## PRELIMINARY CLOSE OUT REPORT SPECTRON, INC. SUPERFUND SITE ELKTON, CECIL COUNTY, MARYLAND



Prepared by

U.S. Environmental Protection Agency Region 3 Philadelphia, Pennsylvania

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# I. INTRODUCTION

This Preliminary Close Out Report (PCOR) documents that the construction activities for the Spectron, Inc. Superfund Site (Site) have been completed. This determination was conducted in accordance with Close Out Procedures for National Priorities List Sites (OSWER Directive 9320.2-22, May 2011).

The U.S. Environmental Protection Agency (EPA) and the Maryland Department of the Environment (MDE) conducted a pre-final inspection of the Site on June 18, 2020 and determined that the remedy was constructed in accordance with the approved remedial design plans and specifications. No additional construction activities are anticipated.

## **II. SUMMARY OF SITE CONDITIONS**

## Site Background

The Site is located approximately six miles north of the Town of Elkton, Cecil County, Maryland in a stream valley formed by Little Elk Creek. The Site consists of the former Spectron, Inc. property (former Spectron Facility), covering about 5 acres, and the groundwater contaminant plume extending to the southeast of the property.

The Site is divided into two operable units. Soil and Overburden Groundwater, designated as Operable Unit 1 (OU-1), and Bedrock Groundwater and Office Area Soil, designated as Operable Unit 2 (OU-2).

A paper mill operated at the Site until it burned down in 1946, followed by a solvent recovery facility between 1962 and 1988. Waste sludge containing solvents such as trichloroethene and tetrachloroethene was placed in an unlined open-air lagoon next to Little Elk Creek. Use of the lagoon and spills and leaks associated with historic operation of the solvent recovery facility contaminated soil and groundwater with Volatile Organic Compounds (VOCs) and other chemicals.

Multiple permit violations and orders were issued against Spectron, Inc. during its operation of the former Spectron Facility. In September 1982, EPA and the predecessor to MDE (formerly the Maryland Department of Health and Mental Hygiene) ordered the former Spectron Facility owner to remove the upper six inches of contaminated soil and to add an asphalt cover. Concrete perimeter dikes were then constructed around the process and storage areas, and the remaining portion of the former Spectron Facility was paved with asphalt. This work also included the removal of "Hot Spots" such as the former lagoon. However, subsequent data collection indicated that contamination in the shallow soils remained following this action.

In 1983, 42 well points were reportedly installed by the former Spectron Facility owner along the western bank of the Little Elk Creek in an attempt to remediate solvents in the shallow groundwater and cut off seepage of VOCs to the Little Elk Creek. Design documents indicate that the well points were to be 10 to 20 feet deep, with an expected total groundwater yield of 20 to 30 gallons per minute (gpm). Extracted water was to be treated by an air stripper, with carbon treatment of the vapor phase, and reinjected through a series of wells reportedly installed on the northwest side of the former Spectron Facility. However, the exact locations of these remediation system components are unknown, and the effectiveness of the system, if installed, is uncertain.

In 1988, the former Spectron Facility was abandoned by the owner with more than 500,000 gallons of solvents and other liquids reportedly remaining on-Site in tanks and drums. EPA initiated a removal action in June 1989 to remove the hazardous materials from the former Spectron Facility and secure it.

Pursuant to an August 1989 Administrative Order on Consent (1989 AOC), potentially responsible parties (PRP Group)<sup>1</sup> completed the removal action in 1990 to mitigate potential hazards of fire, explosion, or exposure to these materials. EPA and the PRP Group entered into a second AOC in October 1991 (1991 AOC) requiring the PRP Group to control seeps of contaminated groundwater that were leaking out of the shallow soil along the bank of Little Elk Creek and posed a potential public health and ecological threat.

On October 14, 1992, EPA proposed the Site to the National Priorities List (NPL), which is a listing of the most serious uncontrolled or abandoned hazardous waste sites requiring long term remedial action. The Site was formally added to the NPL on May 31, 1994.

On September 30, 1996, MDE, in cooperation with the Agency for Toxic Substances and Disease Registry, issued a Preliminary Public Health Assessment Report for the Site. The report found that in the 1960's and early 1970's, area residences may have been exposed to airborne contaminants. However, sampling conducted in 1995 and 1996 for that report indicated that there was no current public health hazard from air exposures near the Site. The report recommended a sampling program for local residential wells near the Site, and further recommended treatment of residential wells where contamination was detected. These recommendations have been followed by the PRP Group. VOCs were historically detected in several residential wells at concentrations below federal Maximum Contaminant Levels (MCLs). Wellhead treatment systems were installed at those residences and are currently maintained by the PRP Group.

