

United States Environmental Protection Agency
Region V
POLLUTION REPORT

Date: Friday, May 13, 2011
From: Ramon Mendoza, On-Scene Coordinator

Subject: FINAL POLREP - Removal Action Complete
Economy Plating Inc. (Chicago)
2348-52 North Elston Avenue, Chicago, IL
Latitude: 41.9242500
Longitude: -87.6765300

POLREP No.:	8	Site #:	B5RT
Reporting Period:	2/4/2011 - 5/6/2011	D.O. #:	
Start Date:	8/31/2009	Response Authority:	CERCLA
Mob Date:	8/31/2009	Response Type:	Time-Critical
Demob Date:	5/9/2011	NPL Status:	Non NPL
Completion Date:	5/9/2011	Incident Category:	Removal Action
CERCLIS ID #:	ILN000510347	Contract #	
RCRIS ID #:			

Site Description

Economy Plating Inc. is a former plating shop which operated for approximately 70 years. The site was discovered vacant and abandoned by the Chicago Department of the Environment (DOE) in January 2009. Markings on the drums/containers include chromic acid, hydrochloric acid, methyl acetate, and oxidizer. DOE ordered the owner/operator to clean up the site. However, the owner/operator was unable to pay for the cleanup. The site was referred to USEPA for cleanup in May 2009.

USEPA conducted a site assessment on June 5, 2009 and found evidence of break-ins and trespassers, as well as holes in the building where weather can enter the facility. Approximately 195 containers (open and closed, 5 gallons and greater), as well as 12 vats were found containing old chromic acid solutions, other acids, and unknown solids. Several containers were found to be leaking in the basement. Results received on June 12, 2009 indicated open containers of solids contained up to 350,000 mg/kg of total cyanide. An emergency removal action was conducted from June 13-17, 2009 which collected, packaged, and properly disposed two drums of the high level cyanide materials. In addition, 18 leaking containers were repacked and a drum of nitric acid was repacked. The building was re-secured and signs put up to discourage trespassing.

An action memorandum for Time Critical Removal Action was signed on Aug. 4, 2009. Field activities were initiated on Aug. 31, 2009, and were completed to the extent practicable on November 19, 2009. The removal work completed during that time in the main plating shop and old plating shop areas included removal and cleaning of metal vats and the removal of solid and hazardous debris and sludge. Accessible windows and doors were boarded up and locked, and the parking lot was fenced to deter trespassers. During this period, the cleanup team made significant progress towards mitigating the threat to human health and the environment presented by the facility, including: 1) recovering, decontaminating, and recycling an additional 16.455 tons of scrap metal; 2) collecting and disposing of 25 cubic yards of hazardous waste; 3) shipping 128 drums of chromium contaminated hazardous waste offsite; 4) disposing of 26 drums of additional hazardous substances, which included cyanide, nitric acid, hydrochloric acid, sodium hydroxide, mercury, PCB light ballast, fluorescent lamps, and flammables; 5) removing 160 cubic yards of solid waste; and 6) sampling the site for additional environmental factors. As a result of additional environmental sampling, the response team confirmed the presence of chromium contaminated soil beneath the main plating shop pit. In addition, hexavalent chromium has seeped through the building and is now located on the building's exterior walls. Controls to block exposure pathways to surrounding residents have been installed including epoxy sealant, plywood boards, and metal fencing. Signs have been posted to deter people from touching contaminated walls and to deter trespassers. However, to eliminate the potential threat to human health and the environment presented by the building itself, removal of this contamination through demolition of the building and disposal of the material is necessary.

A second action memorandum was signed on June 18, 2010 requesting a ceiling increase and exemption from the 1 year statutory limit from the removal action.

In order to gain legal access to demolish the Site's building and complete the removal action, USEPA worked several months to obtain an Federal Administrative Warrant which was signed on September 28, 2010.

After acquiring asbestos abatement and demolition subcontractors (Robinette), EPA re-mobilized to the site on November 8, 2010. Asbestos contractors removed asbestos containing material (window and door seals) from the building. In addition, ERRS removed universal waste left in building, including mercury thermostats and freon from remaining white goods.

