United States Environmental Protection Agency
Region III
POLLUTION REPORT

Date: Monday, September 23, 2013
From: Ann DiDonato

Subject: 2013 Injection Activities Begin
Precision National Plating Site
198 Ackerly Road, Clarks Summit, PA
Latitude: 41.5105000
Longitude: -75.7155000

POLREP No.:	62	**Site #:**	
Reporting Period:	9/10/13 - 9/20/13	**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 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.

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, 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. Precision contractor, Arcadis U.S. Inc, submitted a new Response Action Plan, detailing ongoing

activities on July 30, 2012. 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. Quarterly monitoring of select wells and surface water locations occurred in 2013.

Injections of calcium polysulfide resumed on September 10th, 2013. Additional details regarding the injection activities are documented in the July 2012 Response Action Plan and August 2013 Supplemental Bedrock Injection Plan.

Current Activities

The current round of injections began on September 10th, 2013. During the first two weeks of injection activities, a total of 12,442 gallons of 1% calcium polysulfide solution was injected into nine points, within the overburden, shallow bedrock, and intermediate bedrock zones. Injection points included areas near the lagoon and in the area of the trolley tracks.

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, along Arch Avenue, and along Paper Road. Air monitoring is also recorded by two 24-hour monitoring stations located along Arch Avenue and from the lagoon. No concentration of hydrogen sulfide was documented above the detection level of the instrument, approximately 3 ug/m3. 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.

During injection activities, selected wells are 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 is conducted multiple times each day that injection activities occur. On September 18th, Precision's contractor collected samples from selected locations including residential wells and Ackerly Creek to determine if calcium polysulfide is reaching those areas. Sample collection from these locations will be conducted on a bi-weekly schedule during injection activities.

Five totes of 29% calcium polysulfide solution were delivered to the site to being injection activities (approximately 1,125 gallons).

Planned Removal Actions

Injection activities are currently planned to continue into November 2013. 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 for one additional week following the completion of injection activities.

Semi-annual sampling activities are planned on being conducted in October 2013.

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