United States Environmental Protection Agency
Region V
POLLUTION REPORT

Date: Tuesday, July 10, 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: POLREP #2
Schulte Metals Site
4909 Charlemar Drive, Cincinnati, OH
Latitude: 39.1586000
Longitude: -84.4117000

POLREP No.:	2	**Site #:**	B5HG
Reporting Period:	June 4 through July 10, 2007	**D.O. #:**	030228.0078
Start Date:	6/1/2007	**Response Authority:**	CERCLA
Mob Date:	6/1/2007	**Response Type:**	Time-Critical
Demob Date:		**NPL Status:**	Non NPL
Completion Date:		**Incident Category:**	Removal Action
CERCLIS ID #:		**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 contains 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. The following incidents have occurred at the Site:

• On September 27, 2002, CPD filed an incident report for the theft of 76 pounds of potassium cyanide from the Site.
• On October 12, 2002, CPD filed an incident report for the vandalism and theft of nickel metal from chemical vats at the Site.
• On March 26, 2007, CPD filed an incident report for the theft of computer equipment at the Site.

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. The Ohio EPA advised SMFC not to sell any plating tanks that were not properly decontaminated at an equipment auction to be held on March 28, 2007.

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 4, 2007, Ohio EPA documented the Cessation of Regulated Operations at SMFC as of March 1, 2007. Ohio Administrative Code defines "Cessation of Regulated Operations" as the discontinuation or termination of regulated operations. In the April 4, 2007, letter, Ohio EPA requested a plan from SMFC to deal with the removal of regulated materials and hazardous wastes that remained in storage at the Site within 10 days.

In a letter dated April 5, 2007, 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.

In the Machine Shop Area, U.S. EPA observed numerous locations where the roof was leaking and the owner had placed tarps to attempt to capture the rainwater. This area contained containers of solvents and oils.

South of the Machine Shop Area is Dry Chemical Location A, which contained two 55-gallon, stainless-steel drums labeled nitric acid, six drums labeled nickel carbonate, one 20-gallon drum labeled chromic acid, one drum of synthetic oil, nine 55-gallon drums of parts stripper, and 10 drums of various plating stripping solutions.

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.

South of Liquid Chemical Location B is a storage room labeled Liquid Chemical Storage Room. The storage room contained approximately 75 containers with volumes of 55-gallons or less and labeled as sulfuric acid, ammonium hydroxide, aqua ammonia, nickel brightener and stripper, hydrogen peroxide, and other corrosive chemicals with high and low pH values.

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 ceiling vent fan, directly above the plating line, which was open to the outside elements and would allow rainwater to enter the building.

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 ºF and 71 ºF;
• 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 intiated. START completed a site waste inventory. Drum staging was initiated by ERRS.

Current Activities
Week of June 4 through June 8, 2007 – The following work was completed:

• ERRS completed staging all drums and containers (with a volume greater than 5-gallons) in the northern section of the facility to prepare for sampling.

• ERRS completed staging all laboratory chemicals and containers with volumes of 5-gallons or less to prepare for lab-packing.

• Weiler (local propane gas company) was on site and collected 12 propane fuel cylinder, the propane fuel cylinder cage and an acetylene gas cylinder.

Week of June 11 through 15, 2007 – The following work was completed:

• ERRS continued loading scrap metal into rolloff boxes for recycling, non-hazardous debris into Rumpke rolloff boxes and hazardous debris into a plastic-lined rolloff box. Hazardous debris consists of cut-up vats, metal piping, empty drums, PPE, etc for disposal as F008 waste at a hazardous waste landfill.

• Valley National Gases on site and collected two oxygen gas cylinders, two acetylene gas cylinders and one argon gas cylinder.

• ERRS completed sampling all drums, tanks and containers on site. Approximately 253 drums/containers and 82 tanks were sampled in Level B PPE.

• START and ERRS initiated haz-catting all drum, container and tank samples.

Week of June 18 through 22, 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 a plastic-lined rolloff box. Hazardous debris consists of cut-up vats, metal piping, empty drums, PPE, etc.

• One rolloff box (18 yd3) containing hazardous debris was transported for off-site stabilization and treatment disposal to Environmental Quality, Belleville, Michigan.

• START completed hazcatting all drum/container and tank samples.

• ERRS T&D Coordinator segregated all samples into its respective wastestreams. Eleven wastestreams were established (approximate wastestream volume in parentheses):

1) Acid liquid (575 gallons)
2) Acid solid (95 gallons)
3) Hazardous liquid- Chrome (7,200 gallons)
4) Base-neutral solid (1,900 gallons)
5) Caustic liquid (1,100 gallons)
6) Caustic solid (350 gallons)
7) Basic Chrome liquid (pH = 13) – (5,500 gallons)
8) Chromic acid liquid (3,000 gallons)
9) Cyanide solids (1,100 gallons)
10) Cyanide liquid (6,500 gallons)

• START completed composite wastestream samples for laboratory analysis.