The building was demolished. During demolition, contaminated surface water runoff was controlled using a vac truck. Dust was controlled primarily using water from a nearby fire hydrant in coordination with the Chicago Fire Department. During the Demolition period, the following hazardous substances were removed and properly disposed from the site: 250 tons hazardous soil, 462 tons hazardous debris, 150 cubic yards hazardous debris, 330 kg of PCBs, 45 cubic yards of asbestos containing material, and 1,955 gallons of hazardous liquid. In addition, about 600 cubic yards of solid debris was removed and disposed from the Site.

Contaminated soil underlying the pit in the main plating shop and the basement below the old plating shop area was excavated to approximately 8 feet below the sidewalk level. Soil samples were field screened using the XRF instrument and submitted for laboratory analysis to confirm that the soil was non-hazardous and below the TACO tier 1 remediation objectives for commercial properties. Clean demolition debris was used to backfill the excavation. Clean backfill materials were also used to fill in the excavation.

During demolition activities, ambient air monitoring was conducted daily for particulates. In addition, air samples for asbestos and total metals including chromium, lead, and arsenic analyses were collected for 4 days in the work zone, upwind, and downwind when hazardous substances were most likely be released. Results of the air monitoring and sampling indicated that all contaminants of concern were below NIOSH and OSHA criteria.

Freezing temperatures onsite prevents the use of asphalt and concrete to replace about 20 feet of contaminated wall on the north side of the Site, small portion of the sidewalk and alley. OSC has decided to return to the Site in the Spring 2011 to complete the cleanup.

Current Activities

On February 4, 2011, U.S EPA and ERRS mobilized to the Site to repair the temporary fence which had been destroyed by the Blizzard and to clear out the sidewalks around the site.

- On April 25, 2011, U.S. EPA, WESTON START, and ERRS re-mobilized to the Site to remove the remaining contaminated wall, repair the concrete sidewalk along Winchester Street, and install permanent fencing around the perimeter of the Site. The removal activities summarized below were conducted from April 25 through May 5, 2011.
- The remaining portion of the contaminated brick wall on the west side of the site and fill material along the wall was removed. Approximately 15 yd3 of chromium solids (hazardous soil) were removed from the Site (Manifest No. 008261352JJK) and transported to Envirite, Inc. of Harvey, Illinois for stabilization and disposal.
- On April 26, 2011, U.S. EPA and WESTON START collected one confirmatory soil sample under the sidewalk of the gangway on the west side of the Site. The soil sample was submitted for laboratory analysis of total metals and TCLP metals. Analytical results indicated total metals concentrations below the TACO values. The TCLP metals results were below the TCLP regulatory criteria.
- A new concrete wall was installed along the gangway on the west side of the Site.
- The damaged concrete sidewalk along Winchester Avenue was removed and a new sidewalk was installed.
- Permanent security fencing was installed along the perimeter of the Site to restrict access to the Site. The fencing was equipped with a gate along the alley (southwest) side of the Site that has been secured with a padlock.
- Fresh gravel was brought on to the Site to fill in any exposed soil and regrade the ground to ensure proper drainage.

On May 9, 2011, the U.S. EPA OSC conducted a final walk through of the Site to ensure completion of field work.

Next Steps

None. Site work is complete.

Key Issues

None.

Disposition of Wastes

Waste Stream	Quantity	Manifest #	Disposal Facility
RQ, Waste Cyanides, Inorganic, Solid, n.o.s., (sodium cyanide), 6.1, UN1588, PGII (F008)	2 drum overpacks, 110 gallons	001344657FLE	Envirite of Illinois, Harley, IL
Class A non-hazardous waste Empty containers	20 cubic yards	006038438JJK	Countryside Landfill Grayslake, IL
Class A non-hazardous waste Empty containers	30 cubic yards	006038462JJK	Countryside Landfill Grayslake, IL
Class A non-hazardous waste Empty containers	30 cubic yards	006038461JJK	Countryside Landfill Grayslake, IL
Class A non-hazardous waste Empty containers	30 Cubic yards	006038460JJK	Countryside Landfill Grayslake, IL
RQ, Hazardous Waste Solid n.o.s. (Chromium). 9, NA3077, D007	30 cubic yards	002500713FLE	Envirite of Illinois Harvey, IL
Chromium Waste Solids, D007	3 Drums	002500727FLE	Envirite of Illinois Harvey, IL
Chromic acid solution, D002,D004, D006, D007, D008, D010	21 Drums	002500727FLE	Envirite of Illinois Harvey, IL
Chromic acid Solution,D002, D004, D006, D007, D008, D010	18 Drums	002500728FLE	Envirite of Illinois Harvey, IL
Chromium Waste Solids, D007	12 Drums	002500728FLE	Envirite of Illinois Harvey, IL
Chromic acid Solution,D002, D004, D006, D007, D008, D010	27 Drums	002500729FLE	Envirite of Illinois Harvey, IL
Chromium Waste Solids, D007	14 Drums	002500729FLE	Envirite of Illinois Harvey, IL
Class A non-hazardous waste Empty containers	20 cubic yards	006038459JJK	Countryside Landfill Grayslake, IL
RQ,Waste Chromic acid solution,	23 Drums	002500730FLE	Envirite of Illinois, Harley, IL
RQ, Hazardous waste, solid, n.o.s. (Chromium), (D007)	2 Drums overpack	002500730FLE	Envirite of Illinois, Harley, IL

