U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION/SITUATION REPORT Kiser Plating - Removal Polrep Initial Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Region V

Subject: POLREP #1

Initial PolRep Kiser Plating B5XK Muncie. IN

Latitude: 40.1898450 Longitude: -85.3829730

To:

From: Shelly Lam, On-Scene Coordinator

Date: 6/26/2013 **Reporting Period:** June 14-24, 2013

1. Introduction

1.1 Background

 Site Number:
 B5XK
 Contract Number:
 EP-S5-09-05

 D.O. Number:
 119
 Action Memo Date:
 3/22/2013

 Response Authority:
 CERCLA
 Response Type:
 Time-Critical

 Response Lead:
 EPA
 Incident Category:
 Removal Action

NPL Status: Non NPL Operable Unit:

Mobilization Date: 6/14/2013 Start Date: 6/14/2013

Demob Date: Completion Date:

CERCLIS ID: IND984891879 **RCRIS ID:** IND984891879

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 - Metal fabrication/finishing/coating

1.1.2 Site Description

The site is the former Kiser Plating. Kiser Plating operated as plating shop from approximately 1911 until 1999. It operated under the names Muncie Jewelry & Plating Works and J.F. Kiser Company Plating Works. Muncie Heat Light and Power Company, Muncie Electric Light Company, a hay warehouse, and Muncie Bagging Company also operated there prior to the plating shop. In 2001, the majority of the buildings on the property were destroyed in a fire. The City of Muncie demolished the one remaining building in 2010 or 2011. The site is currently vacant.

1.1.2.1 Location

Kiser Plating is located at 401 E. Howard Street in Muncie, Delaware County, Indiana. The geographical coordinates are 40.1902° north latitude and 85.3832° west longitude.

Kiser Plating is located in the southeast portion of downtown Muncie in an area that is a mixture of commercial, residential, and industrial properties. A residential building is located north of Kiser Plating across Howard Street; a warehouse and former industrial property are to the east across an alley; a commercial building is located to the south; and residential properties are located to the west. Based on 2010 census data, approximately 10,000 people live within one mile of the site.

1.1.2.2 Description of Threat

EPA documented the presence of hazardous substances as defined by section 101(14) of CERCLA including arsenic, cadmium, copper, 1,1-dichloroethene, trans-1,2-dichloroethene, ethylbenzene, mercury, nickel, tetrachloroethene (PCE), trichloroethene (TCE), vinyl chloride, and xylene.

Hazardous substances are present in soil and soil vapor. Possible exposure routes for hazardous substances include dermal contact with contaminated soil and inhalation of contaminated air that has migrated through subsurface soil and groundwater (i.e. vapor intrusion). Potential human receptors include trespassers, future workers and nearby residents

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

In 2008 and 2009, the City of Muncie commissioned Phase I and II Environmental Site Assessments (ESA). The Phase II ESA identified contamination in soil and groundwater. Contaminants included metals

such as arsenic, copper, mercury, and nickel; and volatile organic compounds (VOC) such as TCE and vinyl chloride. Arsenic and mercury were detected above Indiana Department of Environmental Management (IDEM) Industrial Default Closure Levels (IDCL) in near-surface soil (0-2 feet below ground surface [bgs]). VOCs were detected in soil above IDCLs at depths of 6-7 feet bgs. Additionally, TCE, vinyl chloride, arsenic, copper, and nickel were detected in groundwater samples above IDEM IDCLs.

At the request of the City of Muncie, the U.S. Environmental Protection Agency (EPA) conducted a Site Assessment on October 26 and 29, 2012, and collected soil and soil gas samples. EPA collected 11 soil samples from 0 to 4 feet bgs for total and Toxicity Characteristic Leachate Procedure (TCLP) metals, total cyanide, and VOCs. EPA also collected seven soil gas samples for VOC analysis.

EPA compared soil results to November 2012 Removal Management Levels (RML) for industrial soil and regulatory levels for toxicity established in Resource Conservation and Recovery Act (RCRA), 40 CFR § 261.24. TCLP cadmium was above the regulatory level of 1 milligrams per liter (mg/L) in the sample from SS-04 at a concentration of 15 mg/L.

Soil gas data were compared to soil gas screening levels for a 10⁻⁴ cancer risk as established in EPA's Vapor Intrusion Screening Level (VISL) Calculator, which were then converted from units of micrograms per cubic meter (ug/m³) to parts per billion by volume (ppbv) using standard atmospheric temperature and pressure and the molecular weight of each chemical constituent. Six of the seven soil gas samples contained VOCs above the VISL screening levels.

