

DEIDRE HENDERSON Lieutenant Governor

Department of Environmental Quality

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DIVISION OF WATER QUALITY Erica Brown Gaddis, PhD Director

April 5, 2022

Rob Hartman, P.G. Environmental Manager US Magnesium, LLC 238 North 2200 West Salt Lake City, Utah 84116 *Via Email*

Subject: Construction Permit for the Retrofitted Waste Pond Phase 2

Hydraulic Barrier Wall (HBW) Installation

Dear Mr. Hartman:

On March 15, 2022, the Division of Water Quality (DWQ) received the following documents from US Magnesium (USM):

- Retrofitted Waste Pond (RWP) Construction Quality Assurance Plan (CQAP),
- RWP Phases 1 and 2 Basis of Design Report,
- Section 02266 Hydraulic Barrier Wall,
- RWP Phase 1 Earthwork / Phase 2 Slurry Wall Basis of Modification to the Top of Embankment Configuration to Facilitate a Side-By-Side Slurry Wall Trench and Mixing Pad around the old waste pond (Station 45+00 to 183+00) March 09, 2022, and
- Revised Construction Drawings.

These documents were prepared by Chad Tomlinson, PE, of Tetra Tech.

To accommodate the installation of the HBW there were some minor changes requested to the crest of the embankment from approximately Station 45+00 to 183+00. These changes in Phase 1 have been approved and construction of Phase 1 may continue. These changes are shown on the plans.

The following is a summary of the proposed major construction projects for the Phase 2 Construction Permit:

• Construction of the Hydraulic Barrier Wall for Phase 2 of the RWP. This includes slurry mixing, trench excavation down to the clay confining layer, slurry installation, soil and sepiolite backfill mixing, and soil-sepiolite trench backfilling.

The plans and specifications, as submitted, comply with the Utah Water Quality Rules, (R317, Utah Administrative Code). A Construction Permit is hereby issued as constituted by this letter, subject to the following conditions:

- 1. Any revisions or modifications to the approved plans and specifications must be submitted to DWQ for review and approval, before construction or implementation thereof. Please submit any changes for review and approval directly to Woodrow Campbell, P.E., of the DWQ Ground Water Protection Section.
- 2. A written operations and maintenance manual, containing a description of the functioning of the facilities, an outline of routine maintenance procedures, and all checklists and maintenance logs needed for proper operation of the system, must be submitted and approved before the final inspection and operation of the system.
- 3. The approved facilities must not be placed in service unless DWQ has conducted a final inspection, reviewed and approved the As-Built Construction Certification Report, and provided written authorization to place the constructed facilities in service.

The plans and specifications for this project have been stamped and signed by a Professional Engineer currently licensed to practice in the state of Utah. The construction design, inspection supervision, and written construction certification of all work associated with this Construction Permit must be performed by a Professional Engineer licensed to practice in the state of Utah.

This Construction Permit will expire one year from the date of its issuance, as evidenced by the date of this letter, unless substantial progress is made in constructing the approved facilities or the plans and specifications have been resubmitted and the construction permit is reissued. This permit does not relieve you, in any way, of your obligations to comply with other applicable local requirements.

Please contact Mr. Campbell at the beginning of construction to allow periodic inspections to be scheduled.

Upon completion of the project, a final inspection and approval of the As-Built Construction Certification Report is required before the approval to operate the completed facilities can be issued. Please remain in contact with Mr. Campbell to schedule the final inspection. The

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Construction Permit for the Retrofitted Waste Pond Phase 2

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Construction Certification Report with final as-built drawings must include a copy of the documentation required in the following:

- Appendix F: Earthwork and HBW Specifications and
- Appendix G: Construction Quality Assurance Plan

The Construction Certification Report may also include other pertinent information not listed above.

If we can be of further assistance, please contact Mr. Woodrow Campbell at wwcampbell@utah.gov or (801) 536-4353.

Sincerely,

Erica Brown Gaddis, PhD

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Director

EBG/WWC/DJH/blj

Cc: Via Email

Chad Tomlinson, Tetra Tech Michael Storck, DERR

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