RQ, Hazardous waste, solid, n.o.s. (Chromium), 9, NA3077, PG III (D007)	16 Drums	002500730FLE	Envirite of Illinois, Harley, IL
RQ, Waste Nitric acid (other than red fuming with not more than 70% Nitric Acid), 8, UN2031, PG II	1 Drum Overpack	002828221FLE	Envirite of Illinois, Harley, IL
RQ, Waste Corrosive Liquid, Acidic, Inorganic, n.o.s. (Hydrochloric, Sulfuric), 8, UN3264, PG III (D002)	1 Drum Overpack	002828221FLE	Envirite of Illinois, Harley, IL
RQ, Waste Corrosive Liquid, Basic, Inorganic, (Sodium Hydroxide), 8, UN3266, PG III (D002)	2 Drums overpack	002828221FLE	Envirite of Illinois, Harley, IL
RQ, Waste Chromic acid solution, 8, UN1755, PG II (Chromium)	20 Drums	002828222FLE	Envirite of Illinois, Harley, IL
RQ, Hazardous waste, solid, n.o.s. (Chromium), 9, NA3077, PG III (D007)	11 Drums	002828222FLE	Envirite of Illinois, Harley, IL
RQ, Hazardous waste, solid, n.o.s. (Chromium), 9, NA3077, PG III (D007)	1 drum overpack	002828222FLE	Envirite of Illinois, Harley, IL
RQ, Hazardous waste, solid, n.o.s. (Chromium), 9, NA3077, D007	25 cubic yards	002500897FLE	Envirite of Illinois, Harley, IL
RQ, Waste Chromic acid solution, 8, UN1755, PG II (Chromium)	27 Drums	002828224FLE	Envirite of Illinois, Harley, IL
RQ, Hazardous waste, solid, n.o.s. (Chromium), 9, NA3077, PG III (D007)	10 Drums	002828224FLE	Envirite of Illinois, Harley, IL
RQ, Hazardous waste, solid, n.o.s. (Chromium), 9, NA3077, PG III (D007)	2 Drums Overpack, 400 pounds	002828224FLE	Envirite of Illinois, Harley, IL
UN1993, Waste Flammable Liquids, n.o.s., 3, II	1 drum overpack , 120 pounds	001594315FLE	Chemtron Corp; Avon, OH
UN1950, Waste Aerosols, Flammable, 2.1	1 drum overpack, 50 pounds	001594315FLE	Chemtron Corp; Avon, OH
UN281, Waste Toxic Liquid, Organic, n.o.s., 6.1, III	1 drum overpack, 55 pounds	001594315FLE	Chemtron Corp; Avon, OH
Non-hazardous Liquid (Latex)	1 drum overpack, 90 pounds	001594315FLE	Chemtron Corp; Avon, OH
UN2789, Waste acetic acid, Glacial, 8 (3), II	1 drum overpack, 35 pounds	001594315FLE	Chemtron Corp; Avon, OH
UN1823, Waste sodium hydroxide, Solid, 8, III	1 overpack drum, 50 pounds	001594315FLE	Chemtron Corp; Avon, OH
UN3139, Waste Oxidizing Liquid, n.o.s., 5.1, II	1 drum overpack, 8 pounds	001594315FLE	Chemtron Corp; Avon, OH
UN2364, Waste corrosive liquid, acidic, inorganic, n.o.s., 8, II	1 drum overpack, 10 pounds	001594315FLE	Chemtron Corp; Avon, OH
UN2478, Waste isocyanate solution, flammable, n.o.s., 3 (6.1), II	1 drum overpack, 5	001594315FLE	Chemtron Corp; Avon,

