

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Hard Chrome Plating Site - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region V

Subject: POLREP #2
Progress
Hard Chrome Plating Site

Grand Rapids, MI
Latitude: 42.9356380 Longitude: -85.6435440

To:
From: Elizabeth Nightingale, OSC
Date: 12/14/2015
Reporting Period: 12/7/15-12/11/15

1. Introduction

1.1 Background

Site Number:	C57Z	Contract Number:	
D.O. Number:		Action Memo Date:	10/5/2015
Response Authority:	CERCLA	Response Type:	Time-Critical
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	11/30/2015	Start Date:	11/30/2015
Demob Date:		Completion Date:	
CERCLIS ID:	MIN000505853	RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

Time Critical Removal Action

1.1.2 Site Description

The site is a former chemical plating facility, currently owned by the Kent County Land Bank. When the property tax reverted, historically accumulated plating wastes were abandoned in the building, and discovered by the Land Bank.

1.1.2.1 Location

The site is located at 1516 Blaine Avenue SE, Grand Rapids, Kent County, Michigan 49507. The site totals approximately 1/4 acre, and contains a one story industrial building and an open lot. The site was recently occupied by the Hard Chrome Plating and HCP Finishing LLC companies, and tax reverted to the Kent County Land Bank in 2014.

1.1.2.2 Description of Threat

See POLREP 1.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

See POLREP 1.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

2.1.2 Response Actions to Date

2.1.2.1 Actions During Reporting Period

Over the week beginning the December 7, 2015 work focused primarily on the following activities:

- Revising the site health and safety plan
- Finalizing the site air monitoring plan and implementing air monitoring
- Continuing to clear non-hazardous debris from within the building
- Cleaning areas for dress out and decontamination lines
- Establishing the exclusion and contamination reduction zones
- Beginning work to stage containers, sample containers and categorize container contents
- Continuing work to decontaminate building floors

Additionally, the ERRS chemist and three members of the USCG Atlantic Strike Team mobilized to the site this week. The Strike Team is assisting with air monitoring and removal oversight. We also mobilized the EPA air trailer to the site to refill SCBA bottles.

2.1.2.2 Air Monitoring

Every day that cleanup activity work will be ongoing, air monitoring will be conducted to ensure public and worker safety. Chemical hazards due to fugitive emissions from removal activities are anticipated to be low since the crew will employ administrative and engineering controls to minimize fugitive emissions and particulates that migrate off-site.

Meteorological data will be obtained daily from the NWS website that provides current weather conditions and documented in the site logbook.

A website has been established to view the current and past air monitoring data for the site. To view the data go to the web address: vipr.ert.org. You have to create a login on your first visit to the site. Once logged in, go to the R05 Hard Chrome Metals Deployment to view site data.

Particulate Air Monitoring:

Datarams (DR4) are deployed daily at three fixed locations in each direction along the site perimeter boundaries where off-site receptors are most at risk to exposure from fugitive emissions, and at one location within the building in the work zone. Real-time PM-10 particulate data is transmitted back to the site command post where it is monitored continuously.

The perimeter action level for PM-10 particulates has been set at 150 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$), averaged over the work day. The work zone action level is 2.5 milligrams per cubic meter (mg/m^3) averaged over the work day. Should a DR4 unit detect sustained particulate concentrations above the action levels, the source of emissions will be investigated, and administrative and/or engineering controls will be initiated to reduce the particulate emissions.

During the week of December 7, 2015, no exceedances of the perimeter or work zone action levels (calculated as work day averages) for particulates were detected.

MultiGas Air Monitoring:

RAE Systems, Inc. AreaRAE multi-gas monitors are being deployed in the work zone in the building and at 3 perimeter locations during any chemical handling. The AreaRAE multi-gas monitors will be used to monitor oxygen (O_2) in percent, hydrogen sulfide (H_2S) in ppm, hydrogen cyanide (HCN) in ppm, VOCs (ppm), and percent lower explosive limit (LEL). Real-time multigas data are transmitted back to the site command post where they are monitored continuously.