In May 1996, EPA and the PRP Group entered into an AOC requiring the PRP Group to conduct a Remedial Investigation/Feasibility Study (RI/FS) at the Site. The PRP Group conducted two separate RI/FSs, one for OU-1 and one for OU-2. The RI/FS for OU-1 was completed in March 2003. The RI for OU-2 was completed in October 2010, and the FS was completed in June 2012.

Pursuant to the October 1991 AOC discussed above, in April 1998 EPA and MDE approved the design for the installation of a Stream Isolation and Groundwater Treatment System (SI/GWTS) to prevent the discharge of contaminated groundwater seeps from the former Spectron Facility into Little Elk Creek. In the fall of 1998, the PRP Group began construction on the SI/GWTS, consisting generally of the following components:

- Excavation of the creek bed;
- Installation of a passive drain system; and
- Installation of an impermeable membrane liner to provide a barrier between the creek and contaminated seeps/groundwater.

Construction within the Little Elk Creek was completed in 1999. The creek was restored by planting native trees and plants along the banks and in the streambed. Approximately 2,000 cubic yards of affected stream sediments were excavated from Little Elk Creek as part of the SI/GWTS construction and were stockpiled beneath a covered area (the Drum Storage Building) in the northern portion of the Site.

The SI/GWTS began operation in March 2000. The stream liner system consists of three sections of underdrains (slotted PVC pipes) beneath a flexible, impermeable membrane that is installed beneath the Little Elk Creek streambed. These components are kept in place by rock-filled gabion baskets and mats. The underdrains intercept VOC-bearing groundwater from the overburden and bedrock before it can

<sup>&</sup>lt;sup>1</sup> - Approximately 1,000 PRPs have been identified for the Site, consisting of parties that historically sent hazardous materials to the Spectron, Inc. facility for recycling. Various subsets of PRPs have entered into agreements with EPA to perform portions of the cleanup at the Site, as discussed herein. However, for the purposes of this PCOR, the PRPs will be referred to as "the PRP Group" and no distinction will be made to differentiate the various subsets.

discharge to the stream. The upstream and downstream ends of each of the three stream liner sections are anchored by a concrete cutoff wall. Each section of underdrain is piped by gravity to one of three collection sumps; water in each sump is then pumped to the GWTS.

Water from each collection sump is treated using an oil/water separator to remove potential non-aqueous phase liquid (NAPL), followed by air stripping, with discharge of vapors to a vent with odor control via vapor-phase granular activated carbon.

The treated effluent water is discharged back to Little Elk Creek and is monitored for pH and routinely sampled and analyzed for VOCs. The SI/GWTS can process up to 50 gpm but typically treats between 30 to 45 gpm, depending on the amount of groundwater flow in the sumps. Approximately 38,100 pounds of VOCs have been captured and treated by the SI/GWTS, as of December 2019.

## **Remedy Selection**

## *OU-1* – *Soil and Overburden Groundwater*

EPA issued a September 16, 2004 Record of Decision (ROD) (2004 OU-1 ROD) selecting the remedy for OU-1. The remedy for OU-1 was modified by a March 29, 2012 ROD Amendment (2012 OU-1 ROD Amendment) and a March 19, 2020 ESD (2020 OU-1 ESD). The 2004 OU-1 ROD, 2012 OU-1 ROD Amendment and 2020 OU-1 ESD collectively comprise the selected remedy for OU-1 (OU-1 Selected Remedy). The OU-1 Selected Remedy consists of the following components:

- 1. Continued operation and maintenance of the existing SI/GWTS;
- 2. Demolition to grade of all structures in the Plant Area;
- 3. Placement of on-Site debris piles under the asphalt (or equivalent) cap;
- 4. Grading of the Plant Area;
- 5. Installation of an asphalt (or equivalent) cap;
- 6. In-situ thermal treatment (ISTT) of principal threat waste;
- 7. Monitoring to ensure the effectiveness of the remedy; and
- 8. Land and groundwater use restrictions.

Additionally, a Waste Management Area (WMA) designation was set forth in the 2004 OU-1 ROD due to waste remaining in place in the Plant Area at the Site. Based on this designation, groundwater performance standards are to be met at the boundary of the WMA rather than throughout the groundwater underlying the WMA.

