

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



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region V

Subject: POLREP #4
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: 10/8/2013

Reporting Period: July 29 through October 4, 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 and began receiving and burying 55-gallon waste ink 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 summarized 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 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.

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 construction/debris 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 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 property owners to allow EPA access to the properties to conduct site reconnaissance and site investigation 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.

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.

Hazardous wastes identified at the Site exhibited the following characteristics:

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

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

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

In a letter dated December 3, 2012, the OEPA formally requested assistance from EPA to determine if the Site met 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 met 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 planning meetings 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.

On May 27, 2013, ERRS (EPA contractors EQM and CMC) initiated drum excavation activities.

As of October 4, 2013, 2,116 drums and containers were excavated. Approximately 6,320 tons of metals-contaminated soil and debris and treated drummed ink waste have been shipped for off-site disposal. Approximately 27,000 tires have been removed for recycling. START continued hot zone and perimeter air monitoring.

2.1.2 Response Actions to Date

Week of July 29, 2013

No site work was conducted this week. 24-hour site security was on site during this time period.

Week of August 5, 2013

ERRS continued drum excavation activities in Grids D-3, E-3, E-1 and E-2. A total of 400 drums and containers were excavated and processed/treated and metals-contaminated soil was staged in preparation for off-site disposal. Drums and containers contain ink waste of varying colors (red, yellow, white, purple, blue, green, black). ERRS conducting on-site treatment of the drummed ink waste prior to disposal. ERRS conducted clearing and grubbing (as necessary) to access grids for excavation activities.

On August 5, 2 truck loads (80 cubic yards) of hazardous drums and debris were shipped to EQ, located in Belleville, Michigan for off-site disposal. Off-shift site security continued.

On August 8, approximately 3.68 tons of scrap metal was shipped for off-site recycling to Franklin Iron & Metal, Dayton, Ohio. START conducted perimeter air monitoring using an AreaRAE (for VOCs) network and DataRAM (for particulates).

Week of August 12, 2013

ERRS conducted drum excavation activities in Grid E-2 and removed approximately 233 drums and containers for process/treatment. Drums and containers contain ink waste of varying colors (red, yellow, white, purple, blue, green, black). START conducted perimeter air monitoring using an AreaRAE (for VOCs) network and DataRAM (for particulates). Off-shift site security continued.

Week of August 19, 2013

ERRS continued drum excavation activities in Grid E-2. A total of 302 drums and containers were excavated for process/treatment and metals-contaminated soil was staged in preparation for off-site disposal. Drums and containers contain ink waste of varying colors (red, yellow, white, purple, blue, green, black). ERRS conducting on-site treatment of the drummed ink waste prior to disposal. ERRS conducted clearing and grubbing (as necessary) to access grids for excavation activities.

START conducted perimeter air monitoring using an AreaRAE (for VOCs) network and DataRAM (for particulates). On August 21, ERRS shipped 46 truck loads (~ 920 tons) of non-hazardous soil and debris (lead contaminated) for off-site disposal to Stony Hollow Landfill, located in Dayton, Ohio. On August 22, ERRS shipped 25 truck loads (~ 500 tons) of non-hazardous soil and debris (lead contaminated) for off-site disposal to Stony Hollow Landfill, located in Dayton, Ohio. Off-shift site security continued.

Week of August 26, 2013

ERRS worked to clear debris and overburden to access Grid F-2. START conducted perimeter air monitoring using an AreaRAE (for VOCs) network and DataRAM (for particulates). Off-shift site security continued.

Week of September 2, 2013

ERRS continued drum excavation activities in Grid F-2. A total of 96 drums and containers were excavated for process/treatment and metals-contaminated soil was staged in preparation for off-site disposal. Drums and containers contain ink waste of varying colors (red, yellow, white, purple, blue, green, black). ERRS conducting on-site treatment of the drummed ink waste prior to disposal. ERRS conducted clearing and grubbing (as necessary) to access grids for excavation activities. START conducted perimeter air monitoring using an AreaRAE (for VOCs) network and DataRAM (for particulates). Off-shift site security continued.

