

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Princeton Recycles - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region II

Subject: POLREP #3
Princeton Recycles
A25K
Princeton, NJ

To:

From: David Rosoff/Cris D'Onofrio, OSC

Date: 11/24/2015

Reporting Period:

1. Introduction

1.1 Background

Site Number:	A25K	Contract Number:	EPS21502
D.O. Number:	0014	Action Memo Date:	8/10/2015
Response Authority:	CERCLA	Response Type:	Time-Critical
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	8/31/2015	Start Date:	8/31/2015
Demob Date:		Completion Date:	
CERCLIS ID:	NJR000048397	RCRIS ID:	
ERNS No.:		State Notification:	07/22/2015
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

Soil contamination associated with metal recycling

1.1.2 Site Description

The Site is a former paper and metal recycling business located on Basin Street in Princeton, New Jersey. The recycling business began operations in 1955 and ceased operations in 2003. Allegedly operations at the facility included draining PCB transformers and the burning of wire casings. In 2014 and 2015 NJDEP performed extensive sampling of the surface and subsurface soil on the Site and determined the extent of PCB, lead, SVOC and dioxin contamination. Levels of all of these contaminants exceed the RMLs in Site soils. PCB concentrations (mainly Aroclor 1260) were found as high as 2,800 parts per million (ppm) in surface soils. Lead concentrations were detected as high as 11,300 ppm. Benzo(a)pyrene and dioxin were detected as high as 17 ppm and 1.3 parts per billion (ppb), respectively.

The Site is located in a residential neighborhood and is directly adjacent to a tributary to the Stoney Creek. The Site property is unsecured and accessible to trespassers. The results from the NJDEP sampling indicate there has been a release of CERCLA designated hazardous substances at the Site, which is a facility under Section 101(9) of CERCLA. Based on the available information, a CERCLA removal action is warranted at the Site. An Action memorandum signed by the Region 2 ERRD Director on August 10, 2015 authorized funding for the excavation and off-site disposal of approximately 7,500 tons of contaminated soil.

1.1.2.1 Location

The Site is located at 409 Basin Street in Princeton, New Jersey (Block 11503, Lots 2 & 8). Lot 2 is 0.27 acres in size and contains a dwelling and lot 8 is 0.37 acres in size and is undeveloped. The Site also includes adjacent parcels that have been impacted by the spread of contamination including 403 Basin Street (Block 11503, Lot 1), 413 Basin Street (Block 11503, Lot 3), 417 Basin Street (Block 11503, Lot 7) and multiple Lots in Block 11301. The Site is in a residential neighborhood bordered by lands owned by Princeton University. Residences are located immediately to the south along Basin Street. A Princeton University apartment complex is located within 200 feet to the west of the Site. A tributary to Stoney Creek flows from west to east along the north boundary of the Site.

The Site is located at 40° 19' 59.44" (latitude) / -74° 39' 19.6" (longitude).

1.1.2.2 Description of Threat

Analytical data generated from NJDEP soil sampling events in 2014 and 2015 found the above hazardous substances at concentrations well above the EPA RMLs. Elevated concentrations of these contaminants were found in surface soils (0-6 inches BGS) and down to five feet BGS. It is estimated that approximately 7,500 tons of soil will need to be removed from the Site to address the release of hazardous substances.

It is believed that the mechanism for past releases on the Site include improper management of transformer waste oils (PCBs), burning of wire and debris (dioxin and benzo(a)pyrene) and uncontrolled storage of metallic wastes (lead). The threat of future releases from the Site exists through the spread of soil contamination through surface water run-off, windblown dust and/or human tracking.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

Beginning in 2014, NJDEP performed extensive soil sampling at the Site to delineate the extent of contamination. As of June 2015, NJDEP had performed four iterative rounds of soil sampling at the Site. Surface soil (0 – 6”) was sampled within the main Site property in May 2014. Forty-six samples were collected. With the exception of two samples, all results showed elevated levels of PCBs, lead and/or benzo(a)pyrene above NJDEP’s residential standards.

A second round of delineation samples were collected by NJDEP in August 2014. The original 46 sample locations were expanded to eighty-three locations; both deep samples within the Site where contamination had been detected and surface samples along the outer perimeter of the Site. The results indicated deeper contamination (18”– 24”) in some areas. There was additional horizontal contamination above acceptable levels to the north, west and east of the main Site property. In addition to the PCB, metals, and SVOCs analyses, the second round included dioxin samples from where an open burn pit was thought to have been located. Dioxin results were as high as 1.3 ppb in this area.

In December 2014 and June 2015, a third and fourth round of samples were collected to complete the delineation of the horizontal extent of the surface contamination and to delineate the extent of vertical contamination in the sample points that had not reached an uncontaminated zone. Additional dioxin samples were also secured.

