Monthly Progress Report

July 18, 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, June 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.
- 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 and general fill at the West Staging Area, and 3- to 8-inch quarry spalls and drainage layer material at the East Staging Area.
- 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.; Iron Horse Trenching; 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]).

- 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
 - 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 approximately 100 linear feet of 12-inch corrugated polyethylene (CPE) pipe within the storm drain alignment along Berth Road.
 - 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, Site Unit 2, and U-Ditch
 - Work within the West Landfill and Site Unit (SU) 2 was completed in September 2023.
 - Envirocon continued final regrading of the U-Ditch, including the following:
 - Fencing, culverts, and staff gauges were removed.
 - Grades below design elevations within the main ditch were backfilled with general fill.
 - The portion of the ditch west of the Outfall 006 reroute discharge line was backfilled with select fill.

- 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., continued installation of liner and geotextile components of the East Landfill No. 1 low-permeability cap, including the following:

- Deployment of the geosynthetic clay layer (GCL) over subgrade was completed. Seams were sealed with granular bentonite at 9-inch overlaps as per project specifications.
- Deployment of the non-woven geotextile over drainage layer material in East Landfill No. 1 begun. Seams were sewn with a minimum 3-inch overlap as per project specifications.
- Envirocon began placement of material components of the East Landfill
 No. 1 low-permeability cap, including the following:
 - 12 inches of drainage layer material over the GCL
 - 6 inches of general fill over the non-woven geotextile
 - 6 inches of topsoil over general fill
- Envirocon began construction of East Landfill No. 1 stormwater components, including the following:
 - Berth Road perimeter ditch
 - Placement of 6-inch slotted drainage pipe connection to manhole at Control Point 14
 - Stormwater conveyance drainage channel located on the landfill

- Site Units 3 through 5 and East Landfill No. 2

- SU3
 - None this period.
- SU4
 - None this period.
- SU5
 - None this period.
- East Landfill No. 2
 - Envirocon began preparation work within the footprint of the existing landfill, including the following:
 - Clearing and grubbing of vegetation
 - Harvesting and stockpiling clean cover soil

- 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 began preparation work within the limits of the permeable reactive barrier, including the following:
 - Clearing and grubbing of vegetation
 - Surveying and staking wall alignment

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 June.

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



GCL deployment along southern slope

Photograph 2 East Landfill No. 1



Placement of drainage layer material over GCL

Photograph 3 East Landfill No. 1



Deployment of non-woven geotextile over drainage layer material

Photograph 4 East Landfill No. 1



Placement and distribution of general fill over non-woven geotextile

Photograph 5 East Landfill No. 1



Placement and distribution of topsoil over general fill

Photograph 6 East Landfill No. 1



Quarry spalls within on-landfill stormwater conveyance channel

Photograph 7 East Landfill No. 1



Berth Road perimeter ditch and 6-inch slotted drainage pipe

Photograph 8 Berth Road Stormwater Infrastructure



Installation of Type I catch basin and 12-inch CPE pipe

Photograph 9 U-Ditch



Excavation within southern flow channel

Photograph 10 U-Ditch



Backfill with general fill to design elevations within northern flow channel

Photograph 11 U-Ditch



Backfill with select fill within ditch west of Outfall 006 reroute discharge line

Photograph 12 East Landfill No. 2



Clearing vegetation and harvesting clean cover soil