Week of June 25 through June 29, 2007:

• No on-site work was scheduled. 24-hr security during this time period, including weekends

Week of July 2 through July 6, 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 a plastic-lined rolloff box. Hazardous debris consists of cut-up vats, metal piping, empty drums, PPE, etc.

• START using AreaRAEs to monitor the hot zone and perimeter for HCN, CO, LEL, VOCs and percent Oxygen.

• EEI mobilized to the site and began lab packing all laboratory chemicals.

Week of July 9 through July 13, 2007:

• ERRS continued loading scrap metal into rolloff boxes, non-hazardous debris into Rumpke rolloff boxes and hazardous debris into a plastic-lined rolloff box. Hazardous debris consists of cut-up vats, metal piping, empty drums, PPE, etc.

• ERRS using saw to cut apart contaminated metal grading surrounding the plating handline.

• ERRS initiated bulking the "Hazardous Liquid - Chrome" wastestream into the baker above-ground storage tank.

• START continued using AreaRAEs to monitor the indoor breathing zone and outside perimeter for CO, LEL, VOCs, HCN and percent oxygen.

• EEI mobilized to the site and completed lab packing all laboratory chemicals and all containers with volumes 5-gallons or less. A total of 56 lab packs were shipped for off-site disposal. Lab pack contents included all laboratory chemicals, two drums of chromic acid solids, two drums of hydrogen peroxide, two drums of oil, flammable liquids, acids, caustics, toxic liquids, poisons and six drums of cyanide.

Planned Removal Actions
Initiate consolidation of solid and liquid wastestreams into respective groupings for off-site disposal.

Continue off-shift site security during nights and weekends.

Continue removal of contaminated F008 waste.

No on-site work scheduled for July 11-13, 2007.

Next Steps
Continue cutting up and loading hazardous and nonhazardous debris for disposal.

Begin staging drums into appropriate wastestreams, in preparation for off-site disposal.

Continue air monitoring using AreaRAEs.

Continue Site security.

Key Issues
Abandoned hazardous waste on-site including cyanides, acids, caustics, and flammables.

Site emergency contingency plan finalized and distributed to local response agencies on June 1, 2007.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
ERRS - Cleanup Contractor	$650,000.00	$159,625.00	$490,375.00	75.44%
RST/START	$70,000.00	$21,600.00	$48,400.00	69.14%
Intramural Costs				
USEPA - InDirect	$20,000.00	$6,000.00	$14,000.00	70.00%
Total Site Costs	$740,000.00	$187,225.00	$552,775.00	74.70%

* 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.

Disposition of Wastes

Waste Stream	Quantity	Manifest #	Disposal Facility
Acid Liquid	6 drums	002861253	EQ Detroit, Inc. Detroit, MI
Acid Solids	1 drum	002861253	EQ Detroit, Inc. Detroit, MI
Chromic Acid Liquid	50 drums	002861254	Michigan Disposal Waste Treatment Plant (EQ) Belleville, MI
Haz Liquid - Chrome			
Caustic Liquid			
Caustic Solids			
Basic Chrome Liquid (pH = 13)			
Chromic acid solid			
Hazardous Debris (F008) - includes cut-up tanks, pipe, MT drums, PPE, etc.	100 cubic yards	on-going disposal	EQ Belleville, Michigan
Cyanide Liquid			
Cyanide Solids			
Plating sludge (includes sludge from pits and floor sweepings)			
Lab Packing (includes all laboratory chemicals, two drums of	56 lab	Completed	Environmental

hydrogen peroxide, two drums of chromic acid flakes, two drums of oil, six drums of cyanide and all containers with a volume of 5-gallons or less)	packs	on 7/10/07	Enterprises Incorporated Cincinnati, Ohio
Cylinders (acetylene, argon, oxygen and propane)	18 each	Completed on 6/8/07 and 6/11/07	Weiler and Valley National Gases Cincinnati, Ohio
Batteries	9 each	completed on 7/23/07	Garden City Iron & Metal Cincinnati, OH
Metal Scrap (non-hazardous)	42.7 tons	on-going disposal	Garden City Iron & Metal Cincinnati, Ohio
Non-hazardous debris (wood, boxes, trash, etc.)	160 cubic yards	on-going disposal	Rumpke Cincinnati, Ohio
Fire Extinguishers (old)			

response.epa.gov/schultemetals

POLREP #2 Last Updated 7/10/2007