Week of September 9, 2013

No site work was conducted this week. 24-hour site security was on site during this time period.

Week of September 16, 2013

ERRS conducted subsurface excavation activities in Grids E-1, E-2, F-1 and F-2. ERRS removed drums and containers about 5 to 7 feet below surface before reaching native clay soil. A total of 272 drums and containers were excavated for process/treatment and metals-contaminated soil was staged in preparation for off-site disposal. Drums and containers contain ink waste of varying colors (red, yellow, white, purple, blue, green, black). ERRS conducting on-site treatment of the drummed ink waste prior to disposal.

START conducted perimeter air monitoring using an AreaRAE (for VOCs) network and DataRAM (for particulates). START used an XRF to screen for heavy metals contamination in the bottom of the excavation in Grids F-1 and F-2. START did not observe total lead levels greater than 195 ppm. Off-shift site security continued.

Week of September 23, 2013

ERRS transported waste off site for disposal and continued to remove drummed waste in the hillside of Grid F-2. A total of 53 drums and containers were excavated for process/treatment and metals-contaminated soil was staged in preparation for off-site disposal.

On September 24, ERRS transported 48 truck loads (~ 960 tons) of non-hazardous soil and debris (lead contaminated) for off-site disposal to Stony Hollow Landfill, located in Dayton, Ohio.

On September 25, ERRS transported 57 truck loads (~ 1,140 tons) of non-hazardous soil and debris (lead contaminated) for off-site disposal to Stony Hollow Landfill, located in Dayton, Ohio.

On September 26, ERRS transported 18 truck loads (~ 360 tons) of non-hazardous soil and debris (lead contaminated) for off-site disposal to Stony Hollow Landfill, located in Dayton, Ohio. Off-shift site security continued.

Week of September 30, 2013

ERRS conducted drum excavation activities in Grids F-2 and E-2. A total of 79 drums and containers were excavated for process/treatment and metals-contaminated soil was staged in preparation for off-site disposal. Drums and containers contain ink waste of varying colors (red, yellow, white, purple, blue, green, black). ERRS conducting on-site treatment of the drummed ink waste prior to disposal.

EPA has identified the vertical and lateral limit of drummed waste in Grids F-1, F-2, E-1 and E-2. As of October 4, a total of 2,116 drums and containers containing ink waste have been excavated from the Site. Off-shift site security continued.

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

On-going.

2.1.4 Progress Metrics

Waste Stream	Medium	Quantity	Manifest #	Treatment	Disposal
Non-hazardous soil and debris (metals contaminated)	Solid	~6,320 tons (316 truckloads)	Various	Landfill	Stony Hollow Landfill Dayton, OH
Hazardous debris (TCLP lead)	Solid	200 cubic yards	Various	Hazardous Landfill	EQ Belleville, MI
Tires	Solid	1,425 cubic yards (~27,000 tires)	None	Recycling	Rumpke Recycle Center
Scrap metal	Solid	20.34 tons	None	Recycling	Franklin Iron & Metal Dayton, OH
Off-road tires	Solid	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.

2.2.1.2 Next Steps

1. ERRS to continue drum excavation and lead-contaminated soil removal activities.
2. ERRS to continue clearing trees and brush in western drum burial area (as necessary).
3. START to conduct air monitoring for VOCs with an AreaRAE network at the site perimeter during drum excavation activities.
4. Transport waste for off-site disposal, as necessary.
5. Initiate site restoration activities (backfill and hydro-seeding) in completed areas.
6. Continue off-shift site security.

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. To date, approximately 27,000 tires have been removed from the Site for recycling (OEPA-funded).

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

None.

2.5.3 Information Officer

See Dayton Daily News articles in Documents Section.

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) - 2
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 November-December 2013.

7. Situational Reference Materials

No information available at this time.