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

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region V

Subject: **POLREP #5**
Progress PolRep
Kiser Plating
B5XK
Muncie, IN
Latitude: 40.1898450 Longitude: -85.3829730

To:
From: Shelly Lam, On-Scene Coordinator
Date: 8/16/2013
Reporting Period: August 5 - 16, 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, J.F. Kiser Company Plating Works, and Shear-Line Golf. Former operations included plating silver tableware, gold and silver jewelry, nickel golf clubs, and military parts for World Wars I and II, the Korean War, and the Vietnam War. Muncie Heat Light and Power Company, Muncie Electric Light Company, a hay warehouse, and Muncie Bagging Company also operated at the property 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

The Environmental Protection Agency (EPA) conducted a site assessment and 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 [VI]). Potential human receptors include trespassers, future workers and nearby residents

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

See previous Pollution Reports (PolRep) for information on assessment results.

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 Code of Federal Regulations (CFR) § 300.440.

2.1.2 Response Actions to Date

From August 5-16, 2013, EPA conducted the following activities:

- Continued excavating contaminated soil;
- Conducted dust suppression during excavation;
- Conducted air monitoring for volatile organic compounds (VOC) using AreaRAEs and particulates using DataRAMs connected to the VIPER wireless monitoring system;
- Shipped soil off-site for disposal;
- Collected 32 confirmation soil samples;
- Uncovered an area where construction and demolition debris, along with plating process equipment, had been buried;
- Discovered two 24-inch diameter vertical pipes that extended to approximately 14 feet below ground surface that were intially suspected to be septic tank risers. No septic tank was discovered and the pipes were not connected to anything;
- Screened blue-green material in on-site clay tile sewer line with an x-ray fluorescence (XRF) detector. The XRF detected chromium at 49,000 parts per million (ppm) and copper at 10%; and
- Maintained site security during off-site hours.

EPA collected soil confirmation samples from completely excavated grids. Samples were collected from the floor and walls of each grid. Samples for metals analysis were composited from five locations. Grab samples for volatile organic compound (VOC) analysis were collected from the center of the floor or wall. EPA received sample results from 38 grids. The table below provides maximum concentrations for the grids compared to EPA's Removal Management Levels (RML) for commercial/industrial soil and the Indiana Department of Environmental Management's (IDEM) Commercial/Industrial Direct Contact Soil Exposure Levels. EPA conducted overexcavation in three grids - AC, BC, and FE - where hexavalent chromium concentrations were above exposure levels. EPA did not overexcavate where arsenic concentrations exceeded exposure limits because the arsenic was in the range of concentrations naturally occurring in area soil. A map showing grid locations is posted to www.epaosc.org/kiserplating.

Analyte	Maximum Concentration	IDEM Industrial Exposure Level	Industrial RML	Units
Metals				
Arsenic	22.8	16	160	mg/kg
Barium	783	100,000	570,000	mg/kg
Cadmium	98.5	800	2,400	mg/kg
Chromium	746			mg/kg
Chromium, Hexavalent	**153**	**56**	560	mg/kg
Lead	254	1,300	800	mg/kg
Mercury	1.3	3.1	130	mg/kg
Silver	3.5	5,100	15,000	mg/kg
VOCs				
cis-1,2-Dichloroethene	9.5	2,000,000	6,100,000	ug/kg
Methylene Chloride	21.5	530,000	9,200,000	ug/kg
Tetrachloroethene	9.4	26,000	1,200,000	ug/kg
Trichloroethene	2,360	20,000	60,000	ug/kg

mg/kg - milligrams per kilogram
ug/kg - micrograms per kilogram

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

Based on available information, the PRPs 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*
Contaminated soil	Solid	3450.47 tons	Various	None	Jay County Landfill

2.2 Planning Section

2.2.1 Anticipated Activities

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

2.2.1.1 Planned Response Activities

During the next reporting period, EPA will begin backfilling grids and conduct site restoration. EPA will also begin VI assessment. The site will be shut down on August 30th.

2.2.1.2 Next Steps

EPA will initiate VI 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. EPA approved the Health and Safety Plan (HASP) and contractors are attending daily health and safety meetings.

2.5.2 Liaison Officer

Not applicable (NA)

2.5.3 Information Officer

EPA has scheduled a community meeting for the evening of August 21st at the Maring-Hunt Library from 6-8 p.m. EPA staff will provide the residents of Muncie updated information on testing and next steps at the site. EPA will provide information about the vapor intrusion study and discuss community concerns.

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	3

5. Definition of Terms

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 and Safety Plan
IDEM	Indiana Department of Environmental Management
mg/kg	milligrams per kilogram
NA	Not applicable
OSC	On-Scene Coordinator
PCE	Tetrachlorethene
PolRep	Pollution Report
ppm	parts per million
PRP	Potentially Responsible Party
RML	Removal Management Level
START	Superfund Technical Assessment and Response Team
TCE	Trichloroethene

TDD	Technical Direction Document
ug/kg	micrograms per kilogram
VI	Vapor Intrusion
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 Schedule

The OSC will submit the next PolRep when site restoration is complete.

7. Situational Reference Materials

NA