United States Environmental Protection Agency Region V POLLUTION REPORT

Date: Wednesday, June 6, 2007

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Subject: Initial POLREP

Schulte Metals Site

4909 Charlemar Drive, Cincinnati, OH

Latitude: 39.1586000 Longitude: -84.4117000

POLREP No.: Site #: B5HG June 1-6, 2007 030228.0078 **Reporting Period: D.O.** #: **Response Authority: Start Date:** 6/1/2007 **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 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, 110 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, WESTON START, 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 and WESTON START 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:

- \bullet 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.

Current Activities

May 18, 2007- U.S. EPA Region V approved the action memo for the proposed removal action at the Schulte Metals Site.

June 1, 2007- U.S. EPA finalized a site emergency contingency plan and distributed to local responders (CFD, EMA). EPA removal contractors mobilized support zone equipment (office trailers). EPA and ERRS reviewed site wastestreams and made plans for waste staging, segregation, and sampling.

June 4, 2007- The site health and safety plan (HASP) was completed. Site security was initiated.

June 5, 2007- ERRS (EPA response contractor) mobilized personnel and equipment to the Site. All personnel signed the HASP. The following activities were initiated:

- ERRS initiated clearing non-hazardous trash/debris from the north wall of the facility, in preparation for the area to be used to stage drums and containers for sampling.
- ERRS set up its decontamination line and equipment supply area in the contaminate reduction zone.
- START initiated inventorying the laboratory chemicals. Once the laboratory chemicals were inventoried, ERRS transferred the chemicals to the staging area.

June 6, 2007- The following work was completed:

- ERRS began staging drums and containers (with volumes greater than 5-gallons) on the northern end of the facility.
- START and ERRS completed cleaning out the laboratory room and inventorying all of the chemicals. Approximately 400 containers were located within the laboratory.
- ERRS initiated staging containers with volumes less than 5-gallons adjacent to the laboratory chemicals in the northeastern part of the building. All of these containers will be lab packed transported for off-site disposal at a later date.

Planned Removal Actions

June 5-15, 2007- Complete drum staging, segregation, and sampling. Complete inventory of on-site wastes.

Continue Site security.

Next Steps

June 5-15, 2007- Complete drum staging, segregation, and sampling. Complete inventory of on-site wastes.

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.

response.epa.gov/schultemetals