United States Environmental Protection Agency
Region III
POLLUTION REPORT

Date: Friday, September 21, 2012
From: Ann DiDonato

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

POLREP No.:	53	**Site #:**	
Reporting Period:		**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, which is 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 was the principal structure on the site.

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. With PADEP and USEPA oversight, the former plating building was demolished in the Fall of 2000.

EPA approved a Remedial Action Plan, submitted on behalf of Precision National Plating by the Retec Group in September of 2005. 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 unearthed during the excavation was taken to an appropriate disposal facility.

Further 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 contaminant sources remain at the Site in the weathered rock and shallow 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 and the basement excavation in March 2007, and subsequent injection activities beginning in August 2008 and continuing through December 2011, however they still remain above the target ecological goal of 11 ug/L.

Current Activities

The current round of injections began on September 6th, 2012. A total of 13,577 gallons of 1% calcium polysulfide solution was injected this week. Injection occurred in ten points, within the overburden or shallow bedrock, in the area of the former building foundation on the Precision property. A total of 23,779 gallons of 1% calcium polysulfide has been injected during this round of activities.

Prior to, and during injection activities, hourly air monitoring readings were taken with a Jerome hydrogen sulfide meter along the perimeter of the site fence and along Arch Avenue. Concentrations of hydrogen sulfide were documented along the perimeter of the site as high as 3 ug/m3, however, most readings were less than the detection level of the instrument. The hydrogen sulfide site specific action level for nuisance odors is 30 ug/m3, and the NIOSH recommended exposure limit is 10,000 ug/m3.

Packer testing was conducted on six monitoring wells this week. Packer testing consisted of the isolation and pumping of specific fractures identified during previous geophysical testing on each well. A sample was collected from each water-bearing fracture for analysis of total and hexavalent chromium. Results of these samples will be used to determine if these wells should be reinstalled as nested wells covering specific zones, and for determining the use of these wells as injection points for treatment activities.

One residential well sample from the vicinity was collect by Precision contractors for analysis of total chromium, hexavalent chromium, sulfides, and sulfates to ensure injection activities are not influencing the potable well. Precision contractors were not able to secure access from a second residential well location to collect a sample. Samples were also collected by Precision contractors from select surface water and groundwater locations to determine influence of ongoing injection activities.

Planned Removal Actions

The current round of injection activities began on September 6th, 2012. Injection activities are expected to continue through November 2012, injecting calcium polysulfide solution into overburden and shallow bedrock aquifers. During injection activities, air monitoring will be conducted for concentrations of hydrogen sulfide by two fixed point monitoring stations 24 hours a day at the lagoon and on Arch Avenue. In addition, during working hours, Precision contractor personnel will conduct hourly air monitoring using hand held instruments at predesignated locations.

During injection activities, Precision contractors will sample potable wells, currently in-use and directly adjacent to the site, once every two weeks for hexavalent chromium, total chromium, sulfides, sulfates, and pH. Additional groundwater and surface water locations will be monitored for pH, dissolved oxygen, oxidation-reduction potential, specific conductance, and concentrations of sulfide and sulfates on varying schedules. Additional details regarding the injection activities are documented in the Response Action Plan. EPA will have personnel onsite to document monitoring and progress throughout the injection activities.

Semi-annual groundwater monitoring activities will be conducted in October 2012. Select wells from the overburden, shallow, intermediate, and deep bedrock zones will be sampled by Precision contractors for hexavalent and total chromium analysis. Surface water samples from Ackerly Creek and the drainage swale along Ackerly Road will be collected and split by EPA and Precision contractors.

Next Steps

EPA is currently finalizing a web based data viewing tool to better provide access and easier understanding to the public of sampling activities and progress at the site. This is expected to be released to the public this Fall. EPA is currently scheduling an availability sessions with Glenburn Township and local residents to release the data viewer and provide a demonstration session to the public.

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