	pounds		OH
UN2735, Waste amines, liquid, corrosive, n.o.s., 8, III	1 drum overpack, 5 pounds	001594315FLE	Chemtron Corp; Avon, OH
Mercury contained in manufactured articles, 8, UN2809, PGIII, Universal Waste Electrical Devices	1 drum overpack, 5 pounds	20026	Clean Lites; Mason, MI
Non-RCRA, Non-DOT Regulated Material Per 40 CFR 761.b.2(i) (PCB) Light Ballast	1 drum overpack, 50 pounds	20026	Clean Lites; Mason, MI
Universal Waste Electric Lamps (85 4-ft fluorescent, 127 8-ft fluorescent, 7 HID)	5 drum overpacks, 220 pounds	20026	Clean Lites; Mason, MI
RQ, Waste flammable liquids, n.o.s., (Mineral spirits, kerosene, gasoline), 3, UN1993, PGII (D001)	3 drum overpacks, 165 gallons	002828235FLE	Safety Kleen Systems, Inc.; Dolton, IL
RQ, Waste Chromic acid solution, 8, UN1755, PG II (Chromium)	6 drum overpacks, 330 gallons	002828237FLE	Envirite of Illinois, Harley, IL
RQ, Hazardous waste, solid, n.o.s. (Chromium), 9, NA3077, PG III (D007)	8 drums, 3200 pounds	002828237FLE	Envirite of Illinois, Harley, IL
RQ, Hazardous waste, solid, n.o.s. (Chromium), 9, NA3077, PG III (D007)	2 drum overpacks, 800 pounds	002828237FLE	Envirite of Illinois, Harley, IL
Class A non-hazardous special waste Profile # 107827IL, Empty Containers	1 container, 30 cubic yards	006038439JJK	Countryside Landfill, Grayslake, IL
RQ, Asbestos, Class 9, NA2212, PGIII, special waste profile # 108896IL	129 cubic yards	229337	Countryside Landfill, Grayslake, IL
Non-friable asbestos, Cat II, special waste profile # 108896IL	441 cubic yards	229337	Countryside Landfill, Grayslake, IL
Asbestos, special waste, Profile # 108896IL	30 cubic yards	05777	Countryside Landfill, Grayslake, IL
NA3077, Haz Waste, solid, n.o.s. (Chromium), 9, PGIII, ERG #171	30 cubic yards	007797686JJK	MI Disposal Waste Treatment, Belleville, MI
NA3077, Haz Waste, solid, n.o.s. (Chromium), 9, PGIII, ERG #171	30 cubic yards	007797687JJK	MI Disposal Waste Treatment, Belleville, MI
NA3077, Haz Waste, solid, n.o.s. (Chromium), 9, PGIII, ERG #171	30 cubic yards	007797688JJK	MI Disposal Waste Treatment, Belleville, MI
NA3077, Haz Waste, solid, n.o.s. (Chromium), 9, PGIII, ERG #171	30 cubic yards	007797689JJK	MI Disposal Waste Treatment, Belleville, MI
NA3077, Haz Waste, solid, n.o.s. (Chromium), 9, PGIII, ERG #171	30 cubic yards	007797690JJK	MI Disposal Waste Treatment, Belleville, MI
NA3077, Haz Waste, solid, n.o.s. (Chromium), 9,	22 tons	007797691JJK	MI Disposal

