U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Exide Battery - Removal Polrep
Initial Removal Polrep

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region V

Subject: **POLREP #1**
Initial Report
Exide Battery
B5YX
Frankfort, IN
Latitude: 40.2851740 Longitude: -86.4956950

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From: Shelly Lam, On-Scene Coordinator
Date: 9/11/2015
Reporting Period: September 8 - 11, 2015

1. Introduction

1.1 Background

Site Number:	B5YX	**Contract Number:**	EP-S5-09-05
D.O. Number:	175	**Action Memo Date:**	8/15/2015
Response Authority:	CERCLA	**Response Type:**	Time-Critical
Response Lead:	EPA	**Incident Category:**	Removal Action
NPL Status:	Non NPL	**Operable Unit:**	
Mobilization Date:	9/8/2015	**Start Date:**	9/8/2015
Demob Date:		**Completion Date:**	
CERCLIS ID:	INN000510504	**RCRIS ID:**	IND001647460
ERNS No.:		**State Notification:**	
FPN#:		**Reimbursable Account #:**	

1.1.1 Incident Category

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) incident category: Manufacturing/processing/maintenance

1.1.2 Site Description

The Exide Battery Site is a Residential Area surrounding the former Exide Battery facility at 555 North Hoke Avenue in Frankfort, Clinton County, Indiana. The Exide facility was originally developed by Prest-O-Lite Manufacturing during the World War II era. After General Battery Company purchased the property from Prest-O-Lite Manufacturing, battery manufacturing operations continued at the facility. In 1987, Exide acquired General Battery Corporation and the facility. Exide continued battery manufacturing as a large quantity generator until manufacturing was discontinued in 1998. From February 1999 until 2013, the facility was used to store equipment from other Exide properties. Facility buildings were eventually demolished.

1.1.2.1 Location

This Residential Area is defined as the area bounded by Washington Avenue to the north, Kelley Avenue to the east, the railroad to the south, and Young Street to the west. Coordinates for the center of the Residential Area are 40.2851740 degrees north latitude and 86.4956950 degrees west longitude.

1.1.2.2 Description of Threat

The U.S. Environmental Protection Agency (EPA) documented releases of lead in the soil at three residences and trichloroethene (TCE) in the indoor air at one home. Lead and TCE are hazardous substances as defined by section 101(14) of CERCLA. Possible exposure routes include dermal contact with lead-contaminated soil; ingestion or inhalation of lead particles in soil; and inhalation of contaminated air that may have migrated through groundwater, i.e. vapor intrusion. Potential human receptors include residents in the Residential Area.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

In April 2014, Exide removed two unregulated underground storage tanks (UST) from the facility. As part of the UST removal, Exide collected soil and groundwater samples. Sample results included high levels of 1,1-dichloroethane, 1,1-dichloroethene, cis-1,2-dichloroethene, trans- 1,2-dichloroethene, TCE, and vinyl chloride. TCE was detected at a maximum concentration of 8,520 micrograms per liter (ug/L) in groundwater. The Indiana Department of Environmental Management (IDEM) noted in their pre-CERCLIS screening report that the "results may indicate a significant vapor intrusion potential in the homes located adjacent to the Exide property boundaries."

In September 2014, IDEM screened nearby residential properties for metals using a x-ray fluorescence (XRF) detector. Lead was detected as high as 1,388 and 762 parts per million (ppm) in residential yards adjacent to the western and northeastern property boundaries. In November 2014, IDEM referred the site to EPA's Removal Program for a site assessment.

In January 2015, EPA conducted soil gas sampling in the Residential Area to evaluate for vapor intrusion. EPA identified chemical vapors in soil gas including TCE.

In March and April 2015, EPA sampled 34 residential properties within two blocks of the site. EPA tested for metals in soil and evaluated homes for potential vapor intrusion. EPA collected five-point composite samples from front yards, back yards, side yards (where applicable), and gardens for metals analysis. Samples were collected away from the influences of drip zones and other painted surfaces to minimize detection of lead from lead-based paint. EPA did not conduct analysis for lead speciation because of lack of access to source material at the site.

At three properties, lead exceeded the January 2015 Removal Management Level (RML) for residential soil of 400 milligrams per kilogram (mg/kg), at concentrations ranging from 449 to 497 mg/kg. EPA confirmed that average background in this area is 104.7 mg/kg. The results for these three homes were approximately four times greater than background levels. EPA's sample results corroborated IDEM's findings that elevated lead was detected in residential yards west of the site and adjacent to the northeastern site boundary, and showed a spatial correlation between the facility and lead in the community.

