

United States Environmental Protection Agency
Region V
POLLUTION REPORT

Date: Wednesday, November 28, 2007

From: Steven Renninger

To:	Randy Watterworth, OEPA	Dave Combs, Ohio EPA
	Rafael Gonzalez, EPA-OPA	Tracy Johnson, EPA
	Kevin Clouse, Ohio EPA	Jim Crawford, OEPA
	Dale Farmer, Ohio EPA	Distribution List, National Response Center
	Bob Frey, Ohio Department of Health	Victor Dvorak, EPA
	Jason El-Zein, EPA 5	Duane Herth, Cincinnati Fire Department
	Mike Snowden, LEPC	Arlene Lilly, EPA
	Bonnie Phillips, Office of Environmental Quality	Chris Hall, Cincinnati MSD
	Jim Weast, Cincinnati MSD	Beverly Head, Cincinnati MSD
	David Chung, EPA	Edward Frambes, LEPC
	mark durno, EPA 5 Acting Chief RS-1	Ralph Dollhopf, EPA 5

Subject: FINAL POLREP
Schulte Metals Site
4909 Charlemar Drive, Cincinnati, OH
Latitude: 39.1586000
Longitude: -84.4117000

POLREP No.:	5	Site #:	B5HG
Reporting Period:	October 1 through November 28, 2007	D.O. #:	030228.0078
Start Date:	6/1/2007	Response Authority:	CERCLA
Mob Date:	6/1/2007	Response Type:	Time-Critical
Demob Date:	11/20/2007	NPL Status:	Non NPL
Completion Date:	11/28/2007	Incident Category:	Removal Action
CERCLIS ID #:	OHN 000 510 199	Contract #	68-S5-03-06
RCRIS ID #:			

Site Description

The Schulte Metals Site is located at 4909 Charlemar Drive in Cincinnati, Hamilton County, Ohio. The three-acre Site is located in a mixed residential, commercial, and light industrial area, and is less than 200 feet from residential areas. The Site is bordered to the north and west by residential properties, and to the east and south by commercial and light industries. The Site includes one large building that contained plating lines, a hand-line plating area, a laboratory, a waste treatment area, offices, a machine shop area, and numerous drum storage areas. U.S. EPA and WESTON START observed approximately three hundred 55-gallon drums containing various chemicals, 144 plating tanks, and several hundred smaller containers with varying chemical waste capacities.

The Schulte Corporation, the business's operating name from 1958 to 1992, later known as the Schulte Metals Finishing Company (SMFC), conducted copper cyanide, chrome, and nickel plating at the Site. The facility conducted plating operations for plumbing fixtures and specialty automotive parts from 1958 until December 2006.

According to Cincinnati Police Department (CPD) records, the Site has a history of vandalism and trespassing between 2002-2006.

SMFC ceased operations in December 2006 without notifying the Cincinnati Municipal Sewer District (CMSD). On March 8, 2007, CMSD and the Ohio Environmental Protection Agency (Ohio EPA) inspected the Site and observed that most of the plating tanks were empty, and there were numerous drums containing hazardous waste.

On March 30, 2007, CMSD, Ohio EPA, and the CFD inspected the Site in response to a complaint that

plating tanks were being emptied during the auction. The CFD vacated the premises and secured the building. All utilities were discontinued, and CMSD, with SMFC's permission, placed a sewer plug into the Site outflow sewer line.

In a letter dated April 5, 2007, the Ohio EPA requested assistance from the U.S. EPA Region V Superfund Division in conducting a potential time-critical removal action involving several hundred 55-gallon drums and numerous tanks containing plating waste.

On April 16, 2007, U.S. EPA, Ohio EPA and CFD conducted a site reconnaissance inside the facility.

U.S. EPA observed a Laboratory inside the facility, which contained numerous laboratory chemicals such as hexane, various poisons, benzyl chloride, ammonium chloride, nitric acid, acetic acid, sulfuric acid, and various containers labeled as 'containing cyanide'.

The Hazardous Waste Storage Area is located northwest of the Laboratory. In this area of the Site, U.S. EPA observed approximately 200 chemical-containing 55-gallon drums and containers labeled as: hydrochloric acid, sulfuric acid, sodium hypochlorite, copper solutions, nickel sulfide/brightener, cyanide copper, and chrome strip. The drums were staged in rows. Ohio EPA stated that some of the drums were filled with spent plating solutions that the Site owner emptied from the process plating tanks.