PGIII, ERG #171			Waste Treatment, Belleville, MI
NA3077, Haz Waste, solid, n.o.s. (Chromium), 9, PGIII, ERG #171	22 tons	007797668JJK	MI Disposal Waste Treatment, Belleville, MI
NA3077, Haz Waste, solid, n.o.s. (Chromium), 9, PGIII, ERG #171	22 tons	007797669JJK	MI Disposal Waste Treatment, Belleville, MI
NA3077, Haz Waste, solid, n.o.s. (Chromium), 9, PGIII, ERG #171	22 tons	007797670JJK	MI Disposal Waste Treatment, Belleville, MI
NA3077, Haz Waste, solid, n.o.s. (Chromium), 9, PGIII, ERG #171	22 tons	007797671JJK	MI Disposal Waste Treatment, Belleville, MI
NA3077, Haz Waste, solid, n.o.s. (Chromium), 9, PGIII, ERG #171	22 tons	007797672JJK	MI Disposal Waste Treatment, Belleville, MI
NA3077, Haz Waste, solid, n.o.s. (Chromium), 9, PGIII, ERG #171	22 tons	007797692JJK	MI Disposal Waste Treatment, Belleville, MI
RQ, Polychlorinated Biphenyls, 9, UN2315, PGIII	117 pounds	002828270FLE	WM-Mercury Waste Inc., Union Grove, WI
Non-PCB ballasts	157 pounds	002828270FLE	WM-Mercury Waste Inc., Union Grove, WI
Mercury-containing devices	6 pounds	002828270FLE	WM-Mercury Waste Inc., Union Grove, WI
RQ, Hazardous Waste Liquid, (Chromium), 9, NA3082, PGIII	785 gallons	002828273FLE	Envirite of Illinois, Harley, IL
NA3077, Haz Waste, solid, n.o.s. (Chromium), 9, PGIII, ERG #171	22 tons	007797673JJK	MI Disposal Waste Treatment, Belleville, MI
NA3077, Haz Waste, solid, n.o.s. (Chromium), 9, PGIII, ERG #171	22 tons	007797674JJK	MI Disposal Waste Treatment, Belleville, MI
NA3077, Haz Waste, solid, n.o.s. (Chromium), 9, PGIII, ERG #171	22 tons	007797675JJK	MI Disposal Waste Treatment, Belleville, MI
NA3077, Haz Waste, solid, n.o.s. (Chromium), 9, PGIII, ERG #171	22 tons	007797676JJK	MI Disposal Waste Treatment, Belleville, MI
NA3077, Haz Waste, solid, n.o.s. (Chromium), 9, PGIII, ERG #171	22 tons	007797677JJK	MI Disposal Waste

			Treatment, Belleville, MI
NA3077, Haz Waste, solid, n.o.s. (Chromium), 9, PGIII, ERG #171	22 tons	007797678JJK	MI Disposal Waste Treatment, Belleville, MI
NA3077, Haz Waste, solid, n.o.s. (Chromium), 9, PGIII, ERG #171	22 tons	007797679JJK	MI Disposal Waste Treatment, Belleville, MI
NA3077, Haz Waste, solid, n.o.s. (Chromium), 9, PGIII, ERG #171	22 tons	007797680JJK	MI Disposal Waste Treatment, Belleville, MI
RQ, Hazardous Substance, n.o.s., (D007), NA3077, 9, PGIII	17 tons	002828275FLE	Envirite of Illinois, Harley, IL
RQ, Hazardous Substance, n.o.s., (D007), NA3077, 9, PGIII	11 cubic yards	002828276FLE	Envirite of Illinois, Harley, IL
RQ, Hazardous Substance, n.o.s., (D007), NA3077, 9, PGIII	18 tons	002828277FLE	Envirite of Illinois, Harley, IL
RQ, Hazardous Waste Liquid, (Chromium), 9, NA3082, PGIII	1,170 gallons	002828278FLE	Envirite of Illinois, Harley, IL
RQ, Hazardous Substance, n.o.s., (D007), NA3077, 9, PGIII	17 tons	002828279FLE	Envirite of Illinois, Harley, IL
RQ, Hazardous Substance, n.o.s., (D007), NA3077, 9, PGIII	18 tons	002828287FLE	Envirite of Illinois, Harley, IL
RQ, Hazardous Substance, n.o.s., (D007), NA3077, 9, PGIII	18 tons	002828288FLE	Envirite of Illinois, Harley, IL
Demolition Debris, Profile # 108842IL	20 cubic yards	Load # 33	Countryside, Grayslake, IL
Demolition Debris, Profile # 108842IL	20 cubic yards	Load # 34	Countryside, Grayslake, IL
Demolition Debris, Profile # 108842IL	40 cubic yards	Load # 35	Countryside, Grayslake, IL
Demolition Debris, Profile # 108842IL	40 cubic yards	Load # 36	Countryside, Grayslake, IL
Demolition Debris, Profile # 108842IL	40 cubic yards	Load # 37	Countryside, Grayslake, IL
Demolition Debris, Profile # 108842IL	40 cubic yards	Load # 38	Countryside, Grayslake, IL
Demolition Debris, Profile # 108842IL	40 cubic yards	Load # 39	Countryside, Grayslake, IL
Demolition Debris, Profile # 108842IL	40 cubic yards	Load # 40	Countryside, Grayslake, IL
Demolition Debris, Profile # 108842IL	40 cubic yards	Load # 41	Countryside, Grayslake, IL
Demolition Debris, Profile # 108842IL	40 cubic yards	Load # 42	Countryside, Grayslake, IL
Demolition Debris, Profile # 108842IL	40 cubic yards	Load # 43	Countryside, Grayslake, IL
Demolition Debris, Profile # 108842IL	40 cubic yards	Load # 44	Countryside,