The perimeter action levels are as follows:

H_2S = 0.5 ppm

%LEL = >5%

VOCs \geq 5 ppm for 5 minutes

HCN = 2.3 ppm

% O_2 – Less than 19.5% or greater than 23.5%

Work zone action levels are available in the Air Monitoring Plan (see documents section of epaossc.org/hardchromeplating).

Several MultiRAE Plus 5-gas monitors (loaded with sensors for detection of oxygen, carbon monoxide, hydrogen sulfide, LEL, VOCs, and two with HCN) will be used to monitor for carbon monoxide (CO) in ppm, and periodically spot check AreaRAE data. Ammonia (NH_3) and HCN GasAlert monitors will also be used continuously in the work zone during chemical handling.

Over this reporting period, we identified a problem with several sensors in the AreaRAEs, which were resulting in readings we were unable substantiate with other equipment. We replaced numerous sensors and modified the calibration methods, and it appears that we have now rectified the problems.

Hydrochloric Acid Monitoring

On December 11, we deployed 4 Honeywell Analytics Single Point Monitors (SPM Flex) to conduct continuous monitoring of HCL in the contamination reduction zone and along the site perimeter. Prior to deployment of the SPM Flex units, we conducted regular monitoring of HCL with Draeger Chipsets at the perimeter monitoring stations and in the contamination reduction zone. The crew is also using pH paper for acid monitoring in the work zone. The perimeter action level for HCL = 1.8 ppm. No detections were identified during this monitoring during this reporting period.

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

General notice letters were issued to former owners of the property. Investigation is ongoing.

2.1.4 Progress Metrics

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>
Solid	Non-Hazardous Debris	8 Tons	n/a		x

2.2 Planning Section

2.2.1 Anticipated Activities

2.2.1.1 Planned Response Activities

See POLREP 1.

2.2.1.2 Next Steps

Over the next week, we will continue work to stage containers, sample containers, categorize wastes and decontaminate building floors.

Anticipated **on site work schedule** for upcoming week: Monday 12/14/15 through Friday 12/18/15 8:00 AM - 6:00 PM. Security on site during non working hours.

2.2.2 Issues

None at this time.

2.3 Logistics Section

ERRS is managing site logistics.

2.4 Finance Section

No information available at this time.

2.5 Other Command Staff

2.5.1 Safety Officer

OSC is serving in this role.

2.5.2 Liaison Officer

OSC is serving in this role.

2.5.3 Information Officer

OSC is serving in this role.

3. Participating Entities

3.1 Unified Command

3.2 Cooperating Agencies

Kent County Land Bank
MDEQ

4. Personnel On Site

12/7/15 - 12/8/15

EPA: 1
START: 1
ERRS: 7
USCG AST: 3

12/9/15- 12/10/15

EPA: 2
START: 1
ERRS: 8 (Incl. EQM Air Trailer Transport)

USCG AST: 3

12/11/15

EPA: 1

EPA ERT: 2

START: 1

ERRS: 7

USCG AST: 3

5. Definition of Terms

ATSDR	Agency for Toxic Substances and Disease Registry
BZ	Breathing Zone
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System
DNR	Department of Natural Resources
EPA	Environmental Protection Agency
ERNS	Emergency Response Notification System
ERRS	Emergency and Rapid Response Service
MDEQ	Michigan Department of Environmental Quality
NCP	National Oil and Hazardous Substance Pollution Contingency Plan
mg/m3	milligrams per cubic meter
NOAA	National Oceanic and Atmospheric Administration
NPL	National Priorities List
NRC	National Response Center
OSC	On Scene Coordinator
PPE	Personal Protective Equipment
PPM	Parts per million
RCRIS	Resource Conservation and Recovery Act Information System
RP	Responsible Party
RRT	Regional Response Team
START	Superfund Technical Assessment and Response Team
ug/m3	micrograms per cubic meter
US FWS	United States Fish and Wildlife Service
USCG	United States Coast Guard Atlantic Strike Team
AST	
VOC	Volatile Organic Compound

6. Additional sources of information

6.1 Internet location of additional information/report

www.epaosc.net/hardchromeplating

and

viper.ert.org. Once logged in, go to the R05 Hard Chrome deployment to view site data.

6.2 Reporting Schedule

POLREPs will typically be issued weekly over the course of the removal action.

7. Situational Reference Materials

No information available at this time.