

Monthly Progress Report

October 20, 2023

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

Re: **Former Reynolds Metals Remediation – Monthly Progress Report, September 2023**

Per Section XI of the Consent Decree (CD) issued by the State of Washington Cowlitz County Superior Court on December 14, 2018, Anchor QEA, LLC, 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.
 - Silt fencing was removed from Site Unit (SU) 2 west following completion of hydroseed application.
 - Silt fencing and straw wattles were removed from SU10 following completion of hydroseed application.
 - 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 quarry spalls, topsoil, and general fill material 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 mentioned in this report, including Keller Management Services, LLC; Northwest Hydro-Mulchers, Inc.; Denbeste Water Solutions; and Catworks Construction. Anchor QEA is assisting NWA in implementing the *Construction Quality Assurance Plan* (Appendix O to the Final EDR [Anchor QEA 2023]).

- Hydroseed material was received, inspected, and stockpiled at the East and West Staging Areas.
- Temporary facilities installed
 - Denbeste Water Solutions installed a 1-million-gallon water tank as a storage extension to Facility 77.
 - Envirocon constructed the Season 1 temporary drainage channel adjacent to East Landfill No. 1.
 - Temporary construction fencing was installed along southern edge of the U-Ditch to supplement the Closed Black Mud Pond security fence.
- 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 problems were encountered.
- Deviations from project design documents
 - There were no deviations from project design documents.
- **Ground improvement**
 - Work was completed in June 2023.
- **Stormwater infrastructure**
 - Combination air release valves were installed along the force main alignment.
 - Installation of an electrical control panel was completed at the West Landfill Pump Station.
 - Installation of 84 linear feet of 24-inch-diameter corrugated polyethylene (CPE) pipe was completed across Berth Road, connecting the East Landfill Pump Station to the Berth Road ditch along East Landfill No. 1.
 - A concrete manhole was placed within the Berth Road ditch, and a 24-inch CPE pipe was connected between the manhole and the East Landfill Pump Station; select fill was backfilled around the CPE pipe and manhole.
 - GPS and survey control activities were completed.
 - Electrical operating controls were tested for the East and West Landfill Pump Stations.
- **Excavation, consolidation, and backfilling**
 - **West Landfill and Site Unit 2**
 - Topsoil placement over general fill was completed in the West Landfill.
 - Topsoil placement was completed in SU2.

- Northwest Hydro-Mulchers, Inc. applied Hydroseed Mix No. 2 over topsoil in the West Landfill and SU2.
- **Site Unit 8 and East Landfill No. 1**
 - Carbon blocks staged at the perimeter in September 2023 were collected by Pacific Iron & Metal and sent off site for recycling.
 - SU8 was backfilled with select fill and compacted per specifications. Compaction testing was conducted per specifications and the contractor's quality control plan.
 - Topsoil was placed over compacted select fill in SU8.
 - Northwest Hydro-Mulchers applied Hydroseed Mix No. 1 over topsoil in SU8.
 - Settlement monuments installed at East Landfill No. 1 in August 2023 were monitored weekly, and results were sent to Anchor QEA. The observed settlement rate is as expected.
 - Material placement and final grading were completed in East Landfill No. 1.
 - General fill (sand) was placed above consolidated waste material in East Landfill No. 1.
 - Type 1 geotextile and quarry spalls were used to construct the Season 1 drainage channel in East Landfill No. 1.
 - Northwest Hydro-Mulchers applied Hydroseed Mix No. 1 (bonded fiber matrix) over general fill in East Landfill No. 1.
 - Final surveys were completed in SU8 and East Landfill No. 1.
- **Site Unit 10**
 - Northwest Hydro-Mulchers applied Hydroseed Mix No. 1 over topsoil.
- **Site Unit 9, Site Unit 11, and Diesel Aboveground Storage Tank (AST) Area**
 - Envirocon performed the initial excavations in SU9, SU11, and the Diesel AST area.
 - Anchor QEA conducted soil sampling in these excavations per Appendices C, D, and P of the *Final Engineering Design Report, Version 2* (Anchor QEA 2023). Samples were sent to Apex Laboratories LLC for testing.
 - Removed material was loaded directly into export trucks and transported for off-site disposal. Export trucks were weighed before departure.
 - Analytical data are pending.
- **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 September.

Table 1
Deliverables for Upcoming Month

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

Table 2
Deliverables Submitted in September

Deliverable	Submittal Date
None	N/A

H. Reference

Anchor QEA (Anchor QEA, LLC), 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
Facility 77



Denbeste Water Solutions installing 1-million-gallon water tank extension at Facility 77.

Photograph 2
East Landfill No. 1



Placement of general fill over compacted, consolidated waste material in East Landfill No. 1.

Photograph 3
West Landfill



Application of Hydroseed Mix No. 2 over topsoil in West Landfill.

Photograph 4
U-Ditch



Installation of temporary construction fence along southern edge of U-Ditch.

Photograph 5
East Landfill No. 1



Construction of Season 1 drainage channel in East Landfill No. 1.

Photograph 6
SU8



Delivery, placement, and compaction of select fill in SU8.

Photograph 7
East Landfill No. 1



Final grading of consolidated waste material in East Landfill No. 1.

Photograph 8
Site Unit 8



Envirocon, Inc., placing general fill above geotextile fabric at SU8 (facing east).

Photograph 9
Delivery and Staging Hydroseed



Northwest Hydro-Mulchers, Inc., staging hydroseed mixes near West Staging Area.

Photograph 10
East Landfill No. 1



Application of bonded fiber matrix (Hydroseed Mix No. 1) at East Landfill No. 1.