			Grayslake, IL
Demolition Debris, Profile # 108842IL	40 cubic yards	Load # 49	Countryside, Grayslake, IL
Demolition Debris, Profile # 108842IL	40 cubic yards	Load # 50	Countryside, Grayslake, IL
Demolition Debris, Profile # 108842IL	40 cubic yards	Load # 51	Countryside, Grayslake, IL
Demolition Debris, Profile # 108842IL	40 cubic yards	Load # 52	Countryside, Grayslake, IL
NA3077, Haz Waste, solid, n.o.s. (Chromium), 9, PGIII, ERG #171	22 tons	007797681JJK	MI Disposal Waste Treatment, Belleville, MI
NA3077, Haz Waste, solid, n.o.s. (Chromium), 9, PGIII, ERG #171	22 tons	007797683JJK	MI Disposal Waste Treatment, Belleville, MI
NA3077, Haz Waste, solid, n.o.s. (Chromium), 9, PGIII, ERG #171	22 tons	007797684JJK	MI Disposal Waste Treatment, Belleville, MI
NA3077, Haz Waste, solid, n.o.s. (Chromium), 9, PGIII, ERG #171	22 tons	007797685JJK	MI Disposal Waste Treatment, Belleville, MI
RQ, Hazardous Substance, n.o.s., (D007), NA3077, 9, PGIII	18 tons	002828280FLE	Envirite of Illinois, Harley, IL
RQ, Hazardous Substance, n.o.s., (D007), NA3077, 9, PGIII	18 tons	002828281FLE	Envirite of Illinois, Harley, IL
RQ, Hazardous Substance, n.o.s., (D007), NA3077, 9, PGIII	18 tons	002828282FLE	Envirite of Illinois, Harley, IL
RQ, Hazardous Substance, n.o.s., (D007), NA3077, 9, PGIII	18 tons	002828283FLE	Envirite of Illinois, Harley, IL
NA3077, Haz Waste, solid, n.o.s. (Chromium), 9, PGIII, ERG #171	22 tons	002828286FLE	MI Disposal Waste Treatment, Belleville, MI
RQ, Hazardous Substance, n.o.s., (D007), NA3077, 9, PGIII	18 tons	002828289FLE	Envirite of Illinois, Harley, IL
RQ, Hazardous Substance, n.o.s., (D007), NA3077, 9, PGIII	18 tons	002828290FLE	Envirite of Illinois, Harley, IL
RQ, Hazardous Substance, n.o.s., (D007), NA3077, 9, PGIII	18 tons	002828291FLE	Envirite of Illinois, Harley, IL
NA3077, Haz Waste, solid, n.o.s. (Chromium), 9, PGIII, ERG #171	22 tons	007797682JJK	MI Disposal Waste Treatment, Belleville, MI
RQ, Hazardous Substance, n.o.s., (D007), NA3077, 9, PGIII	18 tons	002828284FLE	Envirite of Illinois, Harley, IL
RQ, Hazardous Substance, n.o.s., (D007), NA3077, 9, PGIII	18 tons	002828285FLE	Envirite of Illinois, Harley,

			IL
NA3077, Haz Waste, solid, n.o.s. (Chromium), 9, PGIII, ERG #171	15 cubic yards	008261352JJK	Envirite of Illinois, Harley, IL

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