South of Dry Chemical Location A is Liquid Chemical Location B. This area contained approximately 70 containers with volumes of 55-gallons or less labeled as petroleum/lubricants, chrome, and liquid copper sulfate.

East of the Liquid Chemical Storage Room are the Plating Tank Process Lines. Approximately 100 plating tanks in various levels of deterioration were present. Some of the plating tanks were full of plating solutions.

U.S. EPA observed a 1,000-gallon plating tank that was approximately 50 percent full with a cyanide label and white crystals. The plating tank had plastic wrap over the top, either in an attempt to prevent vapors from leaving the tank or rainwater from entering the tank. U.S. EPA also observed a plating tank with a nitric acid label, approximately 25 feet from the plating tank, containing cyanide. The plating tank containing the green-colored, nitric acid liquid had a volume of approximately 500 gallons and was completely full.

Southwest of the Plating Tank Process Lines is the Waste Treatment Area. This area contained approximately 15 tanks and twelve 55-gallon drums and labeled as sulfuric acid, nickel, magnesium bisulfite solution, sodium hypochlorite, and nitric acid.

In the far southeastern corner of the building is the Cyanide Storage Area. This area contained 10 drums and containers with volumes of 40 gallons or less and labeled as sodium cyanide, zinc cyanide, copper cyanide, and potassium cyanide.

U.S. EPA observed standing water in many areas throughout the facility. The structural integrity of the building roof is questionable due to the evidence of numerous leaks. The potential is high for rain to enter the building through the roof leaks and cause the plating tanks to fill and possibly overflow.

On April 23, 2007, U.S. EPA conducted a site assessment at the Site. During site assessment activities, U.S. EPA tasked WESTON START to collect 22 samples from drums, tanks, and containers. Analytical results indicated the following:

- Four liquid samples showed the hazardous characteristic of ignitability, with flash points between 65 °F and 71 °F;
- Seven liquid samples showed the hazardous characteristic of corrosivity (acid), with pH levels between 0.0 and 0.42 standard units;
- One liquid sample showed the hazardous characteristic of corrosivity (caustic), with a pH level of 14.0 standard units;
- Six samples showed the hazardous characteristic reactivity, with total cyanide concentrations of 1,080 mg/L and 37,500 to 294,000 mg/kg; and
- One sample showed the hazardous characteristic of toxicity, with a TCLP chromium concentration of 4,000 mg/L and a TCLP lead concentration of 14.0 mg/L.

Based on analytical results and Site conditions during the site assessment, the Site meets the criteria for a removal action pursuant to 40 CFR 300.415(b)(2). The chemicals detected at the Site pose an imminent health threat and present a danger to the public and environment.

June 1-6, 2007, the EPA removal action was initiated with mobilization of personnel and equipment. A Site Health & Safety Plan and Site Emergency Contingency Plan was finalized and air monitoring activities were initiated. START completed a site waste inventory. Drum staging was initiated by ERRS.

From June 6 - July 13, 2007, the EPA removal action continued with sampling of wastestreams, packaging of lab chemicals, removal of plating vats, bulking of liquid wastestreams, and air monitoring.

From July 16 through August 10, 2007, the EPA removal action continued with the dismantling of the main plating line, cleaning out pits, bulking and off-site disposal of hazardous wastestreams, and air monitoring.

From August 13 through September 28, 2007, the EPA removal action continued with the dismantling of the main plating line, cleaning out pits, bulking and off-site disposal of hazardous wastestreams, and air monitoring.

Current Activities

Week of October 1 through October 4, 2007 – The following work was completed:

- ERRS continued loading scrap metal into rolloff boxes, non-hazardous debris into Rumpke rolloff boxes and hazardous debris into plastic-lined rolloff boxes. Hazardous debris consists of contaminated tanks, metal piping, empty drums, PPE, etc.
- ERRS cutting up metal tanks with chop saws and using two torches to cut up and dismantle the main plating line. ERRS using a manlift to access and remove heavily contaminated overhead process piping in ceiling rafters.
- Two rolloff boxes (40 yd3) containing hazardous debris was transported for off-site stabilization and treatment disposal to Environmental Quality, Belleville, Michigan.
- ERRS bulked cyanide and chrome-contaminated floor sweepings into poly drums.
- START conducted air monitoring using AreaRAEs.

