

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



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region V

Subject: POLREP #2
Progress
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: 6/5/2013

Reporting Period: May 7 through June 5, 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 adjacent to Opossum Creek in Moraine, OH.

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 drums 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 adjacent 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.

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 adjacent 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 surface 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 surface 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.

On April 29, 2013, the EPA removal action was initiated. A Support Zone was established adjacent to Soldiers Home Road including a Command Post, parking lot, and waste staging and loading area. Site Security was initiated.

2.1.2 Response Actions to Date

Week of May 6, 2013

ERRS (EPA removal contractor) removed brush to gain access to site. Main command post and main waste staging/loading area set up. Access roads were established. Secondary staging area (near beginning of drum burial area) was cleared and ERRS began transporting tires from large tire piles to the main staging area. As a contingency, ERRS installed fire breaks in the tire piles.

On May 7, approximately 6.3 tons of scrap metal was shipped for off-site recycling to Franklin Iron & Metal, Dayton, Ohio.

On May 9, three members from the Moraine Fire Department were on site for a tour of the site.

On May 9, 95 cubic yards of extra large off-road tires were loaded for off-site recycling at Rumpke Recycle Center. Off-shift site security continued.

Week of May 13, 2013

ERRS continued to transfer tires to the main staging area in preparation for loading for off-site disposal. ERRS graded secondary waste staging area. ERRS began clearing trees and brush from drum burial area.

START air monitoring for VOCs using an AreaRAE network and for particulates using a DataRAM.

On May 14, 2013, representatives from OEPA were on site for a removal action briefing by EPA.

On May 15, 95 cubic yards of tires were loaded for off-site recycling at Rumpke Recycle Center. Tire recycling being funded by OEPA.

On May 16, 95 cubic yards of tires were loaded for off-site recycling at Rumpke Landfill, Cincinnati, Ohio. Tire recycling being funded by OEPA. Off-shift site security continued.

Week of May 20, 2013

ERRS completed grading secondary staging area, transferred tires to front of site and continued clearing trees and debris.

START air monitoring for VOCs using an AreaRAE network and for particulates using a DataRAM.

On May 21, 190 cubic yards of tires were loaded for off-site recycling at Rumpke Recycle Center. Tire recycling being funded by OEPA.

On May 22, 190 cubic yards of tires were loaded for off-site recycling at Rumpke Landfill, Cincinnati, Ohio. Tire recycling being funded by OEPA. Off-shift site security continued.

Week of May 27, 2013

ERRS began drum and contaminated soil excavation activities in the drum burial area adjacent to Opossum Creek. ERRS completed excavation activities in Grids A-1, B-1, B-2 and B-3. Crushed and deteriorated drums containing multi-colored ink waste was observed in the grids. Grids are measured at approximately

50-ft by 50-ft. Contaminated (multi-colored ink waste) soil was excavated and staged in the secondary staging area for additional sampling.

ERRS installed a dust suppression plan to keep the particulate levels at a minimum by spraying water in dry areas of the site.

START air monitoring for VOCs using an AreaRAE network and for particulates using a DataRAM. The particulate action level is 1,500 ug/m3, and the average particulate readings are less than 78 ug/m3.

START used XRF to screen the bottom of the excavation area in Grids A-1, B-1, B-2 and B-3. Approximately 9 XRF readings were collected in each completed grid. None of the grids showed lead concentrations exceeding the 400 ppm action level during post excavation screening.

On May 28, 190 cubic yards of tires were loaded for off-site recycling at Rumpke Recycle Center. Tire recycling being funded by Ohio EPA.

On May 29, representatives from Ohio EPA, Rumpke, and City of Moraine on site for an update of the removal action.

On May 30, 190 cubic yards of tires were loaded for off-site recycling at Rumpke Recycle Center. Tire recycling being funded by Ohio EPA.

On May 31, 7.35 tons of scrap metal was shipped for off-site recycling to Franklin Iron & Metal, Dayton, Ohio.
Off-shift site security continued.

Week of June 3, 2013

ERRS continued drum and contaminated soil excavation activities. ERRS completed excavation activities in Grids C-1 and 75% complete in C-2. Approximately 25 drums and 100 cubic yards of contaminated soil and uncontainerized ink waste have been excavated and staged to date. ERRS installed a siphon dam in Opossum Creek to capture any contamination that might fall into the creek during removal activities.

START air monitoring for VOCs using an AreaRAE network and for particulates using a DataRAM. The particulate action level is 1,500 ug/m3, and the average particulate readings are less than 78 ug/m3.

START used the XRF to screen the bottom of the excavation area in Grids C-1. Approximately 9 XRF readings were collected in each completed grid. None of the grids showed lead concentrations exceeding the 400 ppm action level. Off-shift site security continued.

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	11 trucks (1,045 cubic yards)	None	Recycling	Rumpke Recycle Center
Scrap metal	Solid	2 trucks (13.65 tons)	None	Recycling	Franklin Iron & Metal Dayton, OH
Off-road tires	Solid	1 truck (95 cubic yards)	None	Landfill	Rumpke Recycle Center

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.

EPA will provide removal action update to City of Moraine on June 13 at a Council meeting.

2.2.1.2 Next Steps

1. ERRS to begin clearing trees and brush in western drum burial area.
2. START to conduct air monitoring for VOCs with an AreaRAE network at the site perimeter during drum excavation activities.
3. START to conduct air monitoring for particulates using a DataRAM and VIPER at the site perimeter once drum excavation activities are initiated.
4. Waste profiling for off-site disposal of drum and ink waste.
5. Disposal samples to be collected and disposal strategy to be finalized.
6. No Site removal activities scheduled for June 6-7 and July 4-5, and weekends.

2.2.2 Issues

1. There is frequent trespassing onto the site during off working hours. Trespassers were burning tires and emptying the contents of drums to scrap the drum metal. Waste was being discharged to Opossum Creek.
2. During non-working hours, there is site security on site at the EPA Support Zone.
3. ERRS using water suppression to keep the dust to a minimum when excavating within the drum burial area.
4. To date, Rumpke has stated that approximately 200 tons of tires have been removed from the Site. That equates to approximately 20,000 tires.

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

City of Moraine
Moraine Fire Department
Montgomery County Sheriff
OEPA

4. Personnel On Site

EPA - 1 OSC
WESTON START - 1 START
ERRS (EQM) - 2
ERRS (CMC) - 4
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 July 2013.

7. Situational Reference Materials

No information available at this time.