

# Monthly Progress Report

May 19, 2023

To: Garin Schrieve and 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.

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

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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)
    - As shown on Construction Drawings T-01 and T-02, trenching was performed with silt fencing installed in the following areas:
      - West and east perimeters of Site Unit (SU) 2
      - North and east perimeters of Staging Area West
      - Top of the existing ditch bank, north of the Facility 73 Retention Pond
      - North, south, and east perimeters of SU7
    - Wattles were installed along the northern edge of Staging Area East.
    - Stormwater inlets were blinded with filter fabric and surrounded by wattles at Facility 73 and two inlets west of Facility 71.
  - Observations and monitoring of performance for TESC BMPs
    - Envirocon, Inc.,<sup>1</sup> performed daily stormwater inspections, as documented in their construction stormwater site inspection forms.

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<sup>1</sup> 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 (Keller), and Catworks Construction. Anchor QEA is assisting NWA in implementing the *Construction Quality Assurance Plan* (Appendix O to the Final EDR [Anchor QEA 2023]).

- Anchor QEA and NWA observed the completion of the TESC's and BMPs listed previously and noted that they were properly installed.
- Changes or improvements to temporary access and staging facilities
  - Site access roads were constructed at the east and west gates along Industrial Way to provide site access for material and equipment deliveries.
  - A construction road was installed in the Staging Area West to provide access for staging material in this area.
- Temporary facilities installed
  - Envirocon built a construction pad for Keller Management Services, LLC (Keller), near the northern corner of East Landfill No. 1. The pad was constructed to facilitate the setup of a grout mixing station/batch plant used for ground improvements of East Landfill No. 1 (SU7).
  - Keller mobilized and set up two vertical cement storage vessels and a mixing tank to mix and pump the grout slurry to the ground stabilization areas along the perimeter of East Landfill No.1.
- Installation and maintenance of stormwater control facilities and management of remediation water
  - Catworks Construction installed the East Force Main wet well.
  - Shallow groundwater was encountered during the installation of the East Force Main wet well and piping trench. This water was pumped and conveyed via aboveground PVC piping to Facility 77 storage clarifiers.
  - The facility concrete along Dike Road was sawcut in preparation for East Force Main piping installation.
- Problems encountered while operating temporary water control facilities
  - No problems were encountered.
- 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**
  - Surficial soil was removed from ground improvement areas in East Landfill No. 1, with excavated surface soil placed within the footprint of the East Landfill No. 1.
  - The initial ground improvement test section between STA 5+00 and 6+00 was completed.
  - Samples of the mixed soil were collected by Keller and Anchor QEA in Cells 106, 107, 018/108, 019/109, 015, 016, and 017.

- **Stormwater Infrastructure**
  - An approximate 100-foot trench was excavated along Berth Road to facilitate the installation of the East Force Main high-density polyethylene (HDPE) piping.
- **Excavation, consolidation, and backfilling**
  - Surficial vegetation at the West Landfill (SU2) was removed and transported to Staging Area West. Envirocon started grading at the Western Landfill in SU1.
- **Cap placement**
  - There were no activities this period.
- **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**

Construction was delayed by 1 month and resumed on April 17, 2023. The revised construction schedule includes all project components for Year 1, and demobilization is anticipated for mid-October. No delay is anticipated at this time.

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

First quarter 2023 groundwater monitoring data were received and will be included in the annual report.

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

Future data are anticipated for remediation water sampling and will be included in this section as available.

## G. A list of deliverables for the upcoming month if different from the schedule

**Table 1**  
**Deliverables for Upcoming Month**

Deliverable	Submittal Date
Revised AKART Study Plan and QAPP	Week of May 15
CMCRP	Awaiting Ecology comments

Notes:

AKART: All Known, Available, and Reasonable Technologies

AKART Study Plan: *AKART Study Plan for Treatment of Remediation Water at Facility 71*

CMCRP: *Compliance Monitoring and Contingency Response Plan*

QAPP: *Quality Assurance Project Plan for Remediation Water Monitoring*

## H. References

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

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**Photograph 1**  
**Ground Stabilizing Subcontractor Setting**  
**Up Material at East Landfill No. 1**



**Photograph 2**  
**East force main pipe fusion welding**



**Photograph 3 Staging Area**  
**West-unloading bedding**  
**material**





**Photograph 4**  
**U-Ditch silt fence installation.**



**Photograph 5**  
**East Landfill No. 1 Ground Improvement**





**Photograph 6**  
**East Landfill No. 1 Ground Improvement**



**Photograph 7**  
**East Landfill No. 1 Ground Improvement**





**Photograph 8**  
**East Landfill No. 1 Ground**  
**Improvement test section**





**Photograph 9**  
**Landfill (SU2) silt fence**  
**installation**



**Photograph 10 West**  
**Landfill (SU2)**  
**grubbing**



**Photograph 11**  
**Landfill (SU2) grubbing**



**Photograph 12**  
**Excavation for east pump station**