Week of October 9 through October 12, 2007 – The following work was completed:

- ERRS continued loading scrap metal into rolloff boxes, non-hazardous debris into Rumpke rolloff boxes and hazardous debris into plastic-lined rolloff boxes. Hazardous debris consists of contaminated tanks, metal piping, empty drums, PPE, etc.
- ERRS cutting up metal tanks with chop saws and using two torches to cut up and dismantle the main plating line. ERRS using a manlift to access and remove heavily contaminated overhead process piping in ceiling rafters.
- One rolloff box (20 yd3) containing hazardous debris was transported for off-site stabilization and treatment disposal to Environmental Quality, Belleville, Michigan.
- START conducted air monitoring using AreaRAEs.
- Two 55-gallon drums containing hydraulic oil was transported to EEL, Cincinnati, Ohio for off-site disposal.

Week of October 15 through October 19, 2007 – The following work was completed:

- ERRS continued loading scrap metal into rolloff boxes, non-hazardous debris into Rumpke rolloff boxes and hazardous debris into plastic-lined rolloff boxes. Hazardous debris consists of contaminated tanks, metal piping, empty drums, PPE, etc.
- ERRS cutting up metal tanks with chop saws and using torches to cut up and dismantle the main plating line. ERRS using a manlift to access and remove heavily contaminated overhead process piping in ceiling rafters.
- Two rolloff boxes (40 yd3) containing hazardous debris was transported for off-site stabilization and

treatment disposal to Environmental Quality, Belleville, Michigan.

- START conducted air monitoring using AreaRAEs.
- Approximately 24 metal tanks remained to be cut up for off-site disposal.

Week of October 22 through October 26, 2007 – The following work was completed:

- ERRS continued loading scrap metal into rolloff boxes, non-hazardous debris into Rumpke rolloff boxes and hazardous debris into plastic-lined rolloff boxes. Hazardous debris consists of contaminated tanks, metal piping, empty drums, PPE, etc.
- ERRS cutting up metal tanks with chop saws and using torches to cut up and dismantle the main plating line. ERRS using a manlift to access and remove heavily contaminated overhead process piping in ceiling rafters.
- Three rolloff boxes (60 yd³) containing hazardous debris was transported for off-site stabilization and treatment disposal to Environmental Quality, Belleville, Michigan.
- START conducted air monitoring using AreaRAEs.
- The owner of the facility was on site to collect paperwork and files in the main office.

Week of October 29 through November 2, 2007 – The following work was completed:

- ERRS continued loading scrap metal into rolloff boxes, non-hazardous debris into Rumpke rolloff boxes and hazardous debris into plastic-lined rolloff boxes. Hazardous debris consists of contaminated tanks, metal piping, empty drums, PPE, etc.
- ERRS cutting up metal tanks with chop saws and using torches to cut up and dismantle the main plating line. ERRS using a manlift to access and remove heavily contaminated overhead process piping in ceiling rafters.
- Two rolloff boxes (40 yd³) containing hazardous debris was transported for off-site stabilization and treatment disposal to Environmental Quality, Belleville, Michigan.
- START conducted air monitoring using AreaRAEs.

Week of November 5 through November 9, 2007 – The following work was completed:

- ERRS continued loading scrap metal into rolloff boxes, non-hazardous debris into Rumpke rolloff boxes and hazardous debris into plastic-lined rolloff boxes. Hazardous debris consists of contaminated tanks, metal piping, empty drums, PPE, etc.
- ERRS completed cutting up metal tanks with chop saws and completed dismantling the main plating line.
- ERRS using a manlift to access and remove heavily contaminated overhead process piping in ceiling rafters.
- Sixteen (16) drums containing cyanide and chrome-contaminated floor debris were transported to Heritage Environmental for off-site disposal.

