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

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region II

Subject: **POLREP #1**
Princeton Recycles
A25K
Princeton, NJ

To: Judith Enck, Region 2
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Date: 10/8/2015
Reporting Period: 8/31-10/8 2015

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

EPA mobilized the Environmental Response and Remediation Services (ERRS) contractor on 8/31/15 to begin set up of site facilities and to initiate brush clearing, tree removal, site preparation and excavation activities. At that time, portions of the site contained a significant amount of vegetative overgrowth that included heavy brush and large trees; a portion of the excavation area to the north was mostly wooded. The RST contractor was utilized to stake out the boundaries of the planned excavation to aid in the identification of the large trees that required removal.

Tree removal operations were initiated on 9/2/15. An approximate total of 56 trees have been cut down and removed from the excavation area to date and all operational areas have been cleared of brush. The trees and brush have been processed in a chipper and the wood chips have been used as cover within the operational area to aid in dust suppression. EPA is maintaining an inventory of tree type, size and condition for all trees being removed. The inventory will be used to develop a plan for site restoration. EPA is making efforts to preserve trees in the shallow excavations and will use hand digging techniques as feasible to minimize the need for tree removal.

In response to community concerns, EPA conducted a public meeting prior to initiating excavation activities. The public meeting was held on 9/9/15 at the Lawrence Apartments, a Princeton University graduate housing apartment complex located to the northwest of the site. Lawrence Apartment residents expressed their concern that site activities might cause a potential for exposure to site contaminants to Lawrence Apartment residents, a population that includes young children. In order to address their concerns, EPA provided an overview of the site contaminants, planned site operations, a community air monitoring plan, and precautions to be taken to prevent off-site migration of contaminated dust. An EPA toxicologist/risk assessor explained the exposure risks as they relate to site action levels and answered health-related questions posed by the residents. EPA is maintaining open communication with the residents and Princeton University to report air sampling and monitoring results as they become available. Princeton University officials played a key role in assisting EPA by providing the meeting place, assisting with logistics and communicating with the residents as needed to coordinate the public meeting.

A site excavation and material segregation plan based on PCB and lead content was developed using existing site data. Highly contaminated soils are being segregated and staged separately from low-level contaminated soils in order to minimize disposal costs.

Site excavation activities were initiated on 9/23/15 at the north end of the site along Lawrence Drive. Three shallow excavations have been completed in the northern area of the site. Additionally, an area designated as potentially containing TSCA-RCRA hazardous soil was excavated. An approximate total of 800 cubic

yards of contaminated soil have been excavated to date and placed in two separate piles.

Excavation progress was originally slowed by technical difficulties encountered with the Global Positioning Systems (GPS) survey equipment being used to stake out the excavation boundaries and document the limits of the excavation. Interference from the heavy leaf foliage along the borders of the excavation were impacting accuracy. Although the rate of excavation was originally impacted, work activities have been managed so that site progress has not been affected. Excavation operations have been alternated with fence removal and tree cutting and chipping as needed to maintain productivity. Corrective measures have been implemented to improve the accuracy of the survey. An increase in soil excavation rates is expected now that the technical issues have been resolved.

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 (ug/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 on 4 separate days; the first day was used to measure background levels prior to implementing intrusive activities. Air sampling results indicate that all contaminants were 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 around the site.
- Excavated and stockpiled approximately 800 cubic yards of contaminated soil.
- Determined acceptable local backfill source.

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

Waste Stream	*Medium*	*Quantity*	*Manifest #*	*Treatment*	*Disposal*

2.2 Planning Section

2.2.1 Anticipated Activities

In the next month we expect to continue excavation and stockpiling of contaminated soil, sampling of stockpiled soil to profile the waste streams, and to initiate loadout by truck once at least 1000 yards are stockpiled. Importing of certified clean fill will be initated in support of backfill operations.

2.2.1.1 Planned Response Activities

Certified clean fill will begin to be brought into the site in mid October to fill in excavated areas.

2.2.1.2 Next Steps

Sampling for waste profiling and delivery of certified clean fill are the next critical steps. Excavation and soil stockpiling will continue.

2.2.2 Issues

No issues to date.

2.3 Logistics Section

No information available at this time.

2.4 Finance Section

2.4.1 Narrative

A total of $50K is being transferred from contingency funds into the RST (TAT/START) budget as of this PolRep in order to cover additional unexpected expenditures.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
ERRS - Cleanup Contractor	$1,700,000.00	$273,694.00	$1,426,306.00	83.90%
TAT/START	$150,000.00	$82,260.00	$67,740.00	45.16%
Intramural Costs				
Total Site Costs	$1,850,000.00	$355,954.00	$1,494,046.00	80.76%

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Other Command Staff

2.5.1 Safety Officer

No safety issues to date.

2.5.2 Liaison Officer

Pat Seppi has been assiting 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

No information available at this time.

4. Personnel On Site

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

ERRS (ER) - 6 employees (RM, FCA, 2 operators and 2 Techs)

RST (Weston) - 2 employees (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.