



State of Utah

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Department of
Environmental Quality

Alan Matheson
Acting Executive Director

DIVISION OF WATER QUALITY
Walter L. Baker, P.E.
Director

Adam P. Richins
Safety, Compliance, and Regulatory Manager
Sawtooth NGL Caverns, LLC
NGL Supply Terminal Solution Mining, LLC
6965 Union Park Center Suite 270
Midvale, UT 84047

Dear Mr. Richins:

Subject: **Construction Permit** for Sawtooth Brine Pond 2

On April 6, 2015, the Division of Water Quality (DWQ) received the engineering plans and specifications for Sawtooth Brine Pond 2 prepared by Newfields Mining Design and Technical Services and stamped by Matthew Thomas Haley Utah Certified Professional Engineer.

The following is a summary of the proposed major construction projects:

- Construction of Brine Pond 2. Brine Pond 2 is directly south of the previously constructed Brine Pond 1 and will share the southern embankment with Brine Pond 1. Brine Pond 2 will have an approximate footprint of 190 acres and have a minimum operating volume of 5,600 acre-feet (ac-ft). Brine Pond 2 will have two HDPE liners with leak detection sumps and pump back systems.

Because the proposed evaporation ponds are very large and will be holding a significant amount of brine, The Division of Dam Safety in the Utah Department of Natural Resources is also reviewing the engineering plans and specifications. Dam Safety will be issuing an Order Granting to Construct a Dam. The terms and conditions required by Dam Safety will also be required as part of this Construction Permit.

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.*

195 North 1950 West • Salt Lake City, UT
Mailing Address: P.O. Box 144870 • Salt Lake City, UT 84114-4870
Telephone (801) 536-4300 • Fax (801) 536-4301 • T.D.D. (801) 536-4414
www.deq.utah.gov

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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.*
4. *Construction activities that disturb one acre or more are required to obtain coverage under the Utah Pollutant Discharge Elimination System (UPDES) Storm Water General Permit for Construction Activities. The permit requires the development of a storm water pollution prevention plan (SWPPP) to be implemented and updated from the commencement of any soil disturbing activities at the site until final stabilization of the project. For more information, or to obtain permit coverage on-line, please go to: [http://www. waterquality. utah.gov/UPDES/stormwater](http://www.waterquality.utah.gov/UPDES/stormwater). Htm*

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. You may contact Central Utah Public Health Department at (435) 896-5451 or District Engineer John Chartier at (435)896-5451, Ext. 314, for further assistance regarding local matters.

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 Construction Certification Report with final as-built drawings must include test results for the following construction quality assurance and quality control (CQA/QC) elements:

Soil Subgrade

- Proctor Curves,
- Soil Classification,
- Field Compaction Testing, and
- Subgrade Acceptance Certification.

Concrete

- Concrete Mix Verification,
- Concrete ASTM Testing Method, Frequency, and Results,
- Concrete Testing Pass/Fail Criteria, and
- Crack Inspection and Repair.

Flexible Membrane Liner

- Panel Placement Log,
- Trial Seam Test Log,
- Seaming Record,
- Seam Test Record,

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- Repair Log,
- As-Built Drawing,
- Manufactures Certification including QA/QC Testing of the Rolls, and
- Professional Engineer Certification.

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

Sincerely,

A handwritten signature in black ink, appearing to read "Leah Ann Lamb". The signature is fluid and cursive, with the first name "Leah" being the most prominent.

Leah Ann Lamb
Acting Director

WLB/WWC/RFH/nf

cc: John Chartier, District Engineer (via email)
Central Utah Public Health Department (via email)

DWQ-2015-004798