United States Environmental Protection Agency
Region III
POLLUTION REPORT

Date: Monday, October 19, 2015
From: Ann DiDonato

Subject: Precision National Plating Site
198 Ackerly Road, Clarks Summit, PA
Latitude: 41.5105000
Longitude: -75.7155000

POLREP No.:	70	**Site #:**	
Reporting Period:	10/5/15 - 10/18/15	**D.O. #:**	
Start Date:		**Response Authority:**	CERCLA
Mob Date:		**Response Type:**	Non-Time-Critical
Demob Date:		**NPL Status:**	Non NPL
Completion Date:		**Incident Category:**	Removal Action
CERCLIS ID #:	PAD053676631	**Contract #**	
RCRIS ID #:			

Site Description

The Precision National Plating Site is located at 198 Ackerly Road, Clarks Summit, Pennsylvania, approximately 10 miles north of Scranton, Pennsylvania. The property measures 46 acres, approximately five acres of which were used for site operations and the remainder of which are undeveloped and largely wooded. A 45,000 square foot operations building that was demolished in 2000 was the principal structure on the site. Portions of the concrete slab floor remain and are utilized as a staging area for materials during cleanup.

The site began operation as a chromium electroplating facility for locomotive crankshafts in 1956. This operation continued when Precision bought the facility in 1971. Precision operated an industrial component reconditioning facility on site from 1971 until 1999. Site operations ceased in April 1999.

In September of 2005, EPA approved a Remedial Action Plan, submitted on behalf of Precision National Plating by the Retec Group. The Plan details procedures for use of calcium polysulfide to reduce the hexavalent chromium in the soils and groundwater to trivalent chromium, a less toxic form of chromium, which will precipitate and remain in the soil/bedrock matrix.

In July 2006, Precision injected calcium polysulfide into source areas at the site. The goal of the treatment was to reduce hexavalent chromium levels in soil to below 60 mg/Kg, and hexavalent chromium levels in Ackerly Creek to below 11 ug/L.

In March 2007, Precision began excavation of the basement of the former facility. The purpose of the removal was to mitigate impacts by potentially contaminated soils beneath the basement. Any visually contaminated soil and concrete encountered during the excavation was shipped offsite to an appropriate disposal facility.

Additional site investigation activities were performed in the Fall of 2007 and February/March 2008. The soil boring, rock coring and groundwater sampling activities completed in October 2007 and March 2008 confirmed that residual source contamination remains at the Site in the shallow weathered and competent bedrock (18 - 30 feet below the ground surface).

In August 2008, Precision began using calcium polysulfide in-situ chemical injections to treat these residual areas of contamination in the shallow bedrock. Hexavalent chromium levels have dropped in Ackerly Creek due to chemical injection treatments in July 2006, the basement excavation in March 2007, and subsequent injection activities, however they still remain above the target ecological goal of 11 ug/L.

Precision and EPA signed an Administrative Settlement Agreement and Order on Consent on May 3, 2012. On July 30, 2012, Precision's contractor, Arcadis U.S. Inc, submitted a new Response Action Plan, detailing ongoing activities. Injections of calcium polysulfide were conducted in the Fall 2012. A total of 100,885 gallons of 1% solution were injected into 57 wells and 25,252 gallons of 2% solution

were injected into 34 wells between September 6th, 2012 and November 20th, 2012.

Injections of calcium polysulfide were again conducted in the Fall of 2013. A total of 103,047 gallons of 1% and 12,689 gallons of 2% calcium polysulfide solution were injected into 62 separate points within the overburden, shallow bedrock, and intermediate bedrock zones. Injection points included areas near the lagoon, in the area of the trolley tracks, along Paper Road, within the former Precision facility area, and along a trail often used as a public hiking area.

No injections occurred during 2014 and early 2015 in order to allow quarterly sampling events to document groundwater hexavalent chromium concentrations without recent effects of calcium polysulfide. Sampling conducted in April 2015 documented elevated concentrations of hexavalent chromium south of the former building slab in intermediate bedrock monitoring well MW-C at a concentration 9,390 ug/L and the wells near Ackerly Creek, mainly in the shallow bedrock aquifer, at a maximum concentration of 952 ug/L.

Historically,hexavalent chromium had generally not been detected at elevated concentrations in this MW-C. Based on this change in conditions identified in the recent sampling, Precision conducted installation of new monitoring wells in the vicinity of MW-C and modified MW-C between May and September 2015 to further delineate impacts to groundwater.

Current Activities

Injections of calcium polysulfide resumed on September 21st, 2015 focusing on the areas around MW-C and along the Trolley Trail near the end of Arch Ave. Injections along the Trolley Trail area aimed at addressing downgradient contamination documented near Ackerly Creek. Details regarding the injection activities are documented in the September 2015 Supplemental In Situ Chemical Reduction Work Plan.

During the week of October 5th, 2015, injections were expanded to include 9 points in the vicinity of MW-C. 3,261 gallons of 2% calcium polysulfide solution were injected. MW-22, at a depth between 85 feet and 105 feet below ground surface, did not accept any material injected. MW-33 only took 2 gallons of injected material. Both of these wells were removed from the injection set for the time being.

Quarterly sampling was conducted at the site the week of October 12th, 2015. Monitoring wells without calcium polysulfide present, selected residential wells, and site treatment systems were sampled. EPA and Precision contractors split samples from Ackerly Creek.

The week of October 12th, 2015, 3,345 gallons of 2% calcium polysulfide continued to be injected into a total of 7 points in the vicinity of MW-C. Beginning on October 14th, 2015, a total of 2,033 gallons of 1% calcium polysulfide was injected into 2 wells along the Trolley Trail near Arch Avenue.

During this round of injections, a total of 242 gallons of 1% and 9,684 gallons of 2% calcium polysulfide solution has been injected into 9 separate points in the vicinity of MW-C. A total of 2,033 gallons of 1% calcium polysulfide solution has been injected into 2 separate points along the Trolley Trail.

Prior to, and during injection activities each day, hourly air monitoring readings were taken with a Jerome hydrogen sulfide meter from locations around the injection area, product lines, and product storage areas. Air monitoring was also recorded by two 24-hour monitoring stations located along Arch Avenue and at the lagoon. Hydrogen sulfide was not detected by any of the air monitors, which can detect hydrogen sulfide down to 3 ppb. The hydrogen sulfide site specific action level for nuisance odors is 30 ppb.

During injection activities, selected wells were monitored for water elevations and water quality readings such as pH and ORP to determine what zones are currently being influenced by calcium polysulfide. Field monitoring was conducted once a day during injection activities.

Planned Removal Actions

Injections will continue through the Fall of 2015. Injections will continue in the areas of MW-C and the Trolley Trail near Arch Avenue.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
Intramural Costs				

Total Site Costs	$0.00	$0.00	$0.00	0.00%

* 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.

response.epa.gov/precision

POLREP #70 Last Updated 10/29/2015