

United States Environmental Protection Agency
Region III
POLLUTION REPORT

Date: Monday, November 5, 2018

From: Ann DiDonato

Subject: Precision National Plating Site

198 Ackerly Road, Clarks Summit, PA

Latitude: 41.5105000

Longitude: -75.7155000

POLREP No.: 89

Site #:

Reporting Period: 10/29/2018 - 11/4/2018

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 dropped in Ackerly Creek due to chemical injection treatments in July 2006, the basement excavation in March 2007, and subsequent injection activities.

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. Multiple rounds of calcium polysulfide injections were conducted between Fall 2012 and Fall 2015.

Between 2016 and 2018, semi annual and quarterly sampling events occurred to document hexavalent and total chromium levels throughout the site in absence of ongoing injection activities. Injections appear to have been effective at the former site footprint and nearby areas. Some hexavalent chromium continues to persist in isolated areas and further downgradient towards Ackerly Creek. 2018 injection activities will focus on these remaining areas of hexavalent chromium.

Current Activities

Injections began on July 30th, 2018, focusing on Phase 1 areas between the Site and the Trolley Tracks. Phase 1 area injections were completed on September 28th. During the week of September 3rd, injections were expanded into Phase 2 areas closer to Ackerly Creek. Injections began on October 9th in the Phase 3 area, near the former facility and lagoon areas. To complete calcium polysulfide injections, Arcadis will be injecting one final quantity of chemical into each injection point from all Phases (1 through 3).

A total of 3,887 gallons of 1% calcium polysulfide were gravity fed into fourteen wells during this reporting period. Seven wells were located in the Phase 2 injection area closer to Ackerly Creek (OMW-38, MW-38S, OMW-39, MW-39I, MW-40I, MW-42S, and OMW-44). Six wells were located in the Phase 3 injection area near the former facility (OMW-10, MW-29, MW-21S, SB-6, OMW-6, and OMW-4). One well in the Phase 1 area received additional injection chemical, OMW-27. A total of 45,923 gallons of 1% calcium polysulfide has been gravity fed into thirty-six wells during this round of injections.

24-hour air monitoring stations are operating at locations near Ackerly Creek and in the lagoon area. This supplements handheld air monitors operated by site personnel during working hours. Air monitors measure hydrogen sulfide concentration, a byproduct of the injection chemical, with a lower detection limit of approximately 3 parts per billion (ppb). The hydrogen sulfide site specific action level for nuisance odors is 30 ppb. No hydrogen sulfide has been detected above the detection limit on any of the air monitors during 2018 injection activities.

Water quality monitors were used to collect water quality readings and measure influence of injection chemicals in wells between the injection area and Ackerly Creek and within Ackerly Creek. MW-9IA continued to show influence of calcium polysulfide injections with a pH of 10 during this reporting period. MW-9IA is a shallow bedrock well, and not expected to directly influence water entering Ackerly Creek. Precision has conducted pH monitoring of Ackerly Creek to ensure no influence is seen in the creek, where the pH at multiple locations remains at 7.

Semi-annual groundwater sampling was completed. Wells with injection chemical present in them were not sampled. Results of this sampling activity will be included in the Quarterly Progress Report summarizing activities between October and December 2018.

Planned Removal Actions

Injections are planned to be completed in November 2018. During injections, public walking trails will remain accessible, however site personnel will be present at all times when activities are conducted in publicly accessible areas.

Surface water and ground water will be monitored for influence from injection activities. Monitoring wells are positioned between all injection areas and Ackerly Creek in order to monitor for influence of calcium polysulfide prior to chemical impacting the creek.

Analytical samples will be collected from residential wells and Ackerly Creek during injection activities to ensure calcium polysulfide is not influencing these locations.

The lagoon treatment system and seep shed treatment system will continue operation during injection activities. Additional monitoring of treatment systems will occur to ensure that calcium polysulfide is not reaching the treatment systems. If calcium polysulfide is found to be impacting the treatment system, the system may be shut off until injections are completed in that area.

Next Steps

Following the completion of injections, site personnel will remain onsite for one week conducting system breakdown operations and air monitoring.

Seep and lagoon system operation will continue with monthly maintenance being conducted on each system.

The next split sampling between EPA and Precision of Ackerly Creek is scheduled for January 2019.

The next semi-annual groundwater sampling activity is scheduled for April 2019.

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