



State of Utah

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Department of
Environmental Quality

Amanda Smith
Executive Director

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

JAN 17 2014

Ronald Wunderlich
Land and Permitting Manager
CS Mining, LLC
PO Box 608
Milford, UT 84751

Dear Mr. Wunderlich:

Subject: **Construction Permit** for Lined Supernatant Clarification Ponds, CS Mining LLC

On December 23, 2013 the Division of Water Quality (DWQ) received the engineering plans and specifications for Lined Supernatant Clarification Ponds prepared by Intermountain GeoEnvironmental Services, Inc. (IGES). A condition of the Permit-By-Rule issued on October 5, 2009 stated the following "it is our understanding that the tailings impoundment will be lined with a single flexible membrane liner (FML) that will limit subsurface leakage to *de minimis* levels." These new Lined Supernatant Clarification Ponds will also meet that requirement of a single FML to limit subsurface leakage to *de minimis* levels.

In a meeting on September 9, 2013 with John Wallace and Robert Bayer also indicated that CS Mining is looking at constructing a new copper extraction process. This new process will require an application for a Ground Water Discharge Permit which will be submitted in the near future. Therefore the present tailing impoundment and these new Lined Supernatant Clarification Ponds are temporary until the new processing facilities can be permitted, constructed and put into operation.

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

- Excavation and construction of two relatively small lined clarification ponds. The liner material will be 45-mil ethylene propylene diene monomer (EPDM).

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 must be 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 Southwest Utah Public Health 435-986-2582 or Paul Wright, Southwest Utah District Engineer 435-986-2590 for further assistance regarding local matters.

Because of the inherent hazard potential at lagoons and ponds, warning signs should be posted at these facilities to state the dangers of drowning and asphyxiation. Safety ropes running down the pond side slopes, and fastened to posts at the top of the dikes should be available to allow anyone trapped in the ponds to escape.

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.

Flexible Membrane Liner

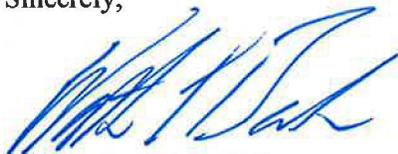
- Panel Placement Log,
- Trial Seam Test Log,
- Seaming Record,
- Seam Test Record,
- Repair Log,
- As-Built Drawing,
- Manufactures Certification including QA/QC Testing of the Rolls, and
- Professional Engineer Certification.

Mr. Ron Wunderlich

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

Sincerely,



Walter L. Baker, P.E.

Director

WLB/WWC/DJH:fb

cc: Paul Wright, Southwest Utah District Engineer (via e-mail)
Southwest Utah Public Health (via e-mail)
John F. Wallace, P.E.

DWQ-2014-001142

