

Monthly Progress Report

June 19, 2024

To: Sarah Penfield, Washington State Department of Ecology
From: Rebecca Desrosiers and Nicole Forsberg, Anchor QEA
cc: Kristin Gaines and Cheryl Vezzani, Northwest Alloys, Inc.

Re: **Former Reynolds Metals Remediation – Monthly Progress Report, May 2024**

Per Section XI of the Consent Decree (CD) issued by the State of Washington Cowlitz County Superior Court on December 14, 2018, Anchor QEA, is providing the following monthly progress report on behalf of Northwest Alloys, Inc. (NWA). This monthly progress report describes the actions taken during the previous month to implement the requirements of the CD. This monthly progress report also summarizes construction progress as outlined in the *Construction Quality Assurance Plan*, Appendix O to the *Final Engineering Design Report, Version 2* (Final EDR; Anchor QEA 2023a), approved by the Washington State Department of Ecology (Ecology) on April 14, 2023.

A. List of on-site activities that have taken place during the month

A photograph log of construction activities is included in Attachment A.

- **Installation and maintenance of temporary controls and facilities**
 - Installation and maintenance of temporary erosion and sediment control (TESC) best management practices (BMPs)
 - Envirocon, Inc.,¹ performed site-wide dust suppression control.
 - Observations and monitoring of performance for TESC BMPs
 - Envirocon performed daily stormwater inspections, as documented in their construction stormwater site inspection forms, and maintenance on existing TESCOs.
 - Changes or improvements to temporary access and staging facilities
 - Envirocon received, inspected, and stockpiled import general fill and drainage layer material at the East Staging Area.
 - Envirocon received, inspected, and stockpiled 12-inch corrugated polyethylene (CPE) pipe in the laydown area adjacent to Site Unit (SU) 8.
 - Temporary facilities
 - No new temporary facilities were installed.

¹ Multiple entities were hired by NWA to complete the cleanup. Envirocon is the prime contractor hired by NWA to conduct the remediation work. They have hired several subcontractors who are sometimes mentioned in this report, including Northwest Hydro-Mulchers, Inc.; Denbeste Water Solutions; and NW Lining. Anchor QEA is assisting NWA in implementing the *Construction Quality Assurance Plan* (Appendix O to the Final EDR [Anchor QEA 2023a]).

- Denbeste Water Solutions removed the 1-million-gallon Facility 77 temporary water tank extension.
- Envirocon removed the Season 1 temporary manhole and stormwater conveyance ditch for East Landfill No. 1.
- Installation and maintenance of stormwater control facilities and management of remediation water
 - None this period.
- Problems encountered while operating temporary water control facilities
 - None this period.
- Compliance with permit requirements for managing remediation water
 - As required by the National Pollutant Discharge Elimination System (NPDES) permit, all remediation water generated at the site was captured, stored, and evaluated for treatment. Each batch of remediation water was tested for fluoride. The fluoride results were determined to be below 45 milligrams per liter. The remediation was conveyed through Facility 77, treated at Facility 73, and discharged through Outfall 002A, as described in permit condition S1.E.1.
- Deviations from project design documents
 - There were no deviations from project design documents.
- **Ground improvement**
 - Work was completed in June 2023.
- **Stormwater infrastructure**
 - Berth Road Stormwater Improvements
 - Envirocon installed Season 2 facilities, including the following:
 - 48-inch Type I manholes at stations D0+05, C0+12, and D1+194
 - Debris racks on manholes at stations D0+05 and D1+194; grate on manhole at station C0+12
 - 24-inch CPE pipe connections to manholes in East Landfill perimeter ditches
 - 30-inch steel pipe casing under railroad between East Landfills
 - 24-inch CPE outlet pipe connection to Season 1 stub
 - Trenching and backfilling were completed per project specifications. Compaction testing was performed per specifications and the contractor's quality control plan.

- **Excavation, consolidation, and backfilling**
 - **West Landfill and Site Unit 2**
 - Work was completed in September 2023.
 - Northwest Hydro-Mulchers applied fertilizer over SU2 and the West Landfill.
 - Envirocon began final regrading of the U-Ditch.
 - **Site Unit 8, Site Unit 10, and East Landfill No. 1**
 - Work in SU8 and SU10 was completed in September 2023.
 - A temporary cap of East Landfill No. 1 was completed in September 2023.
 - A final survey of the seven settlement monuments within East Landfill No. 1 was completed by Envirocon in April 2024.
 - Envirocon removed the Season 1 drainage channel from East Landfill No. 1 and completed Season 2 regrading of the subgrade. Existing general fill over consolidated waste was regraded, and additional general fill was used to meet elevation and slope requirements. The final surface was proof-rolled with a smooth-drum compactor.
 - Northwest Linings & Geotextile Products, Inc., began deploying the geosynthetic clay layer (GCL) over general fill in East Landfill No. 1. Seams were sealed with granular bentonite at 9-inch overlaps as per project specifications.
 - Envirocon began placing drainage layer material over the GCL membrane.
 - **Site Unit 9, Site Unit 11, and Diesel Aboveground Storage Tank (AST) Area**
 - Work was completed in October 2023.
- **Cap placement**
 - Refer to the previous West Landfill and East Landfill discussions.
- **Permeable reactive barrier installation**
 - There were no activities this period.

B. Detailed description of any deviations from required tasks not otherwise documented in project plans and specs or amendment requests

None.

C. Description of all deviations from the Scope of Work and Schedule (Exhibit C) during the current month and any planned deviations in the upcoming month

None.

D. For any deviations in schedule, a plan for recovering lost time and maintaining compliance with the schedule

None.

E. Summary of all environmental data received by Owner during the past month

None.

F. (At Ecology's request) All raw data including laboratory analyses and an identification of the source of the sample

None.

G. A list of deliverables for the upcoming month if different from the schedule and a list of deliverables submitted during May.

**Table 1
Deliverables for Upcoming Month or Currently Pending**

Deliverable	Submittal Date
Compliance Monitoring and Contingency Response Plan	Pending Ecology comments

**Table 2
Deliverables Submitted in May**

Deliverable	Submittal Date
None	N/A

H. References

Anchor QEA, 2023a. *Final Engineering Design Report, Version 2*. Former Reynolds Metals Reduction Plant – Longview. Prepared for Northwest Alloys, Inc. March 2023.

Anchor QEA, 2023b. *AKART Study Plan for Treatment of Remediation Water at Facility 71*. Prepared for Northwest Alloys, Inc. – Longview. May 2023.

Attachment A

Construction Photographs

Photograph 1
East Landfill No. 1



Season 2 regrading – general fill

Photograph 2
East Landfill No. 1



Proof-rolling general fill final grade

Photograph 3
East Landfill No. 1



Placement of granular bentonite at GCL seams

Photograph 4
East Landfill No. 1



Placement and distribution of drainage layer material over GCL

Photograph 5
Berth Road Stormwater Improvements



Installation of 48-inch manholes at Stations D0+05 and C0+12, 24-inch CPE pipe, and 30-inch steel pipe casing

Photograph 6
Berth Road Stormwater Improvements



Placement of select fill over 24-inch CPE pipe

Photograph 7
U-Ditch



Start of final regrading

Photograph 8
Facility 77



Deinstallation of 1-million-gallon extension tank