Monthly Progress Report

August 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, July 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 2023), 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.
 - Envirocon installed silt fence along the PRB alignment and extended the silt fence around the southern slope of East Landfill No. 2.
- 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 TESCs.
- Changes or improvements to temporary access and staging facilities
 - Envirocon received, inspected, and stockpiled import pea gravel, coarse sand, and general fill at the West Staging Area and topsoil and general fill at the East Staging Area.

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.; DeWind One-Pass Trenching; Tsunami Mixing; and Northwest Linings & Geotextile Products, Inc. Anchor QEA is assisting NWA in implementing the *Construction Quality Assurance Plan* (Appendix O to the Final EDR [Anchor QEA 2023]).

- Supersacks of activated alumina were removed from NWA storage facilities and relocated to the East Staging Area.
- PRB trenching equipment was delivered to the West Staging Area.
- Reactive backfill mixing equipment was delivered to the East Staging Area.
 - Tsunami Mixing began mixing and stockpiling 3.4% dosage for use in Site Unit (SU) 3.
- Temporary facilities
 - No new temporary facilities were installed.
- Compliance with permit requirements for managing remediation water
 - No remediation water was collected or processed during this period.
- 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 one Type I catch basin and completed the construction of the 12-inch corrugated polyethylene (CPE) pipe to the existing Pump Station 004 culvert.
 - Trenching and backfilling were completed per project specifications.
 Compaction testing was performed per specifications and the contractor's quality control plan.
- Envirocon began construction of the Outfall 006 reroute, including the following:
 - Aboveground installation of new 6-inch DR 17 high-density polyethylene
 (HDPE) pipe and fusion-weld connection to the existing pipe
 - Placement of the concrete pipe collar and outlet protection

Excavation, consolidation, and backfilling

- West Landfill, Site Unit 2, and U-Ditch
 - Work within the West Landfill and SU2 was completed in September 2023.
 - Envirocon completed final regrading of the U-Ditch, including the following:
 - Grades below design elevations within the main ditch were backfilled with general fill.
 - Fine grading in the western extents was adjusted to discharge toward the U-Ditch and emulate pre-construction flow patterns.

- 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.
- Northwest Linings & Geotextile Products, Inc., completed installation of liner and geotextile components of the East Landfill No. 1 in June 2024.
- Envirocon completed topsoil placement of the East Landfill No. 1 low-permeability cap.
- Envirocon continued construction of the East Landfill No. 1 Berth Road perimeter ditch and roadside swale.

Site Units 3 through 5 and East Landfill No. 2

- SU3
 - Envirocon began preparatory and excavation activities, including the following:
 - Clearing and grubbing of existing ground vegetation and brush
 - Exploratory potholing and excavation to design elevations
- SU4
 - Catwalk and associated infrastructure within easternmost ditch were removed by NWA.
- SU5
 - None this period.
- East Landfill No. 2
 - Envirocon completed grubbing and regrading of slopes and began placement of material excavation from SU3.
- 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

- Envirocon continued preparation work within the limits of the permeable reactive barrier, including the following:
 - Tree removal along Segment 2 alignment
 - Chain-link fence removal along Segment 1 alignment
 - Construction of access road and work pad between segments
 - Preliminary grading and ground leveling

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 July.

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 June

Deliverable	Submittal Date
None	N/A

H. Reference

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

Attachment A Construction Photographs

Photograph 1 East Landfill No. 1



Topsoil placement along western slope

Photograph 2 East Landfill No. 1



Perimeter ditch at western corner

Photograph 3 East Landfill No. 1



Installation of 12-inch CPE pipe along Berth Road

Photograph 4 East Landfill No. 2



Regrading southern slope

Photograph 5 East Landfill No. 2



Silt fence installation along toe of southern slope

Photograph 6 East Landfill No. 2



Grading and consolidation of waste material removed from $\ensuremath{\mathsf{SU3}}$

Photograph 7 Site Unit 3



Excavation in northeastern quadrant (parallel to Berth Road)

Photograph 8 U-Ditch



Placement and grading of general fill

Photograph 9
Permeable Reactive Barrier



Silt fence installation along segment 1 (looking south)

Photograph 10 Permeable Reactive Barrier



Preliminary ground leveling along segment 1

Photograph 11 East Staging Area



Mixer and conveyer mobilization and startup

Photograph 12 East Staging Area



Mixing 3.4% dosage reactive backfill for use in SU3