EPA confirmed that the vapor intrusion pathway was completed, and vapor intrusion was occurring at one property. Exide found high levels of TCE in soil and groundwater at the facility. EPA documented TCE in soil gas in the residential area. Additionally, EPA confirmed the presence of TCE in the crawl space of one home, and detected TCE in indoor air at that home at a concentration of 0.44 parts per billion by volume (ppbv), which was above the June 2015 Vapor Intrusion Screening Level (VISL) of 2.1 micrograms per cubic meter (ug/m3) or 0.38 ppbv. The VISL for TCE was calculated using a Target Risk for Carcinogens (TCR) of lxl0-4 and a Target Hazard Quotient for Non-Carcinogens (THQ) of 1.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

EPA signed an Action Memorandum on August 5, 2015 to conduct the following time-critical removal actions:

- Preparing site plans, including a Work Plan, Quality Assurance Project Plan, site-specific Health and Safety Plan (HASP), and Emergency Contingency Plan;
- Conducting sampling and analysis to determine which residential properties require soil removal. EPA identified three homes with lead above the RML. However, EPA did not test all homes in the area so there is potential for additional homes to have been impacted.
- Excavating soil up to two feet below ground surface (bgs) at residential properties:
- Collecting and analyzing confirmation samples from the bottom of each excavation;
- Placing a visible barrier at the bottom of each excavation;
- Replacing excavated soil with clean soil;
- Restoring landscaping and grass destroyed during removal actions and repairing any damage to property caused by excavation activities;
- Collecting samples for disposal analysis;
- Transporting and disposing off-site any hazardous substances, pollutants and contaminants at a CERCLA-approved disposal facility in accordance with U.S. EPA's Off-Site Rule (40 Code of Federal Regulations [CFR] § 300.440);
- Conducting sub-slab and indoor air sampling at residential properties;
- Performing vapor mitigation at properties where relevant indoor air action levels are exceeded in accordance with current EPA guidance;
- Performing post-installation proficiency sampling 30 days and six months after mitigation system installation; and
- Taking any other response actions to address any release or threatened release of a hazardous substance, pollutant or contaminant that the EPA On-Scene Coordinator (OSC) determines may

pose an imminent and substantial endangerment to the public health or the environment.

2.1.2 Response Actions to Date
During the reporting period, EPA, the Emergency and Rapid Response Services (ERRS) and Superfund Technical Assessment and Response Team (START) contractors conducted the following activities:

- Established a Command Post at 1306 E. Ohio Street in Frankfort, Indiana;
- Prepared a HASP, sampling and analysis plan, and air monitoring plan;
- Sampled soil at 16 properties;
- Sampled sub-slab (or crawl space) and indoor air at seven properties;
- Collected samples from three properties for disposal analysis; and
- Conducted a public availability session on September 8.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)
Information on the PRPs and enforcement activities is contained in the Confidential Enforcement Addendum to the Action Memorandum.

2.1.4 Progress Metrics

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

2.2 Planning Section

2.2.1 Anticipated Activities
The following sections discuss planned response activities and next steps.

2.2.1.1 Planned Response Activities
EPA will continue sampling properties the week of September 14th. Beginning September 29, 2015, EPA will begin soil excavation at properties where lead exceeds 400 mg/kg.

2.2.1.2 Next Steps
See above.

2.2.2 Issues
None

2.3 Logistics Section
The ERRS contractor is providing logistical support.

2.4 Finance Section

2.4.1 Narrative
EPA approved an Action Memorandum for $1,736,200 on August 5, 2015. Contractor costs were not available at the time this Pollution Report (PolRep) was submitted.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
ERRS - Cleanup Contractor	$150,000.00	$0.00	$150,000.00	100.00%
Intramural Costs				
USEPA - Direct	$60,000.00	$13,905.15	$46,094.85	76.82%
USEPA - InDirect	$100,000.00	$7,991.29	$92,008.71	92.01%
Total Site Costs	$310,000.00	$21,896.44	$288,103.56	92.94%

* 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
OSC Lam is responsible for addressing worker health and safety concerns at a response scene, in accordance with 40 CFR § 300.150. Site personnel are working under a site-specific HASP.

2.5.2 Liaison Officer
Not applicable (NA)

2.5.3 Information Officer
EPA conducted extensive public outreach activities including going door-to-door in the time-critical removal area and a public availability session on September 8th. The Times published an article on the removal action on August 31, 2015. The article can be found at http://m.chronicle-tribune.com/ftimes/contaminated-soil-located-near-former-exide-battery-plant-epa-to/article_31625e68-4ff1-11e5-9340-63ed89b64b57.html?mode=jqm.

3. Participating Entities

3.1 Unified Command
NA

3.2 Cooperating Agencies
EPA is receiving support from IDEM, the City of Frankfort, and the Clinton County Health Department.

4. Personnel On Site
The following personnel were on-site during the reporting period.

Agency	# Personnel
EPA OSC	1
EPA Community Involvement Coordinator	1
START	1
ERRS	1

5. Definition of Terms

bgs	below ground surface
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
EPA	Environmental Protection Agency
ERRS	Emergency and Rapid Response Services
HASP	Health & Safety Plan
IDEM	Indiana Department of Environmental Management
mg/kg	milligrams per kilogram
NA	Not Applicable
OSC	On-Scene Coordinator
PolRep	Pollution Report
ppbv	parts per billion by volume
ppm	parts per million
PRP	Potentially Responsible Parties
RML	Removal Management Level
START	Superfund Technical Assessment and Response Team
TCE	Trichloroethene
TCR	Target Risk for Carcinogens
THQ	Target Hazard Quotient for Non-Carcinogens
ug/L	micrograms per liter
ug/m3	micrograms per cubic meter
UST	Underground Storage Tank
VISL	Vapor Intrusion Screening Level
XRF	X-ray fluorescence

6. Additional sources of information

6.1 Internet location of additional information/report
For additional information, refer to www.epaosc.org/exidebattery.

6.2 Reporting Schedule
PolReps will be submitted periodically.

7. Situational Reference Materials
NA