Week of November 12 through November 16, 2007 – The following work was completed:

- ERRS continued loading scrap metal into rolloff boxes, non-hazardous debris into Rumpke rolloff boxes and hazardous debris into plastic-lined rolloff boxes. Hazardous debris consists of contaminated tanks, metal piping, empty drums, PPE, etc.
- ERRS using a manlift to access and remove heavily contaminated overhead process piping in ceiling rafters.

- Two rolloff boxes (40 yd3) containing hazardous debris were transported for off-site stabilization and treatment disposal to Environmental Quality, Belleville, Michigan.
- ERRS began decontaminating the facility concrete flooring with power washers.
- ERRS began removing the two metal baghouse structures in the rear of the facility.

Week of November 19 through November 21, 2007 – The following work was completed:

- ERRS completed loading scrap metal into rolloff boxes, non-hazardous debris into Rumpke rolloff boxes and hazardous debris into plastic-lined rolloff boxes. Hazardous debris consists of contaminated tanks, metal piping, empty drums, PPE, etc.
- ERRS completed removing heavily contaminated overhead process piping in ceiling rafters.
- ERRS completed decontaminating the facility concrete flooring with power washers. Approximately 2,000 gallons of decontamination water was placed into a vacuum truck and then into a tanker for off-site disposal.
- One rolloff box (20 yd3) containing hazardous debris was transported for off-site stabilization and treatment disposal to Environmental Quality, Belleville, Michigan.
- ERRS completed removing the two metal baghouse structures in the rear of the facility.
- All office and equipment trailers were disconnected and demobilized. Site security terminated.
- EPA, START and ERRS personnel demobilized from the site.

Planned Removal Actions

None

Next Steps

On November 30, 2007, OSC Renninger will conduct a final site inspection with the Cincinnati Fire Department, City of Cincinnati, MSD, and the site owner.

Key Issues

Time-critical removal activities are completed.

Disposition of Wastes

Waste Stream	Quantity	Manifest #	Disposal Facility
Floor Sweepings (cyanide and chrome)	16 drums		Heritage Environmental Cincinnati, Ohio
Hazardous Liquid (Chrome)	6,425 gallons		Environmental Quality Co. Belleville, Michigan
Hydraulic Oil	2 drums (110 gallons)		EEI Cincinnati, Ohio
Cyanide Solids	24 drums		Heritage Environmental Cincinnati, Ohio
Acid Liquid	6 drums (330 gallons)		EQ Detroit, Inc. Detroit, Michigan
Acid Solid	1 drum		EQ Detroit, Inc. Detroit, Michigan
Chromic Acid Liquid	50 drums		Michigan Disposal Waste Treatment Plant Belleville, Michigan
Chromic Acid Solids	4 drums		Environmental Quality Co.

			Belleville, Michigan
Caustic Liquid	11 drums		Environmental Quality Co. Belleville, Michigan
Caustic Solids	6 drums		Environmental Quality Co. Belleville, Michigan
Plating Sludge	127 drums		Environmental Quality Co. Belleville, Michigan
Basic Chrome Liquid	4,706 gallons		Heritage Environmental Cincinnati, Ohio
Cyanide Liquid	6,925 gallons		Heritage Environmental Cincinnati, Ohio
Hazardous Debris (F008) (vats, pipe, MT drums, PPE, etc)	24 rolloff boxes (432 cubic yards)		Environmental Quality Co. Belleville, Michigan
Lab packs (includes lab chemicals)	56 lab packs		EEI Cincinnati, Ohio
Sodium Cyanide powder	3 drums		EEI Cincinnati, Ohio
Copper Cyanide powder	2 drums		EEI Cincinnati, Ohio
Zinc Cyanide powder	1 drum		EEI Cincinnati, Ohio
Oily Liquid	2 drums		EEI Cincinnati, Ohio
Chromic Acid flakes	2 drums		EEI Cincinnati, Ohio
Peroxide Liquid	2 drums		EEI Cincinnati, Ohio
Non-hazardous debris	19 rolloff boxes		Rumpke Cincinnati, Ohio
Cylinders	18 each		Weiler and Valley National Gases Cincinnati, Ohio
Batteries	15 each		Garden City Iron & Metal Cincinnati, Ohio
Scrap Metal	11 rolloff boxes (70.9 tons)		Garden City Iron & Metal Cincinnati, Ohio

response.epa.gov/schultemetals