- 1,1-Dichloroethene (DCE) was detected in one sample at a concentration of 660 ppbv, which was above the screening level of 521 ppbv;
- trans-1,2-DCE was detected in three samples above the screening level of 156 ppbv. Concentrations above the screening level ranged from 10,000 to 120,000 ppbv;
- Ethylbenzene was above the screening level of 220 ppbv in one sample at a concentration of 970 ppbv;
- Tetrachloroethene (PCE) was detected in one sample above the screening level of 59 ppbv at a concentration of 85 ppbv;
- TCE was detected above the screening level of 3.8 ppbv in six samples with values ranging from 4.5 to 82,000 ppbv;
- 1,2,4-Trimethylbenzene was detected in two samples above the screening level of 14.6 ppbv at a maximum concentration of 110 ppbv;
- Vinyl chloride was detected in two samples above the screening level of 62 ppbv with the highest concentration at 20,000 ppbv; and
- m,p-Xylene was detected in two samples above the screening level of 226 ppbv at concentrations of 290 and 1,500 ppbv.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

EPA initiated time-critical removal actions on June 14, 2013. Removal actions will include developing and implementing site plans, including a Work Plan, Health and Safety Plan, and Air Monitoring Plan; removing approximately 1,500 cubic yards of contaminated soil based on site assessment analytical results; backfilling excavated areas with clean impermeable fill; conducting vapor intrusion assessment at up to 50 nearby properties within ¼ mile of the site; performing vapor intrusion mitigation at residential properties where assessment results show that relevant indoor air action levels are exceeded in accordance with current EPA guidance; and consolidating and packaging hazardous substances, pollutants and contaminants for transportation and off-site disposal in accordance with the EPA Off-Site Rule, 40 CFR § 300.440.

2.1.2 Response Actions to Date

From June 14-24, 2013, EPA conducted the following activities:

- Used a global positioning system (GPS) to locate soil borings;
- Conducted an extent-of-contamination survey on-site by drilling 50 soil borings in 25-foot by 25-foot grids and screening them with a photo-ionization detector (PID) and x-ray fluorescence (XRF) detector:
- Submitted 40 soil samples for RCRA metals analysis, including duplicates;
- Submitted one soil samples for disposal analysis;
- Drilled and collected samples from 24 soil gas locations; and
- Erected a perimeter fence.

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

Based on available parties, the PRPs are do not have the financial resources to conduct the work. The former owner is in Chapter 7 receivership.

2.1.4 Progress Metrics

Waste Stream	Medium	Quantity	Manifest #	Treatment	Disposal
Pending					

2.2 Planning Section

2.2.1 Anticipated Activities

The next sections discuss EPA's planned response activites and next steps.

2.2.1.1 Planned Response Activities

EPA and its contractors will return to the site on July 8th. Activities will include completing site setup; excavating contaminated soil based on the results from the extent-of-contamination survey; and evaluate soil gas analytical results to determine areas for vapor intrusion assessment.

2.2.1.2 Next Steps

EPA will dispose of soil in accordance with the Off-Site Rule. Additionally, EPA will begin community engagement for vapor assessment and mitigation.

2.2.2 Issues

None

2.3 Logistics Section

EPA's contractors are providing logistical support.

2.4 Finance Section

No information available at this time.

2.5 Other Command Staff

2.5.1 Safety Officer

On-Scene Coordinator (OSC) Shelly Lam is the safety officer for time-critical removal actions.

2.5.2 Liaison Officer

Not applicable (NA)

2.5.3 Information Officer

NA

3. Participating Entities

3.1 Unified Command

NA

3.2 Cooperating Agencies

Cooperating agencies include the City of Muncie, Delaware County Health Department, and IDEM.

4. Personnel On Site

The following numbers of personnel were on-site during the reporting period.

Agency # Personnel

EPA 1 START 1 ERRS 4

5. Definition of Terms

CERCLA Comprehensive Environmental Response, Compensation, and Liability Act

bgs below ground surface DCE Dichloroethene

EPA Environmental Protection Agency

ERRS Emergency and Rapid Response Services

ESA Environmental Site Assessment
GPS Global Positioning System
IDCL Industrial Default Closure Level

IDEM Indiana Department of Environmental Management

mg/L milligrams per liter

NA Not applicable

OSC On-Scene Coordinator

PCE Tetrachlorethene

PID Photo-Ionization Detector

PID Photo-ionization De

PolRep Pollution Report

ppbv parts per billion by volume PRP Potentially Responsible Party

RCRA Resource Conservation and Recovery Act

RML Removal Management Leve

START Superfund Technical Assessment and Response Team

TCE Trichloroethene

TCLP Toxicity Chracteristic Leachate Procedure

ug/m3 micrograms per cubic meter VISL Vapor Instrusion Screening Level VOC Volatile Organic Compound

XRF X-Ray Fluorescence

6. Additional sources of information

6.1 Internet location of additional information/report

Refer to www.epaosc.org/kiserplating for additional information.

6.2 Reporting ScheduleThe OSC will submit the next Pollution Report (PolRep) the week of July 8th.

7. Situational Reference Materials

NA