Overall the sample results indicate that the soil throughout the Site is contaminated with PCBs, lead, and benzo(a)pyrene above both NJDEP residential and non-residential standards and EPA RMLs. Dioxin is found above the NJDEP Action Level in several “burn pit” locations on the Site.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

Approximately 5500 tons of contaminated soil have been excavated to date. 3900 tons of TSCA soil have been transported to a TSCA facility in Belleville, Michigan (Wayne Disposal). Soil is being transported by truck from the site to a U. S. Ecology transfer station in North Bergen, New Jersey where it is being loaded onto rail cars bound for Michigan. Approximately 500 tons of TSCA soil remain in a pile to be transported after Thanksgiving holiday break. Approximately 1,000 tons of non-TSCA ID-27 soil are stockpiled awaiting transportation to Gloucester County, New Jersey Subtitle D landfill. This remaining stockpiled soil will be loaded out the week of November 30th and excavation activities on site will resume the week of December 6th. The site excavation and segregation plan based on existing PCB and lead soil data will continue to be utilized to excavate and segregate the soil into waste streams (piles). Soils anticipated to be higher in contamination are being segregated and staged separately from anticipated lower-level soils in order to minimize disposal costs. Once stockpiled, excavated soils will be sampled to confirm accurate waste profiling. Staged soils are being covered daily at the end of each shift to eliminate the possibility of off-site migration via wind and/or rain.

Excavation operations to date have been focused in the western half of the site. There the entire excavation area has been dug and backfilled with certified clean fill. Top soil is being brought in to complete final grades/restoration. NJDEP Certified Clean Backfill is being brought in from the Trap Rock Industries Moores Station Quarry in Hopewell Township, New Jersey. Topsoil is coming from EME in New Egypt, New Jersey. A backfill source from EME has been sampled and results are pending.

A Community Air Monitoring Plan (CAMP) has been developed for this site. Continuous real-time air monitoring for total dust particulates is being conducted on a daily basis as per the Plan. A site action level of 150 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) has been established as an 8 hour time-weighted average. No exceedances have been experienced to date. Additionally, periodic air sampling is being performed in conjunction with the continuous air monitoring. Air samples have been collected for PCB, lead and benzo(a)pyrene analyses to confirm real-time air monitoring results. Air sampling results indicate that all contaminants remain below method detection levels for all samples collected to date.

2.1.2 Response Actions to Date

The following response actions have been implemented to date:

- Developed a site health and safety plan, quality assurance project plan, and community air monitoring plan.
- Mobilized an Emergency and Rapid Response Services (ERRS) contractor to establish support zones, contaminant reduction zones, and exclusion zones. Initial work included marking out underground utilities and establishing excavation and staging areas.
- Established engineering controls to assure proper management of excavated materials (*i.e.* dust suppression, lined soil staging area, erosion and sedimentation control).
- Conducting air monitoring in order to monitor proper site management of excavated soil and

protection of site workers and community members in close proximity to the site.

- Excavated and stockpiled approximately 5,500 tons of contaminated soil (a TSCA pile and a ID-27 pile).
- Transported 3,900 tons of TSCA regulated soil to Wayne Disposal, Inc. in Belleville Michigan
- Determined acceptable local backfill sources. Backfilling of the excavation has been performed as digging progressed.

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

EPA is conducting PRP search activities including interviews and the preparation of 104e and notice of liability letters.

2.1.4 Progress Metrics

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>
TSCA	Soil	3,900 tons		Landfill	Wayne Disposal Inc.
					Belleville, Mich.

2.2 Planning Section

2.2.1 Anticipated Activities

- Contaminated soil load-out operations will continue the week of 11/30.
- Excavation and backfilling activities will continue restarting the week of 12/6.
- EPA is developing a tree replanting and site restoration plan based on recommendations from a certified tree expert.

2.2.1.1 Planned Response Activities

- Continue transportation and disposal of contaminated soil
- Continue contaminated soil excavation.
- Continue backfilling operations with certified clean fill in completed excavation areas.
- Continue air monitoring and air sampling per the Community Air Monitoring Plan.
- Site restoration including establishing final grades with certified clean top soil, tree planting, grass/sod installation and re-establishing of natural areas.

2.2.1.2 Next Steps

Excavation and soil stockpiling will continue once phase 1 loadout activities are complete.

2.2.2 Issues

- A much greater than anticipated amount of TSCA regulated material has been encountered than was anticipated. An Action Memorandum to request additional funding will be developed to account for additional costs required to dispose of the increased amount of TSCA regulated material. A Documentation of Verbal Memorandum for a change in scope of the action was prepared for management signature.
- Sampling conducted in the front yard of 411 Basin Street (Lot 3) better defines the extent of benzo(a)pyrene contamination allowing a redraw of cut lines for the excavation in this area. Much of the front yard has been cleared by this sampling so that the excavation area can be reduced. As a result, several desirable trees and landscaping will not have to be disturbed. This change will be documented in the final excavation report for the site and NJDEP will be made aware of the change.

2.3 Logistics Section

No information available at this time.

2.4 Finance Section

No information available at this time.

2.5 Other Command Staff

2.5.1 Safety Officer

No safety issues to date.

2.5.2 Liaison Officer

Pat Seppi from EPA PAD has been assisting with community outreach. Meetings have been held with the Princeton University Community and the Town officials to discuss the site activities including EPA's air monitoring.

2.5.3 Information Officer

3. Participating Entities

3.1 Unified Command

3.2 Cooperating Agencies

NJDEP has been involved in several on site decisions and visited the Site on several occasions including October 26th to view the excavation, look at the buried sewer pipe and the bedrock surface at 7 feet BGS.

4. Personnel On Site

EPA - 2 OSCs - Cris D'Onofrio and Dave Rosoff

ERRS (ER) - 7 employees (RM, FCA, 3 operators and 2 Techs)

RST (Weston) - 2 employees as needed (one full time) - Air monitoring/sampling, survey and photo documentation

5. Definition of Terms

No information available at this time.

6. Additional sources of information

No information available at this time.

7. Situational Reference Materials

No information available at this time.