 mg/L), S-8 (20 mg/L), and S-10 (7.4 mg/L) exceeded the TCLP lead regulatory level of 5.0 mg/L, which satisfies the 40 CFR 261.24 criterion for toxic (D008) hazardous waste. Analytical results documented the on-site presence of hazardous waste with the characteristic of ignitability (D001), arsenic and lead analytical results exceeding EPA's residential RMLs, and toxic (D008) hazardous waste.

Hazardous wastes identified at the Site exhibit the following characteristics:

- Ignitability (D001)
- Toxicity (TCLP lead [D008])

Based on the analytical results and Site conditions observed during the site investigation, the Site the criteria for a time-critical removal action pursuant to 40 CFR 300.415(b)(2). Therefore, the Site poses imminent and substantial threats to the public health or welfare of the United States or the environment.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

In a document dated December 3, 2012, the OEPA formally requested assistance from EPA to determine if the Site meets the criteria for a removal action.

In a letter dated December 19, 2012, the PHDMC formally requested assistance from EPA to determine if the Site meets the criteria for a removal action.

On February 5, 2013, the Director of EPA's Superfund Division approved an Action Memorandum approving funding for a time-critical removal action.

On February 8 and March 18, 2013, EPA conducted a meeting to discuss the pending time-critical removal action with the property owner, OEPA, PHDMC and the City of Moraine.

On March 21, 2013, EPA finalized the Emergency Contingency Plan for the upcoming time-critical removal action with Moraine Fire Department. The Emergency Contingency Plan was distributed to local response agencies.

On April 25, 2013, EPA conducted a meeting to discuss the pending time-critical drum removal action with the property owner, OEPA, PHDMC, Rumpke and the City of Moraine. In addition, EPA finalized plans with OEPA and Rumpke to load the on-site waste tires for off-site disposal (recycling). There are an estimated 80,000 tires on site. OEPA will fund the removal and recycling of tires from the Site simultaneous with the EPA time-critical removal action.

2.1.2 Response Actions to Date

Week of April 29, 2013

On April 29, 2013, EPA, START and ERRS removal contractor mobilized personnel and equipment to the site. All personnel reviewed and signed the health and safety plan.

ERRS began clearing a large area at the entrance to the site of trees and brush. The trees and debris are being chipped. Large trees will be stacked and staged in areas where unauthorized access is occurring. The area that is being cleared will be used as the Support Zone (office trailers, etc) and for an area where trucks will be loaded with waste (metals-contaminated soil, drums and tires) for off-site disposal.

The local Sheriff, EPA's CID (Victor Dvorak), B. Kirpatrick from the Bureau of Criminal Investigation (BCI) and Ohio EPA's enforcement specialist (Dave Combs) were on site to investigate trespassing on the property and burning tires to access the metal rims and emptying the heavy metal-contaminated contents within the drums onto the ground and in Opossum Creek in order to scrap out the metal. Numerous tire burn piles were identified in Opossum Creek.

On April 29, one office trailer was mobilized and connected to the on-site EPA generator. ERRS mobilized an excavator with a bucket and grappler attachment, a dozer and a wood chipper on site. Support Zone clearing continued. Off-Shift (evening and weekend) security initiated in the Support Zone area.

On April 30, START marked the parcel corners surrounding the drum burial area. Support Zone clearing continued.

On May 1- 2, two more office trailers were mobilized and connected to the on-site EPA generator. Support Zone clearing continued. Perimeter warning signs were posted. ERRS stabilized tire burn piles in Opossum Creek by moving contaminated soil from creek bed to creek bank.

On May 2, 40 cubic yards of tires were loaded for off-site recycling. The tires will be recycled by Rumpke, Cincinnati, Ohio. Tire recycling is funded by OEPA.

On May 6, Support Zone clearing continued. Main access road to Support Zone gravel delivery initiated.

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

EPA has identified the PRPs at the 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>
Tires	Solid	1 truck (40 cubic yards)	None	Recycling	Rumpke Cincinnati, OH

2.2 Planning Section

2.2.1 Anticipated Activities

The EPA-funded time-critical removal action was initiated on April 29, 2013, and will include the following:

1. Develop and implement a Site-specific Health and Safety Plan, including an Air Monitoring Plan, and a Site Emergency Contingency Plan;
2. Develop and implement a Site Security Plan;
3. Characterize, remove, transport and dispose of all characterized or identified hazardous waste (uncontainerized waste, partially buried and subsurface drums and small containers) and associated heavy metals-contaminated soils and debris located at the Site in accordance with EPA's Off-Site Rule (40 CFR § 300.440);
4. Develop and implement an extent of contamination and post excavation sampling plan to verify cleanup;
5. If necessary, backfill excavated areas with clean material and topsoil. Seed area to prevent soil erosion; and
6. Take any other response actions to address any release or threatened release of a hazardous substance, pollutant or contaminant that the EPA OSC determines may pose an imminent and substantial endangerment to the public health or the environment.

2.2.1.1 Planned Response Activities

See above.

2.2.1.2 Next Steps

1. ERRS to continue clearing trees and brush at entrance to the site. The cleared area will be used for the support zone and for the trucks to turn around after being loaded with waste for off-site disposal.
2. ERRS to make roadways for equipment to access the drum burial area along Opossum Creek.
3. ERRS to clear trees and debris within the drum burial area.
4. ERRS to clear trees and debris in an area which will be the secondary staging area.
5. ERRS to build fire breaks into the large tire piles on site as requested by MFD.
6. ERRS to stage soil to be used to smother a fire should a fire break out in the on-site tires as requested by MFD.
7. START will conduct air monitoring for VOCs with an AreaRAE network at the site perimeter once drum excavation activities are initiated.
8. START will conduct air monitoring for particulates using a DataRAM and VIPER at the site perimeter once drum excavation activities are initiated.
9. No Site work scheduled for May 10-12 and May 23-27.

2.2.2 Issues

1. There is frequent trespassing onto the site during off working hours. Trespassers are burning tires and emptying the contents of drums to scrap the drum metal. Waste is being discharged to Opossum Creek.
2. During non-working hours, there is site security on site at the EPA Support Zone.

2.3 Logistics Section

Front gate to access Support Zone is closed/locked during non-working hours.

EPA Security Guard on-site (Support Zone) during non-working hours (evenings/weekends).

2.4 Finance Section

No information available at this time.

2.5 Other Command Staff

2.5.1 Safety Officer

The health and safety plan is finalized and has been reviewed and signed by all site personnel.

2.5.2 Liaison Officer

Not applicable.

2.5.3 Information Officer

Not applicable.

3. Participating Entities

3.1 Unified Command

Not applicable.

3.2 Cooperating Agencies

4. Personnel On Site

EPA - 1 OSC
WESTON START - 1 START
ERRS (EQM) - 3
ERRS (CMC) - 3
Security Guard (Off-Shift) - 1

5. Definition of Terms

No information available at this time.

6. Additional sources of information

6.1 Internet location of additional information/report

Information regarding the time-critical removal, including pictures, documents (such as EPA's Site Assessment Report, EPA's Action Memorandum and the Emergency Contingency Plan) and all distributed pollution reports (POLREP), can be found at www.epaosc.org/opossumcreekdrumsite

6.2 Reporting Schedule

The next POLREP will be issued in June 2013.

7. Situational Reference Materials

No information available at this time.