

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



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region V

Subject: POLREP #5
Final
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: 2/4/2014

Reporting Period: October 5, 2013 through January 24, 2014

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:	1/24/2014	Completion Date:	1/24/2014
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 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 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 were 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 near the drum burial area. Some corroded drums and containers had released their contents onto the ground. Most of the visible 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 was 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 visible 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 was an estimated 80,000 tires on site. OEPA funded 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.

2.1.2 Response Actions to Date

See POLREPs 1-4 for removal action details from April-September, 2013.

Week of October 7, 2013

ERRS continued drum excavation activities in Grids A-4 and A-5. A total of 23 drums and containers were excavated and processed/treated and metals-contaminated soil was staged in preparation for off-site disposal. Drums and containers contained 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 START used XRF to screen for heavy metals in Grids E-2 and D-2. No total lead concentrations observed greater than the XRF total lead minimum detection limit.

On October 9, ERRS transported 42 truck loads (~ 840 tons) of non-hazardous soil and debris (lead contaminated) for off-site disposal to Stony Hollow Landfill, located in Dayton, Ohio. On October 10, ERRS transported 42 truck loads (~ 840 tons) of non-hazardous soil and debris (lead contaminated) for off-site disposal to Stony Hollow Landfill, located in Dayton, Ohio. On October 11, ERRS transported 9 truck loads (~ 180 tons) of non-hazardous soil and debris (lead contaminated) for off-site disposal to Stony Hollow Landfill, located in Dayton, Ohio.

EPA START conducted perimeter air monitoring using an AreaRAE (for VOCs) network and DataRAM (for particulates).

Week of October 14, 2013

ERRS conducted restoration activities all week in the areas where completed drum excavation activities were conducted. Restoration included backfilling soil and grading.

Week of October 21, 2013

ERRS completed grading the excavation areas along the northeastern sides of Grids F-2, E-2 and D-2. ERRS completed hydro-seeding areas where site restoration was completed.

ERRS completed retrieving hundreds of tires abandoned along Opossum Creek. ERRS continued on-site treatment of excavated drums and containers, prior to off-site disposal.

Week of October 28, 2013

ERRS began removing overburden material in Grids B-4 and C-4. ERRS continued processing and conducting on-site treatment of excavated drums and containers.

On October 29, ERRS loaded one truck with large, over-sized tires for off-site recycling to Rumpke Facility, Cincinnati, Ohio.

On October 30, ERRS loaded a 40-yd rolloff box with regular size tires for off-site recycling to Rumpke Facility, Cincinnati, Ohio.

On November 2, ERRS completed hydro-seeding the area adjacent to the support zone.

Week of November 4, 2013

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

Week of November 11, 2013

ERRS re-mobilized to the site on November 13th. ERRS completed removing overburden material in Grids B-4 and C-4.

ERRS began drum excavation activities in Grid C-4. A total of 37 drums and containers were excavated and processed/treated and metals-contaminated soil was staged in preparation for off-site disposal. Drums and containers contained 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.

Week of November 18, 2013

ERRS continued drum excavation activities in Grids C-4 and B-4. A total of 54 drums and containers were

excavated and processed/treated and metals-contaminated soil was staged in preparation for off-site disposal. Drums and containers contained ink waste of varying colors (red, yellow, white, purple, blue, green, black). ERRS conducted on-site treatment of the drummed ink waste prior to disposal.

On November 18, ERRS transported 40 truck loads (~ 800 tons) of non-hazardous soil and debris (lead contaminated) for off-site disposal to Stony Hollow Landfill, located in Dayton, Ohio.

On November 19, ERRS transported 8 truck loads (~ 160 tons) of non-hazardous soil and debris (lead contaminated) for off-site disposal to Stony Hollow Landfill, located in Dayton, Ohio.

Week of November 25, 2013

On November 25, ERRS transported 52 truck loads (~ 1,040 tons) of non-hazardous soil and debris (lead contaminated) for off-site disposal to Stony Hollow Landfill, located in Dayton, Ohio.

On November 26, ERRS transported 24 truck loads (~ 480 tons) of non-hazardous soil and debris (lead contaminated) for off-site disposal to Stony Hollow Landfill, located in Dayton, Ohio.

ERRS completed all drum and container excavation activities on November 26th. No additional drums or containers were encountered. To date, a total of 2,230 drums and containers had been excavated for off-site disposal.

No Site activities from November 27 through December 4, 2013. 24-hr security during non-working hours.

Week of December 2, 2013

On December 5, ERRS re-mobilized to the Site. ERRS continued backfilling and site restoration activities.

Week of December 9, 2013

ERRS continued backfilling and site restoration activities. ERRS completed off-site disposal of the metals-contaminated soil and debris.

On December 11, ERRS transported 15 truck loads (~ 300 tons) of non-hazardous soil and debris (lead contaminated) for off-site disposal to Stony Hollow Landfill, located in Dayton, Ohio.

On December 12, one 40-yd rolloff box of tires was filled and transported for off-site recycling to Rumpke Facility, Cincinnati, Ohio.

Week of December 16, 2013

ERRS continued site restoration activities.

EPA OSC conducted a site walk-through and summarized EPA's removal action with Ohio EPA, Moraine Fire Dept, local Health Dept, Motorcycle Club property representative.

Support Zone and Office trailers were prepped for demobilization.

Week of December 23, 2013

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

Week of December 30, 2013

ERRS completed site restoration activities.

All office trailers, equipment and personnel demobilized from the site.

Week of January 20, 2014

EPA OSC conducted a final site walk-through with the owner of the property (Gilboy representative and attorney) and summarized EPA's removal action. The main electrical pole was removed and the 50' section of fence along Soldiers Home West Carrollton Road was re-installed.

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

On-going.

2.1.4 Progress Metrics

This is an Integrated River Assessment. The numbers should overlap.	Miles of river systems cleaned and/or restored	NA
	Cubic yards of contaminated sediments removed and/or capped	NA
	Gallons of oil/water recovered	NA
	Acres of soil/sediment cleaned up in floodplains and riverbanks	NA
	Acres Protected	10

Stand Alone Assessment	Number of contaminated residential yards cleaned up	NA
	Human Health Exposures Avoided	10
	Number of workers on site	8
Contaminant(s) of Concern Heavy Metals - Lead and Arsenic		
Oil response Tracking		
Estimated volume	Initial amount released	NA
	Final amount collected	NA
CANAPS Info	FPN Ceiling Amount	NA
	FPN Number	NA
	Body of Water affected	NA

Waste Stream	Medium	Quantity	Manifest #	Treatment	Disposal
Non-hazardous soil and debris (metals contaminated)	Solid	~12,812 tons (548 truckloads)	Various	Landfill	Stony Hollow Landfill Dayton, OH
Hazardous debris (TCLP lead)	Solid	200 cubic yards	Various	Hazardous Landfill	EQ Belleville, MI
Tires	Solid	1,655 cubic yards (~23,170 tires @ 14 tires/cubic yard)	None	Recycling	Rumpke Recycle Center
Scrap metal	Solid	20.34 tons	None	Recycling	Franklin Iron & Metal Dayton, OH
Off-road tires	Solid	190 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 was completed on January 24, 2014, and included the following:

1. Developed and implemented a Site-specific Health and Safety Plan, including an Air Monitoring Plan, and a Site Emergency Contingency Plan;
2. Developed and implemented a Site Security Plan;
3. Characterized, removed, transported and disposed of all 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. Developed and implemented an extent of contamination and post excavation sampling plan to verify cleanup;
5. Backfilled excavated areas. Hydro-seeded areas adjacent to Opossum Creek to prevent soil erosion.

2.2.1.1 Planned Response Activities

None.

2.2.1.2 Next Steps

None.

The removal action is complete.

2.2.2 Issues

None.

2.3 Logistics Section

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

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

50' section of fence re-installed along road to prevent access to site. Gate locked and key provided to property owner on January 21, 2014.

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 was finalized and 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
Ohio EPA
Montgomery Co Health Dept

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

This is the Final POLREP.

7. Situational Reference Materials

No information available at this time.