The OU-1 Selected Remedy set the following Remedial Action Objectives (RAOs):

- 1. Ensure continued operation and maintenance of the SI/GWTS, so that Maryland Ambient Water Quality Criteria for consumption of fish and drinking water are not exceeded within Little Elk Creek, immediately downstream of the SI/GWTS.
- 2. Prevent current or future direct contact with contaminated soils, which would result in unacceptable levels of risk to human health.
- 3. Prevent current or future use (ingestion, direct contact or vapor inhalation) of contaminated groundwater that would result in unacceptable levels of risk to human health.
- 4. Treat principal threat waste (dense non-aqueous phase liquid, or DNAPL, and light non-aqueous phase liquid, or LNAPL) in the overburden to the maximum extent practicable, to minimize the continuing source of contamination to groundwater.

## OU-2 – Bedrock Groundwater and Office Area Soil

Bedrock Groundwater is defined as the Source Area and the Dissolved VOC Plume. EPA selected an interim remedy for the Source Area portion of Bedrock Groundwater and Office Area Soil in the September 26, 2012 OU-2 Interim Record of Decision (IROD) (2012 OU-2 IROD). Due to insufficient data, a remedy for the Dissolved VOC Plume was not selected in the 2012 OU-2 IROD. Following the 2012 OU-2 IROD, the PRP Group worked to collect the data in order to select a final remedy for Bedrock Groundwater. EPA selected a final remedy for Bedrock Groundwater in the March 19, 2020 ROD (2020 OU-2 ROD).

Office Area Soil includes the soil contamination on the northeastern side of Little Elk Creek that was not addressed as part of OU-1. The remedy for Office Area Soil was selected in the 2012 OU-2 IROD. The remedial action for Office Area Soil was implemented in 2016 and thus is not included in the 2020 OU-2 ROD. The remedy components for the Office Area Soil selected in the 2012 OU-2 IROD and the remedy components for the Bedrock Groundwater selected in the 2020 OU-2 ROD collectively comprise the selected remedy for OU-2 (OU-2 Selected Remedy). The OU-2 Selected Remedy consists of the following components:

- 1. Continued operation and maintenance of the SI/GWTS;
- 2. DNAPL collection/extraction and off-site treatment/disposal;
- 3. Groundwater extraction and treatment using the existing GWTS;
- 4. Groundwater monitoring;
- 5. Surface water monitoring;
- 6. Residential well monitoring, temporary water, and wellhead treatment;
- 7. Vapor intrusion monitoring and mitigation;
- 8. Office Area Soil excavation; and
- 9. Land and groundwater use restrictions.

The OU-2 Selected Remedy also includes a Technical Impracticability (TI) Waiver of groundwater Applicable or Relevant and Appropriate Requirements (ARARs) for a portion of the Bedrock Groundwater Source Area due to the presence of DNAPL in the deep bedrock and the low permeability of the geologic formation. Additionally, the WMA designation set forth in the 2004 OU-1 ROD also applies to the OU-2 Selected Remedy due to waste remaining in place in the Plant Area at the Site, meaning that groundwater performance standards are to be met in bedrock groundwater at the boundary of the WMA.

The OU-2 Selected Remedy set the following RAOs:

- 1. Prevent current or future exposure (ingestion, direct contact, and/or vapor inhalation including vapor intrusion) to DNAPL and contaminated bedrock groundwater which would result in unacceptable risk to human health.
- 2. Prevent the mobilization of potentially mobile DNAPL.
- 3. Prevent the migration, and reduce contaminant concentrations, of contaminated bedrock groundwater.
- 4. Remove and treat principal threat waste (DNAPL) in bedrock groundwater, to the maximum extent practicable, to minimize the continuing source of contamination to bedrock groundwater.
- 5. Restore contaminated bedrock groundwater to beneficial use, where practicable, defined as meeting the following criteria:
  - a. Federal MCLs or non-zero Maximum Contaminant Level Goals, as applicable, or MDE Groundwater Cleanup Standards, whichever is more stringent, and

- b. Reduction of cumulative excess carcinogenic risk to less than or equal to 1 in 100,000 (i.e. 10<sup>-5</sup>) and cumulative excess non-carcinogenic risk to a Hazard Index (HI) of less than or equal 1.
- 6. Ensure continued operation and maintenance of the SI/GWTS, so that Maryland Ambient Water Quality Criteria for consumption of fish and drinking water are not exceeded within Little Elk Creek, immediately downstream of the SI/GWTS.
- 7. Prevent current or future direct contact with contaminated soils which would result in unacceptable risk to human health and the environment.

## **Remedy Implementation**

## OU-1 – Soil and Overburden Groundwater

## Continued operation and maintenance of the existing SI/GWTS

The SI/GWTS was constructed to prevent contaminated groundwater seeps from discharging into Little Elk Creek. The SI/GWTS started operation in March 2000 and continues to operate as described above in Site Background. The operation and maintenance of the existing SI/GWTS is documented in monthly progress reports that are submitted by the PRP Group to EPA and MDE. These monthly progress reports summarize the previous months activities which include operational data collection, equipment inspection, general housekeeping, preventive maintenance, and optimization activities.

## Demolition to grade of all structures in the Plant Area

The *Decontamination and Demolition Work Plan* is dated October 24, 2012 and was approved by EPA on November 6, 2012. The work was performed between November 20, 2012 and March 27, 2013 by the PRP Group. The work consisted of the segregation of debris and building contents; asbestos abatement at tank bottoms; removal of an underground storage tank; cleaning and decontamination for metal, concrete, masonry, and asphalt surfaces; cleaning and decontamination of sumps and trenches; demolition of the Boiler House, including the garage and shed; demolition of curbs and pedestals at secondary containment areas; and waste management. The demolition activities were documented in the *Decontamination and Demolition Completion Report* dated July 29, 2013 and approved by EPA on August 9, 2013.

<u>Grading of the Plant Area and placement of on-Site debris piles under the asphalt (or equivalent) cap</u> The grading of the Plant Area and placement of on-site debris piles under the asphalt (or equivalent) cap was first performed during the ISTT activities and then completed during the installation of the asphalt (or equivalent) cap. The debris piles were relocated to the target treatment zone (TTZ) to facilitate the ISTT cap construction. The ISTT cap was then removed and the TTZ was graded to facilitate the installation/construction of the asphalt (or equivalent) cap.

## In-situ thermal treatment (ISTT) of principal threat waste

The ISTT of principal threat waste was performed in accordance with the EPA approved *ISTT Final Remedial Design Report* dated December 2014. The debris piles that remained on-Site from the construction of the stream liner system and the drill cuttings from historical investigation activities were relocated to the TTZ to facilitate the ISTT cap construction. The TTZ was located in the former Process Area encompassing an area of approximately 43,670 square feet and to an average depth of 16.2 feet. The ISTT system operated from February 1, 2016, through November 14, 2016, with an estimated 15,700 pounds of VOCs removed. The ISTT activities were documented in the *ISTT Remedial Action Completion Report* dated September 7, 2017 and approved by EPA on September 21, 2017.

## Installation of an asphalt (or equivalent) cap

The construction of the asphalt (or equivalent) cap was divided into two phases. The first phase consisted of interim stabilization measures that were performed in accordance with the November 1, 2017 *Remedial (100%) Design Report – Phase 1, Asphalt (or Equivalent) Cap* that was approved by EPA on November 2, 2017. The interim stabilization measures consisted of limited paving, demolition of a wooden structure, and utilizing the soil excavated from the Office Area to support an on-site deteriorating retaining wall and covering this material with a geomembrane. This work was performed between November 6, 2017 and November 22, 2017. The Phase 1 cap activities were documented in the *Remedial Action Completion Report, Asphalt Cap, Phase 1 Interim Stabilization Measures* dated May 2, 2018 and approved by EPA on May 25, 2018.

The second phase consisted of the final grading and capping of the Plant Area that was performed in accordance with the February 2019 *Remedial (100%) Design Report – Phase 2, Asphalt (or Equivalent) Cap* that was approved by EPA on March 20, 2019. This work consisted of clearing and grubbing, abandonment of select monitoring wells, ISTT component removal and partial removal of the ISTT insulated cap, placement of clean soil backfill, grading, capping and restoration. Asphalt or concrete was used to cap the WMA. Work was performed by the PRP Group between May 13, 2019 and September 20, 2019. The Phase 2 cap activities were documented in the *Remedial Action Completion Report – Phase 2 Asphalt Cap* dated December 2019 and approved by EPA on May 2, 2020.

## Monitoring to ensure the effectiveness of the remedy

For monitoring to ensure the effectiveness of the remedy there were no design or construction activities. To accomplish this remedy component for the OU-1 Selected Remedy, monitoring the effectiveness of the Cap will be accomplished by the annual inspection of the cap performed by the PRP Group which will follow the approved Operation and Maintenance (O&M) Plan and monitoring the effectiveness of the SI/GWTS will be accomplished by EPA and MDE reviewing analytical results and operational data collected for the GWTS to meet the SI/GWTS performance standards.

## OU-2 – Bedrock Groundwater and Office Area Soil

## Continued operation and maintenance of the existing SI/GWTS

The continued O&M of the existing SI/GWTS is described above in OU-1. This remedy component is in both OUs because it collects overburden and bedrock groundwater.

## DNAPL collection/extraction and off-site treatment/disposal

DNAPL is routinely recovered from angled well AW-1, which extends beneath Little Elk Creek. This is the only well where DNAPL is still observed. Approximately 135 gallons of DNAPL have been removed from the well between 2000 and 2020. The DNAPL is disposed of off-site at a permitted waste disposal facility. Since the ISTT activities in 2016, recoverable DNAPL from AW-1 has been greatly reduced.

The collection and extraction of DNAPL from AW-1 is currently accomplished with a hydrophobic sorbent sock that is left in the well and a bailer. If more than 0.5 gallons of DNAPL are removed from AW-1 in two consecutive months then the automated collection system, that had been used from 2014 to 2019 when there were greater amounts of DNAPL, would be reinstalled. The installation of the hydrophobic sock along with the collection and monitoring frequency are defined the *Work Plan for Dense Non-Aqueous Phase Liquid (DNAPL) Monitoring/Removal in AW-1* dated August 13, 2020 and approved August 17, 2020.

## Groundwater extraction and treatment using the existing GWTS

Groundwater is extracted and treated using the SI System and extraction well VW-35 and the estimated extent of capture matches the area of the groundwater extraction specified in the 2020 OU-2 ROD. The

installation for the VW-35 borehole was performed in accordance with the *Work Plan for Groundwater Extraction Well Installation and Testing, OU-2 Pre-Design Investigation* dated July 24, 2018 and the conditional approval letter dated August 23, 2018. The installation of an extraction pump and its connection to the GWTS were completed per the *VW-35 Connection Work Plan* dated June 20, 2019 and approved on June 20, 2019. The groundwater extraction and treatment utilizing VW-35 and the SI/GWTS is documented in the *Remedial Action Completion Report for Remedy Component: Groundwater Extraction and Treatment*, dated September 2020 and approved on September 17, 2020.

#### Groundwater monitoring

For groundwater monitoring there were no design or construction activities. To accomplish the groundwater monitoring component for the OU-2 Selected Remedy, a draft long-term groundwater monitoring plan has been developed by the PRP Group and is being reviewed by EPA and MDE.

#### Surface water monitoring

For surface water monitoring there were no design or construction activities. To accomplish the surface water monitoring component for the OU-2 Selected Remedy, a draft surface water long-term monitoring plan has been developed by the PRP Group and is being reviewed by EPA and MDE. This plan also includes the residential monitoring OU-2 Selected Remedy component.

#### Residential well monitoring

For residential well monitoring there were no design or construction activities. To accomplish the residential monitoring component for the OU-2 Selected Remedy, a draft long-term residential well monitoring plan has been developed by the PRP Group and is being reviewed by EPA and MDE. This plan also includes the surface water monitoring OU-2 Selected Remedy component.

#### Vapor intrusion monitoring and mitigation

For vapor intrusion monitoring and mitigation there were no design or construction activities. Vapor intrusion monitoring is required to be performed by the PRP Group in support of the five-year reviews (FYRs) that EPA conducts. Vapor intrusion monitoring was performed in 2017 by the PRP Group as part of the first five-year review for the Site and based on the results EPA determined that VI mitigation was not required. Vapor intrusion monitoring will continue in support of upcoming five-year reviews. EPA will complete the next five-year review in November 2022.

## Office Area Soil excavation

The Office Area Soil excavation work was completed in accordance with the OU-2 (Office Area Soil) Remedial Action – Final (100%) Design Report dated September 2, 2016 and approved by EPA on September 2, 2016. The Office Area Soil excavation was completed in September 2016 by the PRP Group. Approximately 200 cubic yards of contaminated soil were excavated, transported and staged at the Plant Area for consolidation under the asphalt (or equivalent) cap. Following soil removal, the excavation was backfilled and seeded. The Office Area Soil activities were documented in the OU-2 (Office Area Soil) Remedial Action – Remedial Action Completion Report dated September 22, 2016 and approved by EPA on September 28, 2016.

## **Institutional Controls (ICs)**

ICs required by the Site decision documents have been partially implemented. There is an informational IC in place with the Cecil County Health Department to prevent wells being installed in the groundwater plume. The Cecil County Health Department will notify EPA if a permit application is submitted for a new well in the vicinity of the Site. EPA will then notify the Cecil County Health Department if the proposed well is likely to be impacted by groundwater contamination from the Site and whether the well permit should be approved or disapproved. The remaining ICs as required by the Site decision documents are being incorporated into an environmental covenant for the Site. The environmental covenant has been

drafted and is being reviewed by MDE and EPA. Once this environmental covenant is signed all ICs required by the Site decision documents will be implemented.

# III. DEMONSTRATION OF CONSTRUCTION QUALITY ASSURANCE / QUALITY CONTROL (QA/QC)

Construction was not required for all the remedy components in the OU-1 Selected Remedy and OU-2 Selected Remedy. The construction that was required took place at different times and followed separate construction QA/QC requirements. Depending on the type and extent of construction, the QA/QC requirements were included in the text of the remedial design document, included in a construction quality assurance project plan as an appendix to the remedial design document, or included as a construction quality control plan that was approved by EPA as a separate submittal.

The remedy components that had a construction quality assurance project plan as an appendix to the remedial design included the construction of both phases of the asphalt (or equivalent) cap and the implementation of the ISTT for the principal threat waste. Additionally, Phase 2 of the asphalt cap included a construction quality control plan. These documents are as follows:

- Construction Quality Assurance Project Plan included as Appendix N in the *ISTT Final Remedial Design Report* dated December 2014
- Construction Quality Assurance Project Plan included as Appendix A in the *Remedial (100%)* Design Report – Phase 1, Asphalt (or Equivalent) Cap dated November 1, 2017
- Construction Quality Assurance Project Plan included as Appendix B in the *Remedial (100%)* Design Report – Phase 2, Asphalt (or Equivalent) Cap dated February 2019
- Construction Quality Control Plan, Phase 2 Asphalt Construction Project dated June 2019

Field representatives checked QA/QC requirements during construction activities based on the above construction quality assurance project plans or the QA/QC requirements in the remedial design documents. EPA and MDE reviewed and approved all remedial design documents and construction quality assurance project plans. During construction of the various remedy components, EPA and MDE made regular Site visits to inspect the work. Construction activities at the Site were determined to be consistent with the 2004 OU-1 ROD, 2012 OU-1 ROD Amendment, 2012 OU-2 IROD and 2020 OU-2 ROD and all approved remedial design plans. No significant deviations occurred during construction.

# **IV. SCHEDULE OF ACTIVITIES FOR SITE COMPLETION**

Construction completion at the Site shall be documented by the signature of this PCOR. All preliminary construction completion requirements for the Site have been met as specified in Close Out Procedures for National Priorities List Sites (OSWER Directive 9320.2-22, May 2011).

A pre-final inspection was performed on June 18, 2020. Inspection attendees included representatives from EPA and MDE, and the following representatives from the PRP Group: Earth Data Northeast, Ramboll, and Groundwater & Environmental Services. No additional construction or punch list items were noted during the pre-final inspection.

The activities listed below will be completed according to the following schedule:

## **Schedule for Site Completion**

Task	Estimated Completion	<b>Responsible Organization</b>
Recording of Environmental	12/15/2020	PRP Group
Covenant		
Approved Final Long-Term	12/30/2020	PRP Group
Groundwater Monitoring Plan		_
Approved Final Long-Term Surface	12/30/2020	PRP Group
Water and Residential Monitoring		
Plan		
Achievement of groundwater	10/1/2049	PRP Group
performance standards outside the		_
WMA and TI Zone		
Deletion from the NPL	7/30/2051	EPA

A statutory FYR is required because hazardous substances, pollutants, or contaminants remain at the Site above levels that allow for unlimited use and unrestricted exposure. The first statutory FYR was completed for the Site in 2017, five years after the start of on-Site construction for OU-1, and subsequent FYRs will be conducted every five years thereafter. The next FYR is scheduled for completion by November 14, 2022.

Paul Leonard, Director Superfund and Emergency Management